Cardiac Arrest.
Members of elite club share their stories

INTO THE PAST.
Fred Hurtado takes a look back in EMS time

Snakes Alive.
Deadly encounters happen everywhere

Under the Microscope
Validity takes scrutiny

THE JOURNAL
OF EMERGENCY DISPATCH

The National Academies of Emergency Dispatch

July/August 2009
What could be more important than protecting our children?

Announcing 9-1-1 COMMUNICATION CENTER BEST PRACTICES IN CASES OF MISSING CHILDREN

A missing child is a critically important and high profile event that can rip the fabric of your agency and community if not handled correctly. In terms of urgency, use of resources and potential impact on the community, a missing child requires a level of readiness akin to a disaster. This joint initiative of NAED, APCO, NENA, National AMBER Alert and the National Center for Missing & Exploited Children (NCMEC) was created to:

- Promote awareness of the critical role of the 9-1-1 communication center in handling missing and exploited children calls
- Develop and endorse best practices
- Develop tools for handling incidents of missing and abducted children

Helping to PROTECT OUR CHILDREN is as easy as 1-2-3!

2. Request a copy of the Public Safety Telecommunicator Checklist for Missing Children.
3. Apply to attend NCMEC’s CEO Overview Course in Alexandria, Virginia.

CEO Overview Course

9-1-1 Communication Center Managers and Directors are invited to apply to attend the two-day overview course held at the National Headquarters of NCMEC in Alexandria, VA. Courses are conducted approximately every six weeks at no cost to participants.

For more information, visit www.missingkids.com/911 or email 911@ncmec.org
Welcome To the Club. Membership depends upon your survival from Sudden Cardiac Arrest (SCA)

30 Years of Research. Research validates link between protocol and patient outcome

Best Practices

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Sudden Arrival  Mark Rector and his daughter Kellsie.

The first time I remember hearing Mark Rector’s voice was a tape of a 9-1-1 call he made when his third daughter, Kellsie, decided to skip a trip to the hospital’s delivery room. The EMD went through the Pre-Arrival Instructions (PAIs) for childbirth and delivery and waited on the phone until the paramedics were at the doorstep. The birth was relatively uneventful, withstanding the delivery that didn’t happen as planned! Mom and baby were both doing very well.

Eleven years later, Kellsie is in the sixth grade and her dad is the Director of Consulting for Priority Solutions and the Director of Special Operations for the National Academies of Emergency Dispatch® (NAED). Mark has served on the NAED Board of Accreditation for nearly a decade, reviewing literally hundreds of applications from communications centers seeking NAED accreditation and reaccreditation. Since he’s a process guy, the board has been a perfect fit for his talents and interests.

The call made 11 years ago was the ideal entry into his current position and, in retrospect he said, it proved valuable on many levels. First and foremost, he needed an ambulance for his wife Hallie and their soon-to-be newborn. Secondly, calling 9-1-1 was the natural thing to do, considering the unexpected arrival time. Finally, Mark was intent on hearing the EMD’s response to a child delivery call. After all, he was a paramedic.

Mark hadn’t planned for Kellsie to arrive at home but, hey, he had recently been introduced to the Medical Priority Dispatch System® (MPDS) through his work. Like it or not, Kellsie’s delivery was an opportunity to observe the protocol first-hand. Mark remembers paying particular attention to the ordering of questions and the EMD’s performance. At least as close as he could, considering the situation.

The protocol and EMD impressed Mark. So much so, that he advanced from EMD certification to a certified EMD instructor on the state and, then, regional level. At the time of the call he was transitioning from field response into a management position within the AMR-Denver (Colo.) communications center.

Over the 21 years Mark worked with AMR/EMSC, his responsibilities broadened to include national client services and government relations. The communications center became the first privately held company to achieve NAED’s Accredited Center of Excellence (ACE) status, and it is the first center in the world to complete three consecutive reaccreditations.

His experience working with local, state, and national legislators sold him on grassroots efforts, organizing people to hit the campaign trail to accomplish measures vital to emergency services. At the NAED, Mark plans to bring dispatchers into these types of campaigns in support of dispatch training and certification. He also anticipates working alongside the various departments to develop written policies for day-to-day operations. It’s a standards approach, he said. Designated steps, well developed, and properly followed bring quality results. Sounds a lot like protocol.

Mark entered the profession for a very good reason—the career in financial services he had planned didn’t quite fit his nature. In fact, at that time, Hallie was far more eager to talk about her day spent as a nurse in a hospital than he was about his day spent in an office designing investment portfolios. She encouraged a career change to one that would mesh with his altruism while, also, complementing his analytical side. With her support, he left financial services for a career in emergency medical services. He truly never looked back and now is in a position that shares the best of both worlds.

Mark approaches projects in a logical manner, which is not to say the call he made to 9-1-1 those 11 years ago was anything close to cool and calculated. Mark wanted the reassurance an EMD could give. Sure, he had confidently delivered many babies as a paramedic but this delivery was on a very personal level. He wanted someone there giving him instructions in case his emotions got in the way.

“Wouldn’t you do the same if it was your wife and newborn?” Mark asked when I mentioned the tape NAED Director of Curriculum Design Larry Latimer had given me.

“Sounds a lot like protocol.”
Not Yet Over. Spread of swine flu continues to alarm public

Jeff Clawson, M.D.

The Academy® continues to field questions regarding the H1N1 swine flu and, of course, the spread of the infection in relation to emergency center call volume and the use of MPDS® Protocol 36. I will summarize answers to both, beginning with the most recent information about the spread of the virus available at the time of publication.

As of mid-June, nearly 36,000 people in 76 countries had been infected with the H1N1 virus, according to figures from the World Health Organization (WHO). Of these, 160 had died, including 45 confirmed deaths in the United States where almost 18,000 cases of swine flu had been reported. According to the BBC, the number of cases in the United Kingdom reached nearly 1,600, during the same month (June), which didn’t include the latest diagnosed cases in Scotland where the virus has reportedly spread particularly fast.

June reports also indicated mild infections, for the most part, with people recovering fairly quickly. Obviously, the infection can be fatal but that generally depends on the severity of symptoms at the time of diagnosis, vaccination, and the presence of underlying health conditions that could aggravate the illness.

Within the level of severity lies a common misconception. The level 6 the WHO declared in issuing the pandemic alert is not a statement of clinical disease indicating the severity of infection. Rather, the number designates the extent of geographic spread. When the level 6 was declared, H1N1 was raging through North America, Australia, South America, Europe, and regions beyond; it had hit all 50 states. While few have ventured a guess at future spread here or abroad, a lull over the summer months doesn’t indicate the worst was over. Flu season in the United States generally runs late fall into early spring. In the meantime, vaccines for swine flu are currently being tested in preparation of a potential outbreak later this year.

The possibility of H1N1 mutating into a different form, as suspected in the case of a patient in Brazil, has raised a question regarding the clinical basis/consensus for the selection of symptoms triggering the shunt to Protocol 36. As those familiar with the shunt know, these symptoms are difficulty breathing, chest pain, headache, and sick person. At this time, the Academy has no plans to revise the selection of symptoms but it is helpful to explain at how the Academy arrived at the decision.

In working with the Chemical, Biological, Radiological, and Nuclear (CBRN) Fast Track Committee under the Council of Standards, these Chief Complaints were considered direct symptom mimics of presenting flu patients and the most likely to capture the majority of cases. It does not attempt to capture every flu patient, as Protocol 36 is designed for use only when initiating a declining response matrix. This group of patients represents about 30 percent to 35 percent of all patients, statistically.

If the service is trying to identify who might have symptoms, they should use the SRI Symptom checklist for evaluation of patients based on center policy. This is actually the first device to be used and will generate information for responders on any suspect patient. Protocol 36 is only used once there is a patient overload/decreased hospital capacity and triage must begin (declining response by stages based on the local severity rating of 1(suffix A), 2(suffix B), or 3(suffix C).

Finally, the WHO, Centers for Disease Control and Prevention (CDC), or other national or international health agencies have not reported abdominal pain and syncope as H1N1 symptoms, although it wouldn’t surprise me if some flu patients had these symptoms. We will pass this concern along to the CBRN Committee for its expert consideration.

Hope this helps clarify... Doc
What comes around goes around, and it’s no different when it comes to award presentations.

Two years ago, Paul Pepe, M.D., asked Jeff Clawson, M.D., to come to the EMS State of the Sciences Conference held in Texas under the guise of filling in for a speaker who had cancelled his appearance. Dr. Clawson accepted, but instead of delivering the speech he wrote on the moment’s notice, he ended up giving a few words in acceptance of the Paul E. Pepe M.D. Award from the U.S. Metropolitan Municipalities EMS Medical Directors Consortium.

The surprise had its consequences this year when Dr. Clawson turned the tables on an unsuspecting Dr. Pepe when presenting him with the Special Award of Preeminent Innovator in EMS. Dr. Clawson had coaxed his friend into attending the Navigator opener in celebration of the protocol’s 30-year history, a plan unlike the modus operandi Dr. Pepe employs when handing out his prestigious awards.

“Often I will ask the unwitting victim (honoree) if they can help me give some special award away to somebody else,” Dr. Pepe said. “Usually, because of the selfless, altruistic nature of such persons, they always, without question, volunteer to pitch in to do something nice for someone else, even if it means traveling from overseas to do so.”

Never did Dr. Pepe expect he’d be called on stage to accept an award nobody had ever received prior to Navigator 2009. He was doing the altruistic thing in honor of his friend and professional peer.

Dr. Pepe admits to a hint of suspicion during Dr. Clawson’s on stage recitation of the yet undeclared recipient’s accomplishments, which included a line crediting the individual with doing “more things than 10 of us put together.” The list sounded more than vaguely similar to Dr. Pepe’s professional record.

“It was like ‘oh this could be me,’” Dr. Pepe recalled.

And, of course, it was.

Dr. Pepe thanked the Academy but in deference to the dispatchers in the audience and what they do every day for the well being of the public they serve.

“Thank you so much for what you do on a daily basis,” he said. “I have learned so much over the years from you all. Who knew, three decades ago, that we could routinely save lives and do vanguard scientific research behind the microphone.”

He also expressed the same regard for every EMS professional watching him accept the award.

“There’s so many people at this meeting who have made so many significant accomplishments, not only Jeff, of course, but other veterans of the EMS and dispatch worlds now sharing their wisdom and experiences at the conference,” he said.

Dr. Clawson and Dr. Pepe first crossed paths nearly 25 years ago in relation to their shared profession, established a friendship, and have since remained in close contact, helping each other when an occasion arises.

Dr. Pepe, medical director, City of Dallas EMS and the Dallas Metropolitan Bio-Tel EMS System, played a large role in the forming of the National Association of EMS Physicians and is the author of scientific papers and abstracts numbering into the hundreds, including the original 1991 “Chain of Survival” publication.

He is an EMS expert featured in network and prime-time broadcasts, such as Rescue 9-1-1 pilot, an ABC News Nightline special, In The ER, and the Learning Channel’s feature, The Strongest Link.
Sometimes, when I look at a printed copy of The Journal, I think it’s morphed into a subsidiary of People magazine. Not that our magazine gives readers the “fix of the hottest breaking news, celebrity photos, fashion, videos, and games,” as People is described on its website, or the list of the 25 hottest dispatchers, but the magazine does feature lots of stories detailing dispatchers at their jobs.

Take this issue for example. Just about every section highlights a person or a group of them. The spread or centerpiece, that as the highlight feature story is called, chronicles the events of three people post sudden cardiac arrest. In each case, a bystander gave undulating chest compressions to the patient under the direction of a trained emergency medical dispatcher. Recovery wasn’t easy for any of them but at least they beat the grim odds to get there.

Then, there are the standard sections—YourSpace and Industry Insider. They always emphasize the work of dispatch and, not only their responses to particular calls, but oftentimes the outcomes from the caller’s perspective. Not every story in YourSpace has a happy ending, but many pay tribute to the close friendships developed in the confines of the 9-1-1 center. In this issue, Nancy Jenkins describes the compassion her coworkers showed during the bleakest period of her life: the death of her 16-year-old daughter. In this issue, Nancy Jenkins describes the compassion her coworkers showed during the bleakest period of her life: the death of her 16-year-old daughter. The spread introduces me to the people making a real difference in their communities.

I think it’s morphed into a sub-variety of People magazine. Not that our magazine gives readers the “fix of the hottest breaking news, celebrity photos, fashion, videos, and games,” as People is described on its website, or the list of the 25 hottest dispatchers, but the magazine does feature lots of stories detailing dispatchers at their jobs.

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Now, that’s what I call family ties in the working world.

My favorite column, RetroSpace, (which our readers might recall as the Last Page First feature) reaches into the past in an attempt to explain the road under construction. While the past often means telling stories involving the dead or events long passed our personal memories, the relatively short history of emergency medical services (EMS) provides us with plenty of living fodder to pursue. This time we were able to keep Fred Hurtado on the line long enough for him to give us one chapter in his EMS scrapbook.

Fred is one captivating character and his dedication to the 9-1-1 profession earned him the Jeff Clawson Leadership Award at Navigator 2009.

There’s no doubt People beats us hands down when it comes to scandal, bad behavior, and keeping up with the hottest stars treading the red carpet. We don’t list celebrities worth watching. But that’s OK by me. I’d rather hear the stories of people making a real difference in the world, one life at a time, without so much as a Fashion Faceoff to tell who wears their fame better. That’s truly what celebrity is all about.
As the heart of Rochester “Med City,” Minn., Mayo Clinic has won its share of admiration. From its consistent top place ranking in U.S. News and World Report honor roll of hospitals to lifetime achievement awards to members of its staff, the hospital certainly lives up to its lofty reputation among an elite group of medical centers.

This same high standard of care for its patients applies to the Mayo Clinic Emergency Communications Center. Upheld by the three-fold mission of patient care, research, and education, the communications center coordinates the integration of ground and air response for the 80,000 to 85,000 requests for dispatch they receive each year.

Is it any wonder the center achieved the title of an Accredited Center of Excellence (ACE) in January 2009, becoming the 124th center in the world to receive the distinction?

This title reflects the success of these sometimes unsung heroes of communications, said Glenn Lyden, Mayo Clinic’s public relations specialist.

“When people hear helicopters in the sky, and they see the emergency vehicles, and they don’t realize how that came about,” he said.

ACE status also validates the work done at the center, Lyden said, and the associated attention makes others aware of the center’s goals. Just ask Emergency Communications Supervisor Steven McCool about his reply to an employee’s “why bother.”

“Why not?” he asked. “Why not be recognized as one of the best centers and achieve our goal with providing the highest level of care to our patients?”

Aiming for ACE

For any center, achieving the ACE may seem an overwhelming task, with the par-
Achieving Ace

Those spearheading the projects had their plates full, not only organizing weekly meetings among participating staff but also simultaneously reminding them of the importance their work brought to the goal. Apparently, the enthusiasm rubbed off.

“The dispatch personnel jumped into this with a lot of energy,” said Dan Han.

It’s not a single send center. Though its local emergency response serves a population of 635,500 residing with an area of 5,775 square miles, the center actually serves a wider geographic spread of patients through its coordination of critical care transports. In addition to basic and advanced life support, the center alerts specialty teams including those for acute stroke, cardiac catheterization, and trauma.

The dispatchers work with medical professionals, emergency first responders, fire departments, law enforcement, and others from around the world arranging patient transports. Locally, they coordinate 11 Gold Cross sites in Minnesota and Wisconsin; three Mayo One helicopters based in Rochester, Eau Claire, Wis., and Mankato, Minn.; and Mayo MedAir based in Rochester, Minn.

But, again, locally is only the tip of the dispatch iceberg.

“A dispatcher may be working on a situation occurring a few blocks from the hospital while the person next to him may be working on a situation on the other side of the world,” explained David Claypool, M.D., assistant professor of Emergency Medicine at Mayo Clinic and communications center medical director. “That will play out in several days, with many steps to getting that person local help.”

The range of their work, the coordination of both transportation and specialty teams, places them in a mentoring role for their neighboring communications center.

“We focus on the need of the patient, and everyone stops and asks the question, ‘What if this was my brother/mother/father?’” asked Dr. Claypool. “When you ask that question, it really helps to settle down the interagency rivalries. We focus on the needs, not the rivalries.”

Evening Takes a Turn

For the next six minutes, Tina kept Patti on the line, repeating Pre-Arrival Instructions (PAIs) for a modified version of the Heimlich maneuver (abdominal thrusts) and reassuring her that help was on the way.

Fortunately, things went really well.

Moments before the ambulance pulled up, Helen was taking deep breaths. She was talking, telling Patti she was doing OK. The piece of bread was no longer choking her, having popped out when Patti laid her mother on the floor, as Tina had instructed as part of the choking PAI.

To say Tina gave a sigh of relief is only part of the story.

“When the call ended, I got up and did a happy dance,” she said. “Everyone in the room smiled. They had a good idea about what had been going on.”

Though Tina claims her mind was going “100 miles per hour,” she was apparently speeding along the right course.

It was supposed to be a nothing out of the ordinary evening for Patti Livingood and her mother Helen.

Helen had been eating a ham sandwich, while her two dogs impatiently waited for the crumbs to fall. Patti was in the next room, settling into her routine after coming home from her job at Mayo Clinic in Rochester, Minn.

A coughing sound alerted Patti; it was nothing all too unusual since Helen sometimes had difficulty swallowing solid foods and the forced coughing helped her push out the food obstructing her airway. When the coughing started sounding more aggravated, Patti ran into the room and wrapped her arms around her mom, just above the diaphragm, and gave a thrust inward. The food wouldn’t come up.

Patti dialed 9-1-1, reaching EMD Tina Stolp, of the Emergency Communications Center for Mayo Clinic, in Rochester, Minn. By this time Helen was unconscious and going into a seizure.

Though Tina claims her mind was going “100 miles per hour,” she was apparently speeding along the right course.

“This was one of those calls where things can go really good or really bad,” Tina said.

The 9-1-1 tape was played in April for the audience gathered to celebrate the center’s recognition as the 124th Accredited Center of Excellence (ACE). Those listening included Jeff Clawson, M.D., co-founder of the National Academies of Emergency Dispatch® (NAED), and NAED Associate Director Carlynn Page. Helen, a former phone receptionist for Mayo Clinic, and Patti were also there.

“It was phenomenal, the call and the recognition,” said Julie Baker, Chief Training Officer/ED-Q. “This meant a lot to them [the dispatchers] because of the confirmation of what they do—save lives.”

Not everyone involved, however, came out a winner. In fact, if dogs could talk, they’d probably mention their disappointment over the outcome of the sandwich.

“The last time this happened, the dogs ate the bread,” Baker said. “This time, Patti made sure she kept the evidence for the paramedics when they arrived.”
kins, M.D., an emergency medicine physician at Mayo Clinic and medical director for Mayo One. “They knew they did a good job, and they wanted to prove to the world and to themselves that that was indeed true. It was a remarkable process, and everyone contributed.”

To accomplish the united goal, McCool and Emergency Communications Project Coordinator Mary Borst selected a rotating group of six frontline dispatchers to review their coworkers’ calls. In this leadership position, the call review group, or CRG, had the opportunity to help other dispatchers improve while doing the same for themselves.

For example, the call review process seemed intimidating until the dispatchers realized the difference protocol compliance could make in an emergency situation. For their part, the CRG further appreciated the skills and integrity of the dispatchers.

“The nice thing about the MPDS® is that it is a logical system; it’s consistent, accurate interrogation,” Dr. Hankins said. “Yet, the protocol could not function without the diligence of the team of dispatchers stiving to provide reliable care to every patient.”

Borst said they coupled their message with a positive approach. Outright criticism was not allowed and advice was provided in the framework of continued improvement. The give and take, and the buy-in the collaborative approach provided, added to the team effort and personal satisfaction of reaching their goal.

 “[The dispatchers] are proud of being an ACE,” Borst said. “Until you’ve sat in that chair, you don’t realize what a difference you make. Once you do, that’s something that can’t be taken from you.”

Dr. Claypool said accreditation tightens that process, a tangible the patients and their families can see.

“The important part for us is doing a good job for many years,” he said. “Accreditation is going through the process of stopping, pausing, doing some internal reflection, and paying attention to details not always organized as optimally as they should be.”

ACE recognition

The Mayo Clinic Emergency Communications Center staff chose April 21, 2009, to celebrate their ACE achievement. Jeff Clawson, M.D., co-founder of the National Academies of Emergency Dispatch® (NAED), and Carlynn Page, NAED associate director, were among their many invited guests.

The event recognized the work the dispatchers and their associates accomplish as a team, and it included the presentation of a lifesaver award to Patti Livingood, who followed the Pre-Arrival Instructions provided by EMD Tina Stolp during a six-minute call to dislodge a piece of food choking Patti’s mother Helen. Her mother survived.

The ACE distinction and subsequent celebration also capitalized on the chance to recognize the many people involved in the process.
“[People] hear helicopters in the sky, and they see the emergency vehicles, and they don’t realize how that came about.”

– Glenn Lyden

“There are a lot of teeth in it in a sense of what it requires to retain accreditation and review it every six months,” Lyden said. “It shows a commitment by the accrediting body and by the center. It’s something that you constantly keep working toward and maintaining.”

For the dispatchers, the ACE and their efforts to achieve the title is nothing short of satisfaction.

“You can see the shine in them,” McCool said. “When they explain to others what they do, I think they take pride in that.”

Also worth mentioning

According to the Mayo Clinic website, Mayo Emergency Communications Center provides other emergency communication services including:

Northwest Airlines emergency calls
Northwest Airlines in-flight staff contact the Emergency Communications Center (ECC) when a passenger has a medical emergency. The call is transferred to a transport nurse or emergency medicine specialist who provides instructions for patient support.

LifeLine Alert
When LifeLine customers need medical assistance, they press a button on a bracelet or necklace, which connects to the Emergency Communications Center. The communications technician determines the appropriate response.

Incoming ambulance and aircraft patient reports
Ambulance and medical aircraft crews radio the Emergency Communications Center with status reports on patients coming to Saint Mary’s Hospital, part of Mayo Clinic in Rochester, Minn. Communications technicians quickly can link them to an emergency room consultant when necessary.

Flight following
The Communication Technicians maintain contact with emergency medical helicopters dispatched to help ensure that industry and federal safety standards are met.

NAED ACE UPDATE

New EMD Accreditations
124 Mayo Clinic Medical Transport/ Emergency Communications; Rochester, Minn.
125 Lake-Sumter EMS, Fla.
126 Lee County Public Safety; Ft. Myers, Fla.
127 Manatee County ECC; Bradenton, Fla.

EMD Reaccreditations
13 American Medical Response – Denver; Denver, Colo.
44 CCS des Capitales; Quebec, QC Canada
65 Sussex County Emergency Operations Center; Georgetown, Del.
74 New Castle County Emergency Communications; New Castle, Del.
77 Kern County/Bakersfield City Emergency Communications Center; Bakersfield, Calif.
78 Centre d’appel d’urgence des regions de l’Est du Quebec; Rimouski, QC Canada
83 Seaford E-911 Communications Center; Seaford, Del.
99 Durham Emergency Communications Center; Durham, N.C.
100 American Medical Response – LIFECOM; Modesto, Calif.
101 Alachua County Sheriff’s Office; Gainesville, Fla.
102 American Medical Response – Sacramento; Sacramento, Calif.
103 Niagara EMS Communications Service; Niagara-on-the-Lake, Ontario, Canada
105 East Midlands Ambulance Service NHS Trust; Nottingham, UK

New EFD Accreditations
8F Harford County Division of Emergency Operations; Forest Hill, Md.
9F Sarasota County Public Safety Communications; Sarasota, Fla.
10F Bernalillo County Emergency Communications; Albuquerque, N.M.

EFD Reaccreditations
2F Cy-Fair Volunteer Fire Department Communications; Houston, Texas
3F Albuquerque Fire Department, Albuquerque, N.M.
Reason Behind Arrangement.  Order of Protocol follows logical progression in an emergency

Brett:

My higher ups would prefer to change the order of EMD questions and dispatch, rather than keep the order the way it is. This is what they suggest we follow:

1. Begin the EMD process by asking the Case Entry questions
2. Dispatch EMS using that information
3. Go back to caller for Key Questions after dispatching EMS
4. When EMS calls enroute, advise them of level of priority

They heard some agencies already do this and refer to it as the “step up process.” Have you heard of this, but most importantly is it allowed?

Craig J. Scholl
Sr. Emergency Communicator
Clinton County
Office of Emergency Services
Plattsburgh, NY

Brett:

You are correct in that some agencies dispatch routinely at Case Entry, then code, and potentially downgrade later. This is sometimes called pre-alerting and the rationale given most often is to save response time in the interest of saving lives. While this approach may save a few seconds, there are reasons for keeping the order as is: pre-alerting is often counter-productive; it is not safe; and it is inconsistent with the protocol’s design.

The ECHO determinant allows for immediate dispatch when the potentially time-critical patient is in need of the closest available trained responder and scene safety concerns are not present. This covers the patient care concerns about response time often cited by proponents of the pre-alert. Unfortunately, political concerns about response time are often the underlying fear when response time is paramount. Remember, most experts agree that less than 5 percent of EMS calls are actually seconds critical and current ECHO response practice addresses those calls.

It has been our experience that pre-alerting crews to respond at Case Entry is self-defeating because crews learn very quickly to expect the downgrade and become less assertive with regard to initial response to the bell. In other words, just like the EMD, the crew does not yet have enough information to make a responsible decision regarding response, and they trust that the EMD will make that decision in a moment or two, so they wait.

Additionally, the immediate HOT response to all calls exponentially increases the chance of an Emergency Medical Vehicle Crash (EMVC) by increasing the time spent running lights-and-siren.

The MPDS was designed to identify and address time-critical events and dispatch appropriately. When time allows, which includes the vast majority of EMS calls, the MPDS takes only a minute or so to determine what is needed and prompt a responsible and appropriate response to the call.

In summary, the Academy does not mandate any particular response policy; these decisions are best made locally because resources vary among agencies. However, the Academy does recommend using the MPDS to assign varied, responsible, and safe responses using the multiple Determinant Descriptor codes provided at the dispatch points recommended by the protocol. A blanket, immediate response for all calls is, in our opinion, unsafe and unproductive.

I hope that helps.

Brett A. Patterson
Academics & Standards Associate
International Academies of Emergency Dispatch

Virginia:

The instruction is in parentheses to designate that it is optional and dependent on caller/patient need. We did this because it comes so soon after PDIs that include the universal “I’m sending the paramedics to help you now...” instruction. In cases where no other PDIs are given, the Case Exit instruction you are referring to comes immediately after and may seem redundant; therefore, it is optional.

You will notice that in Case Exit, the 1st party instructions, located to the left, use “Help is on the way,” while the 2nd party instructions use “Reassure her/him that help is on the way.” This difference is purposeful to address the patient’s concern about response. However, it is always appropriate to address the caller if caller anxiety is an issue.

I hope that helps.

Brett A. Patterson
Academics & Standards Associate
International Academies of Emergency Dispatch
Statistics show that early initiation of bystander CPR increases the chances of survival for patients in sudden cardiac arrest. This incredible data shows the difference a calltaker can make in a patient’s outcome. It is exactly the evidence we need to show we do make a difference in a person’s chances of survival in an emergency and to remind us to continually strive for a 100 percent call assessment 100 percent of the time.

If you’re looking for suggestions on how you can improve or brush up on your call-taking skills, consider the following:

1. Verify the address and phone number if the ANI/ALI does not match what the caller is saying or if there is no ANI/ALI. The best practice for verification of the address and phone number is having the caller repeat the information back to you, rather than you repeating it back to the caller.

2. To select the most appropriate Chief Complaint protocol based on the 12 rules found on the Case Entry (CE) Additional Information panel, ensure you find out exactly what happened. Quite often, the caller’s initial response to that question is telling you only part of the information about what’s going on with the patient; this is not the information needed to select the most appropriate protocol. Simply repeating “Tell me exactly what happened” is usually enough to prompt the caller to tell you about the events leading up to his or her call. Asking the question again also prevents you from falling into a trap of trying to pinpoint the patient’s problem based on any faulty information rather than exactly what happened.

3. Ask the questions exactly as written only adding acceptable enhancements and clarifications. Clarification questions are those questions that help the calltaker determine the best answer choice to select in ProQA®. If your agency is using the Medical Priority Dispatch System® (MPDS) cardset, clarification questions assist you in ensuring you have an appropriate answer to a question so that you are able to select the most appropriate dispatch code.

It is not necessary to clarify the caller’s answer if the answer is a choice in ProQA or the response clearly answers the question asked. Prior to clarifying a caller’s answer, ask yourself, “Is it necessary to clarify the caller’s answer?”

By Corinne Begg

Influencing Outcomes.
Dispatch takes practice and vigilance

Increasing the Odds Sharpening your calltaking skills can make a difference in somebody’s life.
Enhancements are those additional words incorporated into a question that make the question more conversational but do not change the intent of the question. Enhancements are what help call assessments to be more personal and less clinical.

4. Select the most appropriate answer choice in ProQA. The answer choices drive ProQA to determine the most appropriate pathways and the most appropriate Final Code. Be sure to read through all the options and choose the one that best fits the caller's response.

5. Provide all the appropriate Chief Complaint Post-Diagnosis Instructions (PDIs) from the panel in ProQA or the MPDS cardset by taking the time to actually read them as you go rather than glancing over them and advancing past. This will help you avoid missing any instructions, assist you in selecting the correct pathway, and aid you in providing the instructions correctly.

6. Take time to read the instructions from the Case Exit and Pre-Arrival Instructions (PAIs) panels and select the most appropriate pathway at the bottom to ensure ProQA takes you to the next most appropriate set of instructions. This will help you to remember all the steps and provide them correctly.

7. Practice, practice, practice. It sounds cliché but it's the truth. The time to learn how to navigate through ProQA or the MPDS cardset is not when you're processing a call. The time to learn how to navigate through PAIs is not during a call that requires them. Being familiar with how to navigate through ProQA will help you to provide a top quality call assessment and alleviate a large amount of stress for you during the most complicated calls.

8. Provide top-notch customer service to the callers. Top-notch customer service isn't about having an attitude that the customer, or in our case the caller, is always right. It’s about working with the caller to achieve the best possible outcome and no matter the result, leaving the caller with dignity intact and having nothing but positive comments about the service provided.

When someone phones for help, we have no way of knowing how the events and circumstances leading up to the call have affected the caller. No one reacts to an emergency in the same way as someone else and how we react often depends upon what is happening in our own lives. A reaction may seem extreme to someone who views an event as relatively insignificant; however, as professionals, we must avoid judging callers based on their reaction to the events they are experiencing.

When someone phones for help, we have no way of knowing the events and circumstances leading up to the call. No one reacts to an emergency in the same way and how we react depends upon what else is happening in our lives at the same time. A reaction may seem extreme to someone who views an event as relatively insignificant; however, it early on in the call assessment. Even the calmest of callers need to know you are sending help and are trying to help them over the phone until help arrives. Every caller needs to hear this more than once throughout a call assessment, no matter the event. Try it. You'll be amazed at the cooperation the most uncooperative caller can provide.

Explain your actions and prepare the caller for the questions. If you are having difficulty entering information and there's a lull in the call assessment, explain the lull to the caller. If it's a 3rd party caller, let the caller know you understand the difficulty in providing information and it's OK. Bear in mind, every caller knows something you need to know; they just don't know what it is you need to know.

Some great phrases are “I'm sending you lots of help and I need to get some information for the paramedics.” Or, “I'm send-

Quality training, accessible support, experience, and the willingness to continuously improve calltaking skills are the keys to meeting high industry standards.

as professionals, we must avoid judging callers based on their reactions.

Providing outstanding customer service also helps reduce your stress level. It is natural to respond to the caller's emotions and reactions—it's our fight or flight response kicking in. Our goal as professionals should be to de-escalate the situation as quickly as possible. Some helpful hints for providing high quality customer service for every caller are:

a. Use a tone of voice that represents politeness, care, concern, and professionalism. Callers respond to our tone of voice and they will follow your lead.

b. Provide reassurance. Provide it freely, provide it often, and provide it early on in the call assessment. Even the calmest of callers need to know you are sending help and are trying to help them over the phone until help arrives. Every caller needs to hear this more than once throughout a call assessment, no matter the event. Try it. You'll be amazed at the cooperation the most uncooperative caller can provide.

c. Explain your actions and prepare the caller for the questions. If you are having difficulty entering information and there’s a lull in the call assessment, explain the lull to the caller. If it’s a 3rd party caller, let the caller know you understand the difficulty in providing information and it’s OK. Bear in mind, every caller knows something you need to know; they just don’t know what it is you need to know.

Some great phrases are “I’m sending you lots of help and I need to get some information for the paramedics.” Or, “I’m send-
d. Be professional at all times. Cutting callers off by interrupting them, raising your voice, ignoring their questions or not acknowledging their concerns are counterproductive behaviors. Whether your organization is private, municipal, government or a non-profit organization, you should make the caller and patient feel comfortable about calling back if the need arises. Good customer service is about respect, empathy, and professionalism.

e. Don’t take the caller’s behavior personally. If the caller is acting frustrated, angry, or anxious, it’s not because they are unreasonable individuals; people in crisis are frightened. He or she is reacting to the event occurring in their life at that moment. We must lose our personal judgments about the appropriateness of the reaction and provide the reassurance the caller is desperately seeking.

Remember, seasoned call-takers are probably “numb” to most types of calls; however, the same can’t be said of the caller. Most people call 9-1-1 only once in a lifetime most have no idea what to anticipate. Our callers consider their event as serious situations and may truly expect the worst possible outcomes. To them, this may be the most significant event ever to have occurred in their lives.

f. Avoid telling callers to calm down. Simply telling callers to calm down isn’t effective. In fact, it might do the opposite. Providing our callers with reassurance, explaining what we’re doing as well as including the reason will help to calm them and motivate them into providing the necessary care.

9. Take care of yourself and be mindful of your stress levels. It’s not uncommon to finish one stressful call only to dive immediately into another. We are in a profession that makes us feel like it’s a sign of weakness to admit a call has bothered us. Inevitably, the stress comes through our call assessments and as a result, the quality of our call assessments goes down.

We each have our own breaking point, often without we’ve crossed the line. We must be aware of our breaking point because of the impact it has on coworkers, loved ones, callers, patients, and us.

Familiarity with protocol and knowing how to deal with difficult callers help reduce stress levels. We don’t often get closure with calls and there’s seldom time in between calls to gather our thoughts. Take action to minimize the effects of stress by leading a full life outside of work and seeking help when stress levels are affecting the quality of your life. Learn to appreciate the network that comes with the job.

10. Understand your center’s expectations by regularly reviewing the Scoring Standards and your center’s Standard Operating Procedures and policies. The more familiar you are with expectations, the easier it is to meet them. If you are unsure of how your center expects you to handle a certain situation, ask your supervisor or quality improvement representative. If there is an area of the protocol unclear to you or you’re unsure of how to maneuver through an area of ProQA, ask someone for help. Ask your supervisor, a colleague, your training unit, your quality unit, or the National Academies of Emergency Dispatch®. If need be, take initiative and find help outside of the center. Resources are available.

Quality training, accessible support, experience, and the willingness to continuously improve calltaking skills are key to meeting high industry standards and it begins and ends with you as the calltaker. Everyone must take responsibility in the drive for excellence.
On Track

Shake It Up.
Nothing’s dull about these CDE ideas

By Heather Darata

Ever wish you could shake up your center’s Continuing Dispatch Education (CDE) by adding some different and exciting ideas into the mix? Are your EMDs itching to break out of the mold of CDE monotony? Are you new to the training role and tasked with spicing up the program in existence since the Stone Age of communications?

If you answered “yes” to any of these questions, Navigator 2009 was the place to be. Four sessions offered during the 3-day conference held in April focused on the sometimes puzzling, but always necessary, element of continuing dispatch education.

- Game Show CDE—Making CDE Motivational While Educational incorporated the ADDIE instructional systems design model to present elements for consideration before jumping into a CDE design program and, also, games you can modify to meet your specific goals.

- Continuing Education Tips and Tricks covered a variety of methods to convince dispatchers that continuing education can be both inspirational AND fun.

- Thinking Outside the Box for CDE accomplished just that: doing something other than the tried and even true to keep the team motivated and responsive.

- CDE—To Boldly Go Where No Instructor Has Gone Before put the emphasis back on the dispatcher with its dose of real life situations.

Let the games begin

Presenters John Ferraro and Ron Two Bulls adapted their CDE expertise to three quiz show games—Jeopardy, Family Feud, and Who Wants to Be a Millionaire—for their “back by popular demand” Game Show CDE—Making CDE Motivating While Educational.

Brought to Navigator life, Jeopardy, the quiz show that has players asking the questions to reach the answer, featured three teams of two players per team. Family Feud pitted one team against another in the name of fun and education, while those volunteering for the Who Wants to be a Millionaire competed for the “don’t you wish” imaginary prize.

In case you’re interested, game templates are available at the click of your mouse. A template for Jeopardy can be obtained by e-mailing Ferraro at JFerraro@ducomm.org. Two Bulls and Ferraro suggest infusing some fun into the game by including a category about the history of your agency or the interests of your staff (keeping in mind the differences among the boomers and X, Y generations).

Family Feud is available for purchase online (http://ftcpublishing.com) and the Who Wants to Be a Millionaire template can be downloaded off the Internet in a PowerPoint format (try http://jc-schools.net/tutorials/PPT-games/; others are available if that version doesn’t work).

One last note: Take copyright into consideration. While the underlying ideas for games are typically not protected, you should still take precautions. Online resources regarding copyright are plentiful.

Two sites you may want to try are http://www.uspto.gov/ and www.patentcopyright-trademark.blog.com/.

Not a board game player? Try crossword puzzles, as suggested during the Continuing Education Tips and Tricks session led by Christina Baum and Alice Valle. If you’re
Quick-fire drills, scenarios, card tests, and a question of the day were only a few of the suggestions offered. For quick-fire drills, ask dispatchers to identify the protocol for a situation the instructor makes up on the spur-of-the-moment; alternatively, the drill can be based on actual calls modified for class use. Card tests incorporate questions involving specific protocol (i.e., where to turn to if the patient is barely breathing and no AED is available), while the question of the day can be sent out—you guessed it—daily to keep the CDE spirit flowing.

Step up
You want more real world in your CDE mix?
Tracey Barron and Louise Ganley added doses of dispatcher reality in their CDE—To Boldly Go Where No Instructor Has Gone Before, particularly in the case of moving a patient from the bed to the floor.

“‘Well, how do you do it?,’” Barron recalled EMDs asking. “‘Why aren’t there any instructions?’” To demonstrate a how-to, Barron and Ganley pulled the stuffing from inside a standard Resusci Anne manikin, replacing it with pounds of sugar to more closely approximate the weight of a human at dead-weight. They placed a sheet underneath and invited pairs of dispatchers, at different times, to lift Anne off the bed without causing further injury (losing any of the sugar). By going through the motions, the dispatchers better understood what might be happening on the other side of the line.

The ADDIE model:
1. Analysis: Assess your dispatchers’ needs to find out where you’re at with CDE. If something has changed or if a problem has arisen, it’s time to administer a tool to find to what changed and/or what the problem is (think who, what, why, when).
2. Design: When you think about designing a game, promoting team building, or another learning tool, make sure that you really know your learners and what methods work best for them. Would it be best to use PowerPoint, videos, case studies, or role playing? Search the Web for ideas and/or ask other agencies.
3. Develop/Implement: Make sure that when you design and use a new tool that clear objectives are created so everyone at your center knows what is expected and how to go about maximizing the most out of their continuing dispatch education time.
4. Evaluate: Periodically evaluate via a quiz, group test, oral quiz, or written evaluation so after the results are analyzed it’s clear whether instructions need to be revised for a specific method you’ve employed.

Don’t forget another important ingredient: make it fun. Nothing’s worse than a course taught by an instructor who obviously doesn’t want to be there. The attitude you bring to class is the attitude your students reflect.

Source: John Ferraro and Ron Two Bulls in Game Show CDE—Making CDE Motivational While Educational
There’s also the technology to mitigate a dispatcher’s assumptions. In other words, the information the dispatcher hears and uses to base decisions from isn’t always what he or she would find at the scene. For example, a one-line description informing the class of a caller describing chest pain most likely had the class thinking the patient was suffering from sudden cardiac arrest, rather than a painful, though not serious, blow to the chest as a result of a gymnast’s failure to clear the balance beam, as shown in the film clip. “Don’t always assume that you have enough information to select the correct Chief Complaint,” Ganley said. “You can be amazed at how wrong you can be,” Barron added.

Direct exposure

Speakers emphasized the importance of experience—especially the experience of field responders and their coworkers.

Ride alongs give dispatchers a window into the scene. You can also encourage your dispatchers to step outside the communications center (call volume permitting) for CDE sessions. A breath of cool, fresh air and colorful outdoor surroundings can bring new life to attitudes and motivation. Finally, don’t forget the stories your dispatchers may want to tell. Their experience in handling different calls and their callers can inspire and comfort others, especially during those “what to do after the call is over” stress-filled situations.

Go public

Broaden your local resource base by bringing in speakers from outside your agency; for example, contact the community college or the local office of homeland security. If your budget allows, set up a special fund for sending dispatchers to conferences such as the annual Navigator conference held by the National Academies of Emergency Dispatch® (NAED). Your selection of who attends can be set on a rotating basis or by scholarship determined by compliance scores. Or, give the community a better view of 9-1-1 through visits to local schools or senior drop-in centers. You may even think about attending a regional event, such as a state fair, to bring the 9-1-1 message to the broader community.

Turn to the Academy

Finally, the Academy offers several resources. The Journal publishes two CDE articles per issue (12 per year) that include 10-question quizzes for earning those important CDE credits (just make sure you mail them in by the deadline). In addition, members can access the EMD Advancement Series and there’s always the CD package of sessions recorded directly from the Navigator conference. Use your imagination and make it fun!
Quickly sending the RIGHT on-scene information to responding officers and updating it in real-time can help save lives. That’s what the Police Priority Dispatch Protocol System® does better than any other. When your team takes a 9-1-1 call using ProQA® dispatch software, you can be confident that both your new and veteran dispatchers are doing it RIGHT and that responding officers are receiving the information they need to protect themselves and the citizens around them.

We agree with what master mathematician Claude Shannon said in 1963:
“Information is the reduction of uncertainty”
ProQA® Dispatch Software—reducing uncertainty for over 29 years

ask the right question. get the right answers. send the right information.
No one could attest to the physical well-being of Fernando Hernandez, 29, before he collapsed and died at the edge of railroad tracks outside the city of Bonita on the southwestern coast of Florida.

But the death, however inconsequential to his present state of health, pointed to an uninvited caller.

From newspaper accounts published shortly after his death in June 2006, Hernandez, originally of Ocotlan de Morelos, Mexico, was on the edge of poverty. He lived in a rented apartment in Old Bonita Springs and worked part time for a company that hired workers for odd jobs on a daily basis.

On the night Hernandez died, he had been drinking beer among friends in a clearing close to a city of tents connected by a network of trails leading to a creek. Hernandez apparently disapproving of the visitor cloaked in alternating red, yellow, black, yellow bands slithering into their circle slashed its body with the glass from a broken beer bottle. The intruder reacted instinctively, injecting potent neurotoxin venom through a set of small but fixed fangs it buried into his tormentor’s forearm. Hernandez died several hours later near the tracks where he had walked shortly after the encounter; the snake, which someone had crammed inside a bottle, was dropped off at a fire station about one mile away.

Hernandez’s death was notable not because of his circumstances. Rather, his name will go down as the first documented death due to an eastern coral snake (Micruirus fulvius fulvius) in the United States in more than 40 years. An ELISA (enzyme-linked immunosorbent assay) developed specifically for the investigation provided the post-mortem evidence.

Hernandez did not seek medical help following his then unknown brush with death. He may not have recognized the type of snake or known its status for having the second most potent venom of any North American snake. Odds were also in his favor. The bite of the reclusive coral snake accounts for less than one percent of all snakebites annually in the United States. Rattlesnakes, copperheads, and water moccasins (cottonmouths) are responsible for most venomous snakebites among the roughly 25 venomous snake species in the United States.2

The coral snake is an elapid snake (family Elapidae). An elapid snake is any of numerous venomous fanged snakes found in warmer climates. A medical emergency due to the bite of an elapid snake is considered so rare in the United States that it took until Medical Priority Dispatch System™
An estimated 8,000 venomous snakebites occur every year in the United States, with 10 to 12 suspected deaths annually.

1. Elapid Snakebite Instructions
1. Keep her/him from moving around.
2. (Keep the bitten limb down.)
3. (Bandage the limb from the area of the bite to the hand/foot, then back up to the body, snugly enough to allow one finger to slip between the bandage and the skin.)
4. (Immobilize the limb by splinting if possible.)
5. Tell her/him to keep calm.
6. Do not move her/him at all.
7. Wait there for the paramedics (EMTs).

2. Allergies (Reactions)/Envenomations (Stings, Bites)

MPDS® v12.0 to add Post-Dispatch Instructions (PDIs) for emergencies related to elapid snakebites in Protocol 2: Allergies (Reactions)/Envenomations (Stings, Bites). The response to a snakebite is coded 2-D-4, unless the caller reports that the patient is breathing ineffectively, having difficulty speaking between breaths, or is not alert.

Elapid snakes, such as the coral snake, use a pair of small fangs, fixed in the front of their upper jaw, to deliver their venom. The toxin is delivered under pressure through its narrow, hollow teeth, similar to a subcutaneous injection. Elapid snakes tend to hold on to their victim while releasing the venom as opposed to vipers (non-elapid snakes), which have retractable fangs and let go immediately after striking.

The world’s most famous species of elapid snake is the Indian cobra (N. n. naja), the serpent most often used by snake charmers.

The MPDS PDIs for a bite from an elapid snake was formerly the domain of the Australian version—and for good reason. In Australia, species of venomous snakes outnumber nonvenomous snakes by four to one. The largest, most dangerous species is the taipan (Oxyuranus scutellatus), a tropical species that can reach a length of 11.5 feet. Several species of tiger snakes (Notechis scutatus and N. ater) are more widespread and have particularly deadly venom. The death adders (Acanthophis antarcticus and A. pyrrhus) are viper-like elapids.

Despite their relatively high numbers, deaths by snakebite in Australia are somewhat rare. In a published survey of deaths from snakebite in Australia (Sutherland and Leonard 1995), 12 deaths were reported over the three-year period (1992–94); none of the victims had received proper first aid.³

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Three species of elapid snakes are found in North America: the eastern coral snake,
the western coral snake, and the yellow-bellied sea snake. The eastern coral snake is the most widespread and, for those lucky enough to notice, carries the warning signs of red-yellow-black-yellow coloration, unlike the similarly colored but nonvenomous scarlet king snake. A folk saying, developed to help people remember the important differences in coloration between the coral snake and its harmless mimics, goes like this: “Red touch yellow—dangerous fellow. Red touch black—venom lack.”

An estimated 8,000 venomous snakebites occur every year in the United States, with 10 to 12 deaths annually. North Carolina has the highest frequency of snakebites, with 19 bites per 100,000 persons. The national average is approximately 4 bites per 100,000 persons. In the United States, the number dying is so low, compared to cardiovascular disease or traffic accidents, for example, that health departments seldom track the morbidity or mortality rates.

Response to snakebites
In 1895, French physician Albert Chalmette developed the first snake antivenom for use against the deadly cobra. His discovery and those that followed have prevented the snakebite fatalities once prevalent; the sooner the antivenom is administered the better, particularly to minimize the disfiguring consequences of tissue destruction.

The venom is “milked” from the snake, diluted, and injected into a mammal, such as a horse, rabbit, or goat. As the animal builds up immunity to the venom, the dosage is increased, and the animal creates blood rich in antibodies.

Antibodies are blood proteins created to fight antigens. These antibodies collect in the serum, which is eventually separated from the dark red cells. After the serum has been purified a little more, it’s ready to be injected at a moment’s notice.

Physicians have historically approached antivenoms almost as a last resort in many cases because of the chance of adverse reactions in response to the serum. Newer technology may waylay their fears with antivenoms made from human antibodies and more purified and specific product manufacturing.

Venom Response Team
Miami-Dade County (Fla.) is home to numerous venomous animals and also the point of entry for a wide variety of venomous animals imported into the United States for collectors or, during the past decade, an effective ruse for smuggling drugs into the country. The dubious distinction helps to explain why the Miami-Dade (Fla.) Fire Rescue Venom Response Team maintains the largest and only snake, spider, scorpion, fish, and jellyfish antivenom bank for public use in the United States.

Last year, the Miami-Dade Fire Rescue Venom Response Team responded to about 1,100 calls throughout Florida, of which about half were attributed to snakebites. Of those, about one-fifth, or 100 people, needed antivenom.

Miami-Dade Fire Rescue Chief Al Cruz started this program 10 years ago and, five years ago, Captain Charles Seifert was assigned as the program’s full-time coordinator. He is a licensed private keeper of venomous snakes, and his collection, started nearly 30 years ago, includes a cobra he brings throughout southern Florida for public awareness classes.

As Seifert explained, the response team has 49 antivenoms on hand for shipment 24 hours a day, seven days a week. A team of trained paramedics often takes the antivenom for administration to the victim, and the team is also available to provide the same instructions over the phone to medical personnel at a center having its own antivenom.

The response team has a worldwide reputation, at least among snake enthusiasts, poison control centers, and areas of particular venomous snake concentrations. Other than the enlightened few, “Most people don’t even report when they’re bitten.”

The awareness of their team is a situation Seifert is determined to change through a campaign that includes sending their contact information to dispatch centers throughout the state. From there, he plans to go national with the information, especially since they are participants in a clinical trial for producing eastern coral snake antivenom for application on a national level. Currently, one type of antivenom is used to counteract the toxic effect of all types of coral snakes; the same applies to pit vipers.

The Miami-Dade Police Department communications center refers the known venomous bites to the resource team.

But, for the most part, snakebite calls are routine to a center receiving upwards of 2.6 million 9-1-1 calls a year.

“I’m not trying to downplay the situation, but most of them are not a big deal,” said center Director Deborah Weintraub. “They’re the garden variety with only rarely the report of a venomous bite.”
It’s like Seifert said. The death three years ago in Florida from the bite of a coral snake is a rare occurrence and, in this case, related to several factors such as the failure to seek medical attention.

“Even those waiting for the antivenom can be kept alive for hours because of modern technology,” Seifert said. “What happened [in Florida] could have been prevented.”

References

2 National Center for Environmental Health (NCEH)/Agency for Toxic Substances and Disease Registry (ATSDR), Coordinating Center for Environmental Health and Injury Prevention (CCEHIP).
CDE Quiz Mail-In Answer Sheet

Take this quiz for 1.0 CDE unit.

Answer the test questions on this form. (A photo-copied answer sheet is acceptable, but your answers must be original. Please do not enlarge.) Within six weeks, you will receive notification of your score and an explanation of any wrong answers. Once processed, a CDE acknowledgement will be sent to you. (You must answer 8 of the 10 questions correctly to receive credit.)

Clip and mail your completed answer sheet along with the $5 processing fee to:
The National Academies of Emergency Dispatch
139 East South Temple, Suite 200
Salt Lake City, UT 84111 USA
(800) 960-6236 US; (801) 359-6916 Intl.
Attn: CDE Processing

Please retain your CDE acknowledgement to be submitted to the Academy with your application when you recertify.

1. The death of Fernando Hernandez is attributed to the following type of snake:
   - rattlesnake.
   - cottonmouth.
   - eastern coral snake.
   - cobra.

2. In Australia, species of venomous snakes outnumber nonvenomous snakes by a ratio of:
   - one to one (50 percent venomous/50 percent nonvenomous).
   - three to one (75 percent venomous/25 percent nonvenomous).
   - four to one (80 percent venomous/20 percent nonvenomous).
   - one to zero (all snakes in Australia are venomous).

3. The world’s most famous species of elapid snake is the:
   - Indian cobra.
   - Trans-Pecos copperhead.
   - common kingsnake.
   - western diamondback rattlesnake.

4. The eastern coral snake is the most widespread and, for those lucky enough to notice, carries the warning signs of:
   - the shaking of its rattle.
   - alternating bands of red-yellow-black-yellow.
   - alternating bands of red-black-yellow.
   - hooded threat display.

5. The number of venomous snake species in the United States is:
   - less than 10.
   - roughly 25.
   - between 75 and 100.
   - more than 150.

6. According to the 1979–2005 study cited in the sidebar, the state with the highest number of fatalities due to snakebite is:
   - Florida.
   - Arizona.
   - New Mexico.
   - Texas.

7. Who is credited with developing the first snake antivenom for use against the deadly cobra?
   - Scottish biologist Sir Alexander Fleming
   - American virologist Jonas Salk
   - French physician Albert Chalmette
   - British physician Jack Preger

8. Post-Dispatch Instructions for elapid snakebites are found in which MPDS Chief Complaint Protocol?
   - Protocol 2
   - Protocol 12
   - Protocol 26
   - Protocol 30

9. The largest and only snake, spider, scorpion, fish, and jellyfish antivenom bank for public use in the United States is located in:
   - Phoenix, Arizona.
   - Dallas, Texas.
   - Miami, Florida.
   - San Diego, California.

10. Prior to v12.0, the PDIs for a snakebite from an elapid snake were the domain of the following country:
    - Australia.
    - India.
    - Mexico.
    - Canada.

In order to receive credit for this quiz you must be certified in the specific discipline it is designated for. To be considered for CDE credit, this answer sheet must be received no later than 08/30/10. A passing score is worth 1.0 CDE unit toward fulfillment of the Academy’s CDE requirements (up to 4 hours per year). Please mark your responses on the answer sheet located to the right and mail it in with your processing fee to receive credit. Please retain your CDE certificate to be submitted to the Academy with your application when you recertify.
Two weeks that will change your future*

*Cookie not included

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2009 Online registration begins January 5

“I’ve been involved in this profession for almost 20 years. During that time I’ve attended multiple National and State APCO and NENA Conferences. The CCM course was hands down the BEST learning experience that I have ever experienced. I recommend attending, in fact I plan on having every one of my management staff attend the class.”

— Tom Ling, Johnson County Central Dispatch

Online applications for the 2009 course to be held in Kansas City, MO will begin January 5, 2009. Go to www.emergencydispatch.org or call Sharon Conroy at (816) 431-2600 for more course curriculum and registration information.
Sinking Vehicle.
Prevention is all about protocol and consistent feedback

By Michael Spath

“What can I do right now?”

Those six words were some of the last words anyone would ever hear from Kimberly Kendrick; she drowned in her car after it sunk in floodwaters on May 2, 2009. Over the course of her haunting 10-minute telephone call to 9-1-1, she repeatedly asked the emergency dispatchers for instructions on what to do. Aside from telling her to stay in the car, they focused almost exclusively on identifying her location, which she attempted to provide multiple times. Kimberly’s case was a tragic demonstration of the potentially life-saving use of the NAED’s 9-year-old Sinking Vehicle Protocol.

Oklahoma Highway Patrol Lieutenant George Brown said, “Most of the people who are victims of drowning did not get out of their vehicles.” In other words, it is predictable that people trapped in a sinking vehicle will very likely drown if they stay in the car.

“Predictable is preventable,” says Gordon Graham, a popular speaker on the emergency response lecture circuit. He is the keynote speaker at the upcoming national NENA conference. How many people will truly hear his message? Prevention, in this context, is all about adopting protocols and providing comprehensive and consistent feedback to maximize their use during any crisis. Is it predictable that someone may drive their car into floodwaters? Yes, that’s why we put up signs in hopes of preventing these accidents. Still, people drive around them. Is it predictable after doing so they will have a cellular telephone and may dial 9-1-1 for help?

Yes, that’s why we have pushed so hard for latitude/longitude information on wireless devices. Still, having their location may not be enough—it takes time for responders to get there. Is it predictable the caller will then ask us for instructions on what to do before the responders get there? Yes, that’s why pre-planned protocol must exist, why this has gone beyond “doing EMD” on calls, why PALS exist for police and fire calls as well, why protocol must not only be used, but used correctly—the first time, every time, before the call comes in.

“In an emergency situation, you don’t rise to the occasion; you fall back to your level of training.” —Unknown

Sinking Vehicle Protocol

Each of the three protocol systems—PPDS™, FPDS™, and MPDS®—contains the Sinking Vehicle Protocol. Regardless of which protocol we are using, we first obtain and verify the location, then obtain and verify the caller’s telephone number. In the case of a sinking vehicle, the driver may be completely disoriented and unable to provide the location. It remains important for
the calltaker to at least attempt to ascertain location and telephone number information. If the caller doesn’t know, the caller doesn’t know; however, as we heard in this call, more information may be obtained.

We rely on other technology to assist us in those cases (GPS data, for example).

How much time should the emergency dispatcher spend on location before giving instructions to the caller in a sinking vehicle? There’s no simple answer to that question, but as is stated in the protocol, “a vehicle may sink completely in as little as 1 to 2 minutes.” To provide the emergency dispatcher guidance on how to perform when faced with these highly stressful calls, the Academy has published the Law of Concurrent Priorities, which can also be found (at least in part) on all three protocols. Found on Protocol 32 of the MPDS, it states, “The EMD must weigh the concurrent priorities of obtaining (and verifying) a useful location, helping the caller get to safety, and caring for the patient.” The PPDS and FPDS have a similar rule in the Case Entry Additional Information, which also states, “A caller may be unable to identify the exact location for a variety of reasons. If the initial effort fails, attempt briefly to obtain the street or highway of travel, direction of travel, and last cross street or identifiable object seen. Further attempts to locate can be made as time permits.”

The PPDS and FPDS address sinking vehicles with a caller inside through a direct Dispatch Life Support Link from Case Entry. The PPDS codes the call a 131-E-1, the FPDS a 72-E-1. Case Entry Protocols link directly to Pre-Arrival Instructions for a Sinking Vehicle. In the MPDS, we move to Protocol 29 from Case Entry, but do not ask any Key Questions. The call is coded a 29-D-2s; we then link to the Sinking Vehicle PAI Protocol. Each system’s code provides agencies with the ability to plan the most appropriate response configuration for a sinking vehicle emergency based upon the resources within their jurisdiction.

The Sinking Vehicle Protocol is identical on all three of the Priority Dispatch Systems. The emotional content of this call is very likely to be high, with a frantic caller facing his or her own death and/or the deaths of any others in the car, almost always relatives or friends. It is written in first-party language, as the calltaker will be talking to the person trapped in the vehicle. Panel 1 starts off with a calming statement, including those highly effective words, “I will tell you exactly what to do next.” The calltaker then instructs the caller to “release [their] seat belt and unlock the door.”

Instructing someone to release their seat belt and unlock their door may seem rudimentary to the calltaker, but the caller is under a great deal of stress that can easily impede rational thinking. It is also important to deliver these instructions early in the process in anticipation of potential escape problems. These instructions are intended to help the caller increase their chances of surviving the incident.

The calltaker then asks the caller, “Has the water outside reached the bottom of your window yet?” The answer to this question helps the calltaker determine whether...
the vehicle is FLOATING or UNDERWATER, linking them with the next panel of instructions. (Side note: Words printed in all CAPITAL LETTERS have a written definition listed on the protocol. A FLOATING vehicle is one in which the driver’s window is above the water line. An UNDERWATER vehicle is one in which the driver’s window is part way below or completely below the water line.)

For a FLOATING vehicle, it is possible for the caller to escape through the open window without waiting for the car to fill up with water. If the window won’t open, the calltaker instructs the caller to break a side window by hitting it in the center with a sharp or heavy object. If they are still unable to get out, the calltaker is directed to the UNDERWATER instructions.

For a vehicle that is UNDERWATER, the car must be allowed to fill up with water. Doing so allows the pressure inside the car to equalize with the water pressure currently holding the door closed from the outside. While these instructions must be delivered in order, it is very important to deliver them all. Unlike other Pre-Arrival Instruction sequences, the first instruction—letting the car fill up with water—does not have to be completed by the caller before the next instruction is delivered. The other instructions pertain to what the caller must do once the car is nearly filled up with water—taking a deep breath, opening the door, breaking the window if the door won’t open, kicking out the window if it won’t break, and following the bubbles to the surface. Vehicles frequently turn onto their side or flip over completely when they sink. Telling the caller to follow the bubbles to the surface is a potentially life-saving instruction.

Dynamic problem-solving

These are extremely dynamic situations, with circumstances changing rapidly. Rules 1 and 2 on the Sinking Vehicle Protocol provide additional guidance on the calltaker’s performance, directing them to navigate among the most appropriate advice and give specific instructions early in the PAI process (prior to potentially losing contact with the caller). If the caller indicates the car is already submerged and rapidly filling with water (because the back window was open, for example), several instructions can be omitted in favor of providing the most relevant instructions. For example, “Release your seat belt and unlock the door; just before the water covers your head, take a deep breath; once the car is full, you should be able to open the door and follow the bubbles to the surface.”

“I can’t do it. It won’t open.” There are several problems callers can encounter when trying to escape, which these instructions are designed to anticipate as much as possible. They include, but are not limited to: the door is locked, there is too much pressure on the outside of the door, or the door is damaged or blocked by an object (try another door). It is also possible the caller may be very young, injured, sick, or disabled, and not have the strength needed to open the door. In that case, we can only deliver the instructions and encourage them to keep trying. There may not be enough time to wait for the responders to find and rescue them.

Help was on the way to Kimberlyn’s last known location. When they arrived, they could not see her vehicle. The water had pulled it nearly 300 feet down current and into an adjacent field that was completely flooded. On the 9-1-1 recording, the responders can be heard desperately seeking an updated location. They knew that Kimberlyn was in grave danger. Though she sounded surprisingly calm throughout, it is also painfully clear that Kimberlyn knew she was in grave danger, speaking of her two biggest fears: burning and drowning. All the while, water can be heard in the background rushing around the car.

“What can I do right now?” was an ominous plea. What can I do to help myself before they get here? She speaks of opening the window, climbing out and onto the roof and her chance of finding any remaining air in the car. She can be heard frantically trying to describe her location again when the call abruptly ends.

Necessity of protocol

While Kimberlyn’s case deals specifically with the Sinking Vehicle Protocol, it also serves as an excellent demonstration of the absolute necessity of structured, scripted calltaking protocols, comprehensive and specific feedback on performance, and pre-planned responses. Whether the Sinking Vehicle Protocol would have made a difference in the outcome of her case will never be known. She might have followed the emergency dispatcher’s instructions and still perished in the rushing water. We don’t even know if she could swim. That being said, her chances at the surface were better than her chances underwater. (Side note: The FPDS contains instructions on what to do if floodwater makes the vehicle start to move, which could have provided additional guidance on the case.)

While the protocol might or might not have saved Kimberlyn, what it would have done is make a difference in what the 9-1-1 calltaker could have professionally offered when Kimberlyn asked, “What can I do right now?” It would have given her expert-based ideas on how to improve her chances of surviving. As 9-1-1 calltakers, we should all be demanding this level of training (so we know what we are doing) and feedback (to be sure we are doing it correctly). We need to be able to help whenever possible, even in cases like these, which are likely to occur only once in the life of a dispatch calltaker.

“Listen to me very carefully, Kimberlyn. I’m going to tell you exactly what to do next.”

For those using protocol and quality improvement, continue to do so with excellence. The public, the calltakers, the dispatchers, the responders—each of them deserves no less.

For those not yet using protocol and quality improvement, start doing so immediately. Again, we deserve no less.
Answers to the CDE quiz are found in the article “Sinking Vehicle” which starts on page 26.

1. Which of the protocol systems contain the Sinking Vehicle Protocol?
   a. PPDS and FPDS only
   b. PPDS and MPDS only
   c. MPDS and FPDS only
   d. All three—PPDS, FPDS, and MPDS

2. What is the purpose of the question: “Has the water outside reached the bottom of your window yet?”
   a. The answer alerts the caller to close the car window.
   b. The answer gives the calltaker an indication of the water’s depth.
   c. The answer helps the calltaker determine whether the vehicle is FLOATING or UNDERWATER.
   d. The answer helps the calltaker decide whether the caller can provide directions to the scene by looking out the car’s window.

3. Words written all in CAPITAL LETTERS in the protocol indicate:
   a. a dispatch definition of the word or phrase is listed in the protocol.
   b. the calltaker should repeat the word or words to the caller to maximize understanding.
   c. the next step the caller should take in the emergency.
   d. the situation requires an ALPHA response.

4. The difference between a FLOATING vehicle and an UNDERWATER vehicle is:
   a. the relation of the vehicle relative to the waterbed.
   b. the level of the water line in relation to the driver’s window.
   c. the speed of the vehicle when it went off the road and into the water.
   d. the type of vehicle involved.

5. While Kimberlyn’s case deals specifically with the Sinking Vehicle Protocol, it also serves as an excellent demonstration of the absolute necessity of:
   a. structured, scripted calltaking protocols.
   b. comprehensive and specific feedback on performance.
   c. pre-planned responses.
   d. all of the above.

6. The PPDS codes the Sinking Vehicle call as:
   a. 131-E-1.
   b. 72-E-1.
   c. 31-D-2c.
   d. 22-E-3a.

7. Unlike other Pre-Arrival Instruction sequences, the first instruction—letting the car fill up with water—does not have to be completed by the caller before the next instruction is delivered.
   a. true
   b. false

8. As stated in the protocol, a vehicle may sink completely in as little as:
   a. 1 to 2 minutes.
   b. 3 to 5 minutes.
   c. 30 minutes.
   d. an hour.

9. In the MPDS, we move to Protocol 29 from Case Entry, but do not ask any Key Questions.
   a. true
   b. false

10. Which of the following is known as the Law of Concurrent Priorities, according to the definition found in the MPDS?
    a. “In an emergency situation, you don’t rise to the occasion; you fall back to your level of training.”
    b. “The EMD must weigh the concurrent priorities of obtaining (and verifying) a useful location, helping the caller get to safety, and caring for the patient.”
    c. “Severity of pain is not related to the seriousness of the problem.”
    d. “Predictable is preventable.”
Welcome To the Club

Membership depends upon your survival

BY AUDREY FRAIZER

The people described in the following stories are eligible for membership in very exclusive clubs. On the one hand, you might think they are lucky to qualify—since not everyone can join—while on the other, you soon find out that the qualifications are a real bummer.

The people are survivors of sudden cardiac arrest (SCA), making them prime candidates for a nonprofit foundation of the same name led by Mary Newman, who runs the national SCA Foundation out of an office in Pittsburgh, Pa.

They are also part of a chain, linked by the evolution of emergency medical services into a system, rather than a series of random events.

Confused? The connection does take some explaining.

Survivors of sudden cardiac arrest, in these stories, beat overwhelming odds when considering their chances for survival against the national rate of about seven percent. In areas where responders are trained in CPR and the use of AEDs, however, the survival rate can go as high as 43 percent. That’s where the SCA Foundation and the National Academies of Emergency Dispatch® (NAED) enter the picture.

The higher survival rates depend on the coordinated distribution of information and the reassurance people are following the advice and, in the case of the NAED, the medical protocol.

The SCA Foundation serves as a virtual meeting place for “any time, any place” exchange of information, ideas, experiences and guidance related to SCA. For users of the Medical Priority Dispatch System® (MPDS), the NAED is there, behind the scenes, helping to keep the patient alive.
Take the case of CPR. The American Heart Association (AHA) last year issued a science advisory stating that chest compressions only are sufficient in the many cases involving bystander aid and consistent with ventricular fibrillation or myocardial infarction. The iconic mouth-to-mouth doesn’t necessarily improve outcomes, particularly if administered by an untrained bystander or if the incident is witnessed by someone who refuses to go mouth-to-mouth with a stranger.

The NAED followed the AHA advisory statement and modified the CPR Pre-Arrival Instruction (PAI) accordingly in MPDS version 11.2. If a bystander not trained in standard CPR sees an adult collapse then he or she should call 9-1-1 and follow the dispatcher’s instructions to provide chest compressions by pushing hard and fast in the center of the chest. Interruptions must be kept to a minimum until those trained in CPR arrive and take over the life-saving efforts.

The modified instruction reached all users of MPDS v 11.2 and, subsequently, dispatchers in nearly 3,000 communications centers worldwide had the PAI to provide callers with the updated over-the-phone instructions necessary for the situation described.

Our story about Paul Moore is a perfect example. He had no indication of cardiac failure until the day he nearly died from SCA. Within minutes of the attack, his wife Thelma called 9-1-1, and was soon administering CPR under the direction of EMD Cathie McGee. Thelma knelt by Paul’s side, depressed his tongue to free the airway, and when he stopped breathing, pumped his chest 85 chest times while waiting for emergency services to arrive. He survived.

Throughout his recovery, Thelma kept a chain of e-mails going to update friends and family on his progress and setbacks. When the time is right, the Moores can contact the SCA Foundation, add Paul’s name to the Survivor Online Registry, and record their story to share with others.

The support networks Newman and the NAED create among the larger community provide the public protection. In Newman’s case, the organization gets people talking about their experience while the NAED, through its protocol, gives people the opportunity to talk about it.

Membership does have its benefits.

**CPR facts and statistics.**

The American Heart Association

About 75% to 80% of all sudden cardiac arrests happen at home; being trained to perform cardiopulmonary resuscitation (CPR) can mean the difference between life and death for a loved one.

Effective bystander CPR, provided immediately after sudden cardiac arrest, can double or triple a victim’s chance of survival.

On average, only 27.4% of out-of-hospital sudden cardiac arrest victims receive bystander CPR.

Approximately 94% of sudden cardiac arrest victims die before reaching the hospital.

Brain death starts to occur four to six minutes after someone experiences sudden cardiac arrest if no CPR or defibrillation occurs during that time.

If bystander CPR is not provided, an SCA victim’s chances of survival fall 7% to 10% for every minute of delay until defibrillation. Few attempts at resuscitation are successful if CPR and defibrillation are not provided within minutes of collapse.

Sudden cardiac arrest is most often caused by an abnormal heart rhythm called ventricular fibrillation (VF). Cardiac arrest can also occur after the onset of a heart attack or as a result of electrocution or near-drowning.

When sudden cardiac arrest occurs, the victim collapses, becomes unresponsive to gentle shaking, stops normal breathing and after two rescue breaths, still isn’t breathing normally, coughing or moving.

About 310,000 coronary heart disease deaths occur out-of-hospital or in emergency departments each year in the United States. Of those deaths, about 166,200 are due to sudden cardiac arrest—nearly 450 per day.
For 15 agonizing minutes sisters Bre-anne and Ashley Millard helped their mother Janet hold on to life. They intently listened to telephone CPR, took turns frantically pumping their mother's chest to stimulate circulation, and waited anxiously for the ambulance to arrive to their home in rural central eastern Washington. “I was freaking,” said 14-year-old Breanne. “But the dispatcher calmed me down. She gave us instructions and kept saying everything was going to be OK. Help was on the way.”

The girls’ mother, Janet Millard, had collapsed in the kitchen while cooking supper on April 10, 2009. By the time the Multi Agency Communications Center in Moose Lake, Wash., responded to their call to 9-1-1, she was foaming at the mouth and her skin was turning a pale shade of purple. “The girls were clearly shaken,” said EMD Helen Terry, who answered their call. It’s a good thing Terry wasn’t. Millard was a victim of sudden cardiac arrest and for the next quarter hour Terry provided CPR instruction, rotating the girls between the jobs of counting compressions and giving compressions. Together, Breanne and Ashley delivered two cycles of CPR—consecutive chest compressions for four minutes (400 compressions)—followed by ventilations for a subsequent 100 chest compressions, until EMS arrived.

From the sound of the audio, it’s the counting and Terry’s constant reassurance keeping the girls appreciably distanced from the crisis in their kitchen. “Helen kept them focused,” said Quality Assurance Coordinator Jennifer Kriete. “She did exactly what she was supposed to do, following the instructions exactly, and keeping the two daughters on task.”

The task of CPR had actually started moments before 14-year-old Breanne made the 9-1-1 call. Her scream from the kitchen after watching her mother fall to the floor brought 17-year-old Ashley running into the room. Ashley immediately started CPR, something she had never done before. “I don’t know what took over but I knew I had to do something,” Ashley said. During the latter part of the call, a volunteer EMT, who had heard about the emergency over his scanner, rushed over to the home and took over the CPR.

He stayed the course for the next several minutes, awaiting arrival of the defibrillator on board the ambulance. The paramedics responding to the call provided mechanical and compression CPR for another 45 minutes before transporting Millard to the hospital.

Millard survived. Four weeks later she was back at work part-time and following a program of recovery under the watchful eyes of her daughters. “They’re amazing,” Millard said. “They just jumped in and worked together.”

The story of their quick response has made the rounds in their small town. The attention is gratifying, although the girls insist heroics has nothing to do with them. “It was my mom,” Breanne said. “Wouldn’t anyone do that for their mom?”

Terry received a certificate from the agency acknowledging the save, but sounds rather reticent when it comes to accepting praise for something, she said, is part of her job. The added bonus never routine in her work was the day she met Janet and her two daughters. “The girls were very grateful,” said Center Director Mary Allen. “If it hadn’t been for Helen, they wouldn’t have known if what they had started was right.”
A reality-based television show featuring Paul and Thelma Moore is not what the couple intended for the years closing in on their retirement.

After all, the San Diego, Calif., couple has led a service-oriented life, preferring their church activities to notoriety involving, say, a road trip or a competition for survival on a tropical island. Paul is a safety consultant for Cal/OSHA and Thelma teacher English as a Second Language.

The publicity is a little surprising, Thelma admits. “But we’re glad to tell the story if it helps others.”

The Moores’ world forever changed on Feb. 26, 2009, when a loud crash late at night had Thelma rushing into the bathroom, only to find her husband Paul, 59, lying unconscious on the floor; his breathing slow and labored. She called 9-1-1 and pried his mouth open, depressing his tongue to free his airway. He stopped breathing and within seconds Thelma was administering CPR under the direction of Lincoln Park Fire EMD Cathie McGee.

“He was basically dead when Thelma started the CPR,” McGee said. “Later on the doctor told Thelma her husband had survived an unsurvivable heart attack.”

Thelma provided 85 chest compressions during the space of time between the call and when emergency personnel arrived. They gave him oxygen and used the defibrillator three times before transporting him to Paradise Valley Hospital, less than two miles away. Once in the emergency room, it took another 15 times until his condition was stabilized and he could undergo surgery for the insertion of balloon stent. He was placed on life support in a medically-induced coma to optimize the efficiency of the heart and lung machines.

Thelma says the constant stream of family friends and prayer gave her the strength she needed to get through the first critical days. At one point, she told Paul to squeeze her hand in a sign of love.

“He squeezed it RIGHT AWAY,” she wrote in one of a series of e-mails she was sending to update people on his condition. “Things were looking up.

Eighteen days from the date Thelma found Paul near death, he was home from the hospital. Less than two weeks later, they were carrying thank you notes and boxes of chocolates to the people involved in his recovery. They were featured in a newspaper story and interviewed for an upcoming television program featuring the heroics of 9-1-1 dispatchers by the producers of American Idol and So You Think You Can Dance.

McGee, who was off the day they dropped off her chocolates, met Paul and Thelma on the set. It was the first time she came face to face with anyone she had helped in her 29 years on the job.

“When they told me they were able to celebrate their 33rd anniversary because of what we did, I got goose bumps,” McGee said. “There was nothing I could say. We just hugged, and hugged, and hugged.”

When the cardiologist cleared Paul to return to work part-time in June, Thelma accepted it with reservations. Releasing him was a big step for her, as she had admittedly played the mother hen during his recovery and still shudders each time she hears a thud, thinking she might again find Paul on the floor unconscious. But Paul was eager to return to his job.

The event also changed their perspective on life and rooted their appreciation of those behind the scenes in a crisis.

“They [emergency personnel] said that in their line of work they rarely get feedback,” she wrote in an e-mail circulated among friends. “So if any of you ever have to use emergency or critical care services, please send them a note or give them a visit afterwards to let them know you’re OK.”
Paul Hoefert can honestly say 2009 was the start of something very good for him, although it took an emergency to do it.

Hoefert, a trustee for the village of Mount Prospect (Illinois) Village, and his wife Linda were watching a movie at home in early January when a sudden onset of rapid heart palpitations left him breathless. Linda heard him make a “funny” noise but when she looked over at him sitting on the couch, she realized he wasn’t laughing. His eyes were glazed and the expression on his face didn’t look right.

Linda didn’t know what was wrong with her husband, who runs for physical fitness. She jumped out of her chair and called 9-1-1.

EMD Kristi Burke, of Northwest Central Public Safety Communications Center, identified the crisis at the other end of the phone. Although Paul was breathing, it seemed from the sounds in the background that he was gasping for air. She told Linda to take Paul off the couch and lay him flat on the floor. Linda checked his airway, as instructed, and in seconds she kneeling beside him pressing up and down on her husband’s chest.

“She was phenomenal,” Linda said. “She was calm and collected and by giving me a job to do, I stayed focused. I was scared but not panicking.”

Emergency service personnel responding to the scene applied the AED five times before transporting him to the local hospital. There, several tests later, doctors diagnosed a serious arrhythmia interfering with his heart rate and not the cardiac arrest initially suspected. In a matter of days, her husband was home from the hospital and eager to return to work and his volunteer position as village trustee.

Paul is his own self again, Linda said. The pacemaker inserted into his chest is “not a fun thing for him,” she said, though it gives him the reassurance of keeping his heart rhythm under control.

“From what the doctors have told us, he has no permanent damage,” she said.

Hoefert didn’t want the emergency assistance to go unnoticed after all, as Linda said, “If it wasn’t for their quick response, he wouldn’t be here.” He wrote a letter published in their daily newspaper to thank everyone for the “protocols and level of care” that undoubtedly made a difference in his condition and recovery.

The public forum also gave him the chance to promote the life safety service available to the residents he has served as trustee for nearly 20 years.

“Because our public safety administration has put a high level of importance on employing up-to-date processes and procedures over the years, we can all have a high level of confidence that this will happen when we need it to happen,” he wrote in the letter running in the Jan. 19, 2009, edition of the Daily Herald. “I am living proof.”
Nothing spells validation more accurately than scientific research: diligent, systematic, and unbiased.

And nothing says more about the conviction of a scientist than the pursuit of independent investigations of the product he or she has placed on the market.

But that’s precisely the story pushing the progression of the priority dispatch protocols (particularly the Medical Priority Dispatch System®, or MPDS). As we’ve chronicled in the past three issues of The Journal, the emergency communications protocol used in thousands of centers worldwide grew from its beginnings at the Salt Lake City Fire Department thanks to the people and agencies supporting the need for standardized and dependable dispatch.

More than word-of-mouth, however, is the serious research Jeff Clawson, M.D., continues to conduct and oversee on behalf of his vision to bring emergency medical dispatch into the emergency medical services fold. He is a medical doctor and scientist by training who would now never dream of introducing anything into the market without data collection and testing to guarantee its soundness and reliability.

“When you start hearing ‘based on the data,’ listen, because that means someone has gone further than just the opinion stage,” Dr. Clawson said during an interview with Linda and
Fred Hurtado subsequently published in *Paramedic* magazine (1984). “Any system survives or fails based on whether or not it’s doing the job, and the only way to determine that is to have a monitoring device.”

Alas, good science can make or break the vision.

**Study focus**

From its start, the priority dispatch system has had three essential components to emergency dispatching: interrogation questions, known as Key Questions; telephone help, known as Pre-Arrival Instructions; and response determinants for setting the level of response and the use of warning lights-and-siren.

Research has always focused on these components, although the emphasis of the research has necessarily shifted according to the tools available.

“That’s an important point to bring out,” said Brett Patterson, National Academies of Emergency Dispatch® (NAED) Academics and Standards associate. “Experts helped to evolve the system but it wasn’t until the past five years that we’ve had the tools available to collect data for outcome research.”

**Descriptive phase of research**

Early articles published in magazines serving the EMS community emphasized expert opinion; the observations of those in the field familiar with protocols and supporting the evolution and advancement of the medical dispatch science.

Validation in its more subjective form came through newspaper articles, mainly human-interest features written by reporters who knew little about protocol but a lot about the type of news articles that might grab their readers’ attention. Not uncommon were the subjects still making headline news today: parents caught off guard when baby decided it was time for delivery or a family member giving life-saving cardiopulmonary resuscitation (CPR) to a child found face down in the backyard pool.

These articles caught the interest of their intended audiences. But it wasn’t until physicians and national safety organizations started looking Dr. Clawson’s way and asking questions that he knew protocol was making inroads into a world beyond advocacy and intrigue. He was no longer preaching to his choir.

“Someone out there aside from Dr. Clawson and the organization was saying we need this,” Patterson said. “Others were getting involved.”

**Outside notice**

The others included the National Association of Emergency Medical Services (EMS) Physicians (NAEMSP) and the American Society of Testing and Materials (ASTM), which both took positions in 1988 on the need for training and emergency medical dispatchers in standardized interrogations, pre-arrival instructions, and pre-determined unit responses.

The NAEMSP Consensus Document on Emergency Medical Dispatch (EMD) states pre-arrival instructions are a mandatory function of the EMD because of the “first” first responder position in emergency services. Not only did the immediate action effectively eliminate the time gap between the call and arrival but, also, according to the NAEMSP statement: Standard telephone instructions by trained EMDs are safe to give and in many instances a moral necessity.

The statement represented the first official “standard of care” document from exactly the people who should have a position—the medical directors of North America.

“It demonstrated that trained EMDs who use medically appropriate pre-determined protocols can prioritize EMS calls,” Dr. Clawson said. “Finally, dispatchers were receiving national recognition as a key element of the EMD system.”

**Formalizing research**

During that same year—1988—Dr. Clawson organized the National Academy of Emergency Medical Dispatch (the NAEMD, now known as the National/International Academies of Emergency Dispatch”, or NAED/IAED) as the certifying and standard development organization for both emergency medical dispatch protocols and its associated curriculum and quality assurance processes.

To address the scientific issues related to emergency dispatch, the NAEMD in turn established the College of Fellows. Its express purpose: To conduct an on-going review of the current standards of care and practice in EMD and evaluate the tools and mechanisms used to meet or exceed these standards. The College of Fellows has since divided its members into seven boards and councils complementing individual expertise such as the Council of Research and Board of Accreditation.

Robert Martin was the NAEMD executive director at the time the College of Fellows came to be. He described the work of the internationally recognized experts in EMS, EMD, and public safety communications as a window into every other dispatch center in the world. The Fellows reviewed the findings collected from the affiliated communications centers, modified protocol based on the data collected and their professional consensus, and distributed the updates to all licensed users.

The process to control standards for protocols and all aspects of Dispatch Life Support was no different from that of the American Heart Association and its oversight of CPR, basic life support, and advanced life support.

“In this way, the protocol remains unified and standard and not subject to arbitrary, anecdotal modifications that are not medically nor legally supportable,” said Martin, past executive director of the National Emergency Number Association (NENA) and now vice president of business development for the Washington, D.C., based e-Copernicus consulting firm. “Since protocol is designed to help people in their moment of crisis, there is no other medically correct, morally-responsible way to do it.”

**Quality assurance**

Quality assurance (QA) became the watchword for EMD in the early 1990s. The QA goals highlighted compliance, particularly the application of retraining and procedural modification arising from non-compliance problems. QA took research and review on the part of communications
centers. For example, findings from a MPDS compliance data study conducted at the Los Angeles City Fire Department proved the direct correlation between Case Entry and Key Question interrogations in relation to the accuracy of correct determinant level selections.

A study Patterson conducted at his communications center in Pinellas County, Fla., during the same period took the compliance question one step further. He filtered out the noncompliant calls and used only the protocol compliant calls to compare the EMD’s response code selection to paramedic findings on the scene in realtime QA. His findings showed 95 percent agreement.

“It was a first step,” Patterson said. “There was a lot of controversy over interrogating the untrained caller. The study supported our hypothesis that the caller reported what actually happened when asked the right questions.”

The Academy was collecting the objective data to enforce its own rule: strict compliance with Entry Level and Key Question interrogation was absolutely vital to the success of a comprehensive MPDS process and the EMS system it appropriately deploys.

“Experts helped to create and evolve the system but it wasn’t until the past five years or so that we’ve had the tools available to collect data for outcome research.”

—Brett Patterson

Measuring the EMD

The first quantitative article assessing protocol’s effectiveness was published in the February 1983 issue of the Journal of Emergency Medical Services (JEMS). The article, which ran exactly two years after an article in JEMS had introduced the EMS world to Dr. Clawson’s dispatch system, highlighted ALS and BLS response percentage trends based on Salt Lake City Fire Department communications center dispatch data. The study concluded that the use of selective dispatch screening via the Medical Dispatch Priority concept was safe, effective, and economically appropriate; the results of the study reinforced the fact that medical dispatching should be one of the prime areas of national EMS attention and improvement in the 1980s.

Research published during the next decade assessed the effectiveness of EMDs providing pre-arrival instructions, both in terms of cost savings and saving lives. Dis-
emergency dispatchers with those identified with bioterrorism or chemical agents or naturally occurring contagious diseases. These are compared to historical records to see if any significant anomalies occur, and to trigger an alert when they do.

The swine flu (H1N1) pandemic is a recent example of the CBRN in action. Earlier last year, anticipating a potential avian flu outbreak in the coming fall, the NAED had begun work on several items for both ProQA® and cardset users. When the swine flu hit, the CBRN Committee conferenced on April 27 and formally requested an immediate release of all materials relevant to the situation with modifications specific to swine flu. It was out in all versions and languages in 48 hours.

Dedicated research staff

During the past year, the Academy realized a long-held dream by creating a full-time position for research. Chris Olola, who received his Ph.D. in biomedical informatics in May 2009 from the University of Utah, will focus his attention on patient outcomes in relation to protocol and interoperability of data collection from the primary sources (EMD, paramedic, and the hospital receiving the patient).

The interoperability part—the exchange of data among the entities involved in emergency response—is a three-way stream of information. Interoperability is the icing on the research cake. The data exchange far exceeds the empirical approach to proving protocol’s impact, Dr. Olola explained.

“To prove something scientifically takes a statistical correlation between what you do and what happens down the road to the patient,” Dr. Olola said. “There’s an aggregate of data validating your studies’ hypotheses and findings.”

Connecting the links

The first link is the communications center, specifically those using the protocols correctly (at very high compliance) and willing to share the data; the second is the field response unit associated with the specific centers; and the third is the hospital receiving the patient.

Connecting the three is the next phase in the evolution of research, according to Scott, who has long participated in data collection for the NAED. The barriers between links one and two have just about cleared, while the third has stalled over issues of data management services and privacy and confidentiality concerns raised by the administrative simplification provisions of the 1996 Health Insurance and Portability and Accountability Act (HIPAA). That link, however, to hospital data should improve, Scott believes, through the introduction of electronic medical records and the ability to mask confidential patient information through filtering processes.

Peer review

In the meantime the primary members of the NAED Council on Research—Dr. Clawson, Dr. Olola, Patterson, Scott, Heward, and Tracey Barron of the IAED U.K. office—pride themselves on the six studies so far published in prestigious peer-reviewed journals such as Resuscitation, Emergency Medicine Journal, Prehospital Emergency Care, and Prehospital and Disaster Medicine. The studies quantify, or measure, the accuracy of the EMD disease identification compared to patient outcome based on strict compliance to MPDS protocols. Several other studies are making their way through the proposal, writing, research, and review phases.

Dr. Olola calls peer-reviewed journals the gold standard of scientific study. Panels of experts in the specific field of study critique papers prior to acceptance for publication through a rigorous procedure that scrutinizes adherence to the six major steps of the scientific method.

“We know the protocols are effective but it takes good data to prove this to others,” Dr. Olola said. “That’s the overall goal, to validate and prove protocols through scientific evidence-based processes that approve or disapprove pre-defined hypotheses.”

—Chris Olola

Unfortunately, the same hasn’t always been followed by others conducting independent research correlating Determinant Codes to patient outcomes. When that happens, the findings produce an inaccurate account of protocol’s and method’s validity and a letter to the journal of publication to point out the significant omissions and commissions in the study’s methods/design, findings, and conclusions.

“Compliance to protocols is key,” Scott said. “Without that, everything is skewed.”

Conduct your own review

For those interested in the research, both the empirical and quantitative, check the NAED website. Currently, the papers can be found under the research banner available from the homepage. In the near future, the published research and editorials the NAED has written in response to research will be available on a page dedicated to science.
By the second sentence, Eric Parry said the jig was up. There had been indications up to the time he took center stage at the National Emergency Number Association (NENA) conference recently held in Fort Worth, Texas. But, being the busy guy Eric is, the signs went right by him. After all, what was so unusual about making sure he sat in the front row during opening remarks, when the music ended, including an opening ceremony tribute he played on bagpipes.

“I’m not a stupid man, but I can be tricked,” admits Parry, a Priority Dispatch Corp. consultant and Chairman of NENA’s Education Advisory Board.

And, boy, did NENA get him this time. Parry was called on stage to accept the prestigious William E. Stanton Award, a lifetime achievement award introduced in 1999 in honor of NENA’s first and long-serving executive director. Parry is the 11th recipient of the award, so recognized for contributions that go above and beyond to further NENA’s goals.

The award came as a complete surprise, a turn of events for Parry, until presenter John Kelly started listing the reasons behind their selection.

“That’s why I was told they seated me up front,” he said. “At about sentence two, I knew it might be me.”

So, why Eric?

Presenters Kelly and Christy Williams, both NENA members, couldn’t help but list some unique characteristics—sure giveaways—separate from all the work Parry has done for NENA. Parry is the first career Royal Canadian Mountie to receive the award and no one else in their memory would appear on stage dressed in kilts after playing *The Green Hills* on bagpipes.

He’s also the kind of NENA devoted guy people want to emulate, according to NENA President Craig Whittington.

“Eric has been a mentor and friend to me for many years and I am a better person for knowing him,” Whittington said. “He is the kind of dedicated 9-1-1 professional I aspire to be.”

Parry took the stage, so bowled over he momentarily failed to recollected.

A four-minute song composed by Paul Stiegler, M.D., was music to the ears of one of his largest audiences and nothing, not even a triple seven on a slot machine, could have made him any happier.

“I was ecstatic,” said Dr. Stiegler, medical director for Dane County (Wis.) EMS. “That’s what songwriters live for, the ability to touch people with their music.”

The song—dedicated to the 30-year anniversary of emergency dispatch protocol—played during the opening ceremonies of Navigator 2009. Dr. Stiegler, who was in the audience while his music entertained the hundreds present, had “cut” the CD on his laptop a week earlier inspired by the protocol the Dane County center has used for the past eight years.

But the music was more than a tune dedicated to emergency medical protocol. Dr. Stiegler admires the work of protocol creator, Jeff Clawson, M.D., and his lasting contribution to their shared emergency medicine profession.

“I met Dr. Clawson at a class he was teaching in Madison (Wis.). We went out to Protocol inspires song performed at Navigator

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“I met Dr. Clawson at a class he was teaching in Madison (Wis.). We went out to
“lunch, and that’s all it took,” he said. “I saw what the protocol could do. Great stuff.”

Dr. Stiegler retired nearly two years ago from a 30-year medical career spent in the emergency room. He misses the patient contact, although not the schedule that kept him away from home on nights, holidays, and weekends.

The song writing is an extension of his musical talents, something he had long wanted to do during a career that gave him very limited free time. He accompanies his songs with guitar, an instrument picked up while in college at a time when the British Invasion was big on the American music scene. His favorites—the Rolling Stones, Beatles, and Elton John—are among the artists influencing his music. Performing is something he loves.

No telling where the new path will lead. His business card advertises songs made to order, and he is shown on front of the card holding a six-string guitar strapped over his right shoulder. The image is a far cry from the scrubs an emergency room physician wears. He has little aspiration to make it big on the music circuit.

“Yeah, I’d take a million for a song if someone offered,” he said. “But that’s not the point. I’m not trying to make a living from this. Music is my passion.”

NENA President supports dispatch training standards

Some things are hard to understand. Take, for example, the lack of requirements for training of 9-1-1 Telecommunicators.

“Many states require training for people in jobs far less critical than 9-1-1,” said Craig Whittington, ENP, and President of the National Emergency Number Association (NENA). “That doesn’t make sense. Something needs to happen in every state to give people in 9-1-1 high quality training.”

Serving as the 9-1-1 and Special Projects Coordinator at Guilford Metro 9-1-1 in Greensboro, N.C., and with 30 years of experience in public safety, Whittington believes training for public safety communications personnel should be a top priority for local and state officials.

“Training 9-1-1 personnel should never be considered an expense; it must be thought of as an investment,” said Whittington in his first official comments to membership at the recent 2009 NENA national conference held in Fort Worth, Texas.

Whittington believes that training for 9-1-1 communications personnel should be comparable in scope to existing state requirements for law enforcement officials, paramedics, and firefighters. He hopes that each state will someday offer quality certification courses preferably developed or at least reviewed and endorsed by appropriate /recognized standards organization.

“Whether it’s an existing program or a new one that gets developed, that doesn’t matter as long as it meets or exceeds a minimum standard of care, a minimum level of core competencies,” he said.

Black Hawk County scores first in country with 9-1-1 text messaging capability

Sending for emergency help just got as easy as the tip of your finger.

Literally, at least in Black Hawk County, Iowa, where dispatchers will soon be among the first at an emergency communications center to automatically translate AFAIK (As far as I know) when asking a caller about the patient’s breathing status or, perhaps, 7K (sick) in relation to Medical Priority Dispatch Protocol® (MPDS) Protocol 26.

Chief Thomas Jennings, Waterloo Police, and chairman of the county’s 9-1-1 service board, said the communications center, located in Waterloo, Iowa, successfully received a text message sent on June 9, 2009, from Fort Worth, Texas, where the

NENA President Dr. Robert Cobb, who has long known Parry, however, easily found a lot of words when it came to explaining Parry’s selection.

“His accomplishments are exemplary,” Cobb said. “The Stanton award is the highest honor you can receive within NENA and I can’t think of anyone else who better deserves to be recognized for his efforts to promote education, training, and ENP certification.”

Since joining NENA in 1993, Parry has been the motor driving the organization’s education program. He authored the book Managing the 9-1-1 Center, and recently completed NENA’s first online course. As chair of the NENA Education Advisory Board, he helped develop at least two-dozen NENA courses, from introductory to advanced and specialty one- and two-day classes. Parry is dedicated to NENA.

“How many people are plugged into an organization where they can do so much?” he asked. “I learn from what everybody brings to the table.”

NENA President Craig Whittington.
National Emergency Number Association (NENA) conference was taking place.

Jennings said the county reached this point as a result of a process that began about two years ago when it was time to replace the aging phone system used in the dispatch center. When decision time arrived, the need for the system to be adaptable to technological advances was in the forefront of their minds.

About a year after Black Hawk County made the purchase, the state of Iowa was contacted by Intrado, an emergency services company, inquiring which counties used the phone system Black Hawk County had implemented; several locations were researched and Black Hawk County was selected as the perfect site for the groundbreaking operation.

Introducing text messaging to Black Hawk County’s 9-1-1 center actually started with the intent to help service those with speech and hearing impairments since communicating away from home without a landline connection and the necessary equipment in place is a struggle.

“If they’re out walking around or not at home, they’re cut off from communicating,” Jennings said.

Now, it will serve more of the area’s population as texting becomes an increasingly popular form of communication, especially with the younger population.

“We see a good avenue to serve the public,” Jennings said.

Potluck proves educational

When Kathleen Fisher, lead dispatch supervisor, Orem (Utah) Department of Public Safety, was brainstorming ideas for continuing dispatch education (CDE), she was struck by the thought of organizing a potluck—a buffet to satisfy both the mind and body.

The potluck included food and continuing dispatch education all wrapped into one jam-packed day as a way for dispatchers to earn CDE hours. This potluck might have been a bit different from a traditional one—people from other agencies in a 60-mile radius arrived at Orem’s dispatch center on May 28, 2009, with a food dish to share, ranging from salads and sandwiches to home-baked goods, and a topic to discuss once through with their meal. Everyone attending paid $10.

About 25 dispatchers and instructors from eight agencies were able to attend the debut all-day smorgasbord of discussion highlighting the CDE feast. Fisher was pleased with the turnout, especially considering the competition of graduations and Memorial Day picnics, and looks forward to making it an annual event for the Orem Department of Public Safety.

“I’ve had nothing but good feedback [no pun intended] and I would hope that other agencies might use the idea too,” she said.

For more CDE ideas, check out the Navigator Rewind feature found on page 16.

Communities pull together for disaster preparedness

A course offered by the Center for Domestic Preparedness (CDP) trains community leaders, dispatchers, and other emergency responders to better help their communities in case of a disaster caused by a weapon of mass destruction, including chemical, biological, and nuclear agents.

The WMD Incident Command: Capabilities, Planning, and Response Actions (IC) course brings a cross section of professions together to develop plans for complex all-hazard incidents, according to IC Instructor Barry Williams.

“Just having a plan on the shelf doesn’t always satisfy the requirement,” said Williams. “The course is designed to give all disciplines, from cities large and small, the chance to identify emergency resources and prepare those who work in command and support roles to better serve and protect their community.”

The 24-hour course includes Hands-on-Training (HOT), which gives students the opportunity to experience an environment using GB or VX nerve agent at the CDP’s Chemical, Ordnance, Biological, and Radiological Training Facility (COBRATF), the only facility of its kind in the nation that
offers toxic preparedness training for civilian responders.

The CDP is located in Anniston, Ala., and funds courses for state, local, and tribal response personnel, including travel, meals, and lodging. More information is available at http://cdp.dhs.gov or by calling 866-213-9553.

Two’s company, but three’s not out of the question

The rate of triplet and higher births tripled overall from 1980 to 1998, and while the rate has decreased over the past decade, it’s not a decline that might demolish your odds of delivering a crowd over the phone.

According to national vital statistics from the Centers for Disease Control and Preventions (CDC), the rate of multiple births (more than two) increased approximately 400 percent overall from 1980 to 1998, with the greatest increases among mothers aged 25 to 39 years of age and those over 40 years). The numbers declined after reaching their peak in 1998 at 193.5 per 100,000 live births to 153.3 in 2006, the last year of data collection.

The National Academies of Emergency Dispatch® (NAED) has been help-

Randall Larson makes his last call

It’s tough to write about Randall Larson in 300 words or less.

After all, here’s a guy who’s supervised the night shift in one of California’s largest fire dispatch centers for 20 years while also training dispatchers around the country to bring their skills to incident communication positions out in the field.

He’s volunteered his dispatch expertise outside his home base, including local PSAPs during the 2002 Winter Olympics held in venues of Northern Utah and during several major California wildfires. Then, you don’t want to forget his continuing commitment to 9-1-1 Magazine (he’s the editor) or the countless articles he’s contributed to magazines of similar genre.

But before we get too far ahead of ourselves, let’s mention why we’re drawing so much attention to a person who considers himself “a shy, quiet introvert.”

Larson retired in July, not from everything related to communications, but from his tenure with the San Jose Fire Department Communications Center.

Larson won’t leave the world of dispatching; he’ll continue to bring his support of field communications and his teaching skills to dispatch classes and seminars (another check in his list of career accomplishments). Larson will also continue to engage his passion as a journalist in the world of music and pop literature. There are also plans to relocate closer to his two “amazing daughters” in the redwoods of Northern California.

To everything, you can be sure he’ll bring what he calls his “fairly warped sense of humor.”

Larson steps aside carrying major insights into a profession he has watched blossom into a vital link in emergency services.

“The recognition of the dispatcher as an equal partner in the public safety response team has been a major change for the better,” he said. “Having the professionalism of the 9-1-1 dispatcher understood by public and responder alike has gone a long way to validate what we do and why, and improve our working conditions.”

He also leaves with few regrets over investing 25 years in the career.

“I remember the bad and the ugly that this job mixes together, but I value the good,” he said. “I recognize that I haven’t always been positive, but I’ve always tried to do a proper job, and I feel I’ve always had the profession’s and my team’s best interests at heart.”

If you’re counting, we were right. You can’t describe Larson and his career in 300 words or less. He’s one tough act to dispatch.
The National Academies of Emergency Dispatch® (NAED) has Dr. Christopher Olola right where it wants him: working full-time in research. Dr. Olola's academic specialty in applying biomedical knowledge and information to improve individualized patient care is an exact fit for current and future research at the Academy. The recent graduate with a Ph.D. in Biomedical Informatics from the University of Utah had been working part-time in research for the Academy while completing his studies, and during the past three years assisted in studies culminating in six papers published in scientific, peer-reviewed medical journals to date, with several more in the works.

Dr. Olola fulfills a position NAED co-founder Jeff Clawson, M.D., has long envisioned coordinating the Academy’s research projects and taking the lead in the application of computer science in collecting data germane to advancing and improving the protocol process. The NAED relies on its research teams and committees for pursuing studies using data collected from agencies using the automated dispatch protocol (ProQA®), but this is the first time there has been a person dedicated to coordinating these efforts.

Dr. Olola brings to the Academy years of academic and clinical research, including five years as a regional coordinator of clinical data management for severe malaria in African children (SMAC) surveillance project. The project was conducted in five countries in Africa (Kenya, Malawi, Gabon, Ghana, Gambia) and coordinated by the Kenya Medical Research Institute in collaboration with Michigan State University and Harvard School of Public Health. His doctoral research focused on electronic standards in medical data transmission, particularly as the standards relate to electronic medical records (EMR) and patient health information (PHI).

His work has brought him several honors, including recognition at the annual Bruce A. Houtchens Award Presentation, sponsored by the University of Utah, Department of Biomedical Informatics, for his paper examining the adoption of American Society for Testing and Materials (ASTM) standards to advance continuity of care among the United States medical community. The award was established in memory of Bruce A. Houtchens, M.D., a Salt Lake City-based surgeon with primary interests in trauma surgery/critical care, space medicine, and clinical applications of telemedicine and biomedical informatics.

Dr. Olola and his wife Betty moved to Utah three years ago from their native Kenya to pursue their respective educations. During this past year, Betty received an associate degree in Executive Medical Assisting from a local business college and has since enrolled in a four-year degree nursing program offered at Brigham Young University in Provo, Utah.

Dr. Olola calls his work exciting and an essential component in the scientific evolution of the fire, police, and medical protocols, paving the way for deeper understanding of 9-1-1 callers and patients.

“Research supports not only the use of protocol, but also optimizes the application of protocol in terms of efficacy,” he said. “It’s crucial for us.”
CoRinne Begg
is a Dispatch Quality Improvement Coordinator and Emergency Medical Dispatcher with the BC Ambulance Service as well as a professional coach focused on developing and supporting emergency dispatch personnel. She’s been with the BC Ambulance Service in Vancouver, British Columbia (Canada) for over 13 years.

QUALITY ASSURANCE PAGE 13

Brett Patterson
is an Academics & Standards Associate for the NAED. His role primarily involves protocol research, standards, and evolution. He is also an instructor trainer and QI consultant. Brett is a member of the NAED College of Fellows, Standards Council, and Rules Group, and is chairman of the Research Council. He became a paramedic in 1981 and began a career in emergency communications in 1987. Prior to accepting a position with the NAED, he spent 10 years in Pinellas County, Fla.

FAQ PAGE 12

Michael Spath
began 9-1-1 dispatching more than 16 years ago. He is the Senior Public Safety Dispatcher at the Sunnyvale Department of Public Safety in Sunnyvale, Calif. Michael is a NAED®-certified quality-improvement instructor for police, fire, and medical protocols. He co-chairs the NAED Call Processing board and is a member of the Q Standards Task Force. Spath and his wife Tammy own and operate EDQ911, a quality management consulting service.

UNIVERSAL CDE PAGE 26
Let the Fun Begin.
Telecommunicator Week celebrates work of unsung heroes

All in a day’s work doesn’t quite describe the reason Jennifer Wright was chosen as West Suburban Consolidated Dispatch center’s 2009 Telecommunicator of the Year during National Public Safety Telecommunicator Week.

Wright does personify the qualities West Suburban Consolidated Dispatch center Deputy Director Ron Gross looks for in his hires. But aside from her work integrity, she has also demonstrated her ability to establish rapport in some of the most difficult situations. In one example, the one for which she received the award, Wright won the trust of a suicidal caller who had slit her wrists, staying with the caller on the line for almost an hour to pinpoint her location for police. The caller survived.

West Suburban Consolidated Dispatch in River Forest, Ill., was among communications centers throughout the country honoring telecommunicators for what they do in association with National Public Safety Telecommunicator Week. The weeklong celebration, held during the second week of April, had communications centers pulling out all the stops in gratitude of their “unsung heroes.”

“I think this week set aside is just a reminder ‘Hey, you’re touching so many lives and you’re doing a good job,’” said Cathy Cavness, supervisor, Dyersburg (Tenn.) 911 Public Safety Communications. “Everybody needs a pat on the back sometimes so we’re very appreciative that we do have this week every year.”

Names, faces, and games

The West Suburban Consolidated Dispatch center dedicated the week to awards and fun and a chance to introduce their families to the job through the weeklong Bring Your Family to Work program. A scavenger hunt had teams searching for 15 items, ranging from finding a ticket tied to a specific call to an EMD card showing any number of emergencies the team handles on a daily basis.

A Who’s Who quiz drilled dispatchers on little-known facts about their coworkers. By asking the right questions, dispatchers found out who traveled to Ireland; who would love to visit Bollywood, India; which coworker went to kindergarten twice; which telecommunicator met Bon Jovi; who somersaulted down a sand dune and suffered a head injury; and which worker’s favorite childhood memory is drinking hot chocolate in an igloo.

Dyersburg administrators put together a bulletin board displaying the names, faces, and hire dates of those who work in the center, framed by letters from the mayor, ambulance director, and the center’s manager and supervisor. A proclamation at the heart of the display explained the job of emergency dispatch in line with the resolution Congress passed in 1991.

The display has drawn a fair share of attention from those in the center.

“When we put on the board how long people have been here it’s like ‘Oh, my gosh,’” Cavness said. “They’ve been here a long time.”

The goods

Many centers got to the heart of dispatchers through their stomachs.

At Deschutes County 9-1-1 in Bend, Ore., the management staff, with funding help from the Redmond Fire Department, organized a party for each of the teams featuring everybody’s favorite food—pizza.
Center supervisors cooked either lunch or dinner for their teams and each telecommunication received a handful of chocolates. The Bend Police Department sent an arrangement of strawberries, watermelon, and other seasonal fruits. The Redmond Police Department delivered a snack laden gift basket.

Harford County EOC in Forest Hill, Md., dished up a full week of edible recognition, beginning with ice cream sundaes at the start of the week and rounding out the days with chocolate dipped goodies, veggie trays, and snack baskets.

Dyersburg dispatchers were treated to pun with their snacks, such as the “You’re a Good Catch” note attached to the bags of goldfish crackers. There were also sausage rolls, donuts, and pizza served, though not all at the same time.

Recognition

Some centers chose to show their appreciation from the outside. Harford County dispatchers put aside their uniforms for one day to wear casual clothes. Dyersburg’s communications center dispatchers wore “Today I” shirts designed by the nonprofit 911 CARES, and embossed with words finishing the sentence such as Today I helped find a lost child or—for those childbirth and delivery PAIs—Today I helped bring a baby into the world.

“That was a big hit,” Cavness said.

Dyersburg communications also put everyone’s picture in the city’s newsletter and an article about telecommunicator week ran in the local newspaper. Deschutes County 9-1-1 telecommunicators received a 911 CARES headset bag. West Suburban handed out tongue in cheek awards, including the “Ma’am (or sir)” award for frequently inserting that salutation into calls, the Trigger Finger award, and the Tongue-Tied award.

“The people that won they were like ‘Yeah, that’s me,” Gross said. “OK, you got me.”

Central Communications in Elizabeth City, N.C., presented the Telecommunicator of the Year to Pam Collins and the first-ever EMD Telecommunicator of the Year award to Crystal Owen.

Collins started at the center 19 years ago and is one of only two employees still with the center since it opened in 1990. She is a shift supervisor, a terminal agency coordinator (TAC), and a communications training officer (CTO).

“She is just a go-getter,” said 9-1-1 Center Director Ed Conran.

Owen achieved an overall protocol compliance score of 99.41 percent during the past year and she was also one of the top compliance scorers in 2008.

“We thought that it needed to be recognized this year,” Conran said.

How it all started

Patricia Anderson of the Contra Costa County (Calif.) Sheriff’s Office organized the first Telecommunication Week in 1981, according to history provided by the online DISPATCH Monthly Magazine. It was observed at her agency for three years before Virginia and North Carolina Association of Public-Safety Communications Officials (APCO) chapter members stepped in. Soon after, APCO persuaded Rep. Edward J. Markey to introduce a formal proclamation. H.J. Res. 284 created National Public Safety Telecommunicator Week, an event introduced two more times—in 1993 and 1994—before achieving a permanent place on the calendar.

Never Too Young.

Eight-year-old honored for quick action to save his “granny”

Ella Click is one lucky and alive grandmother thanks to her then 8-year-old grandson.

Grandson Tyson Click, home on summer break, and his “granny” were on a banking errand when Ella pulled over complaining she wasn’t feeling well. She parked on the road under a tree, went to the backseat to lie down until the nausea and dizziness passed, and fell unconscious after vomiting a massive amount of blood.

Tyson called his dad, Daren, who told his son to hang up and dial 9-1-1.

The ensuing six minute call made from his granny’s cell phone on July 12, 2008, was everything but frantic. Tyson calmly relayed their location and vehicle type to Stephenville Police Department (Texas) dispatcher Pam Gaitan and gave her periodic updates of his grandma’s condition.

During one point in their brief call, Gaitan asked Tyson about his mother and father.

“My mom, she’s dead,” Tyson tells her. “My dad said he’s coming to meet us here.”

Daren arrived on the scene within minutes, just in time to watch responders place his mother on a stretcher and into the ambulance. Once at the hospital, doctors discovered a large vessel in her esophagus had burst, filling her stomach with blood. She was scheduled for surgery following a battery of medical tests.

Doctors at the hospital credited Tyson for saving his granny’s life, said Christie Eskew, 9-1-1 Public Education Specialist for the North Central Council of Governments.
“He did such a great job,” she said. “He wanted to make sure help would come for his granny.”

Tyson’s quick thinking and composure have placed him on the awards circuit. The North Central Texas Council of Governments and the Stephenville Police Department presented him with a certificate of achievement, a medal, and a 9-1-1 Hero T-shirt at a city council meeting held on Aug. 5, 2008. On March 24, 2009, he received a heroes award at a 9-1-1 gala sponsored by the E9-1-1 Institute, in conjunction with National Emergency Number Association (NENA) and the Congressional E9-1-1 Caucus.

Granny Ella is doing so well that she accompanied Tyson and her son Daren on the trip to Washington, D.C., where he accepted the national “Citizen in Action” award during the annual event recognizing both individuals and centers for contributions to the 9-1-1 system.

Granny Ella is doing so well that she accompanied Tyson and her son Daren on the trip to Washington, D.C., where he accepted the national “Citizen in Action” award during the annual event recognizing both individuals and centers for contributions to the 9-1-1 system.

Granny, as Tyson calls her, said she has now even more reason to consider her grandson a hero.

“He’s always helping me, especially now since that day,” she said. “He doesn’t want anything else happening to me.”

Daren said his mom’s help in raising Tyson since his mother died when he was a toddler has created a special bond between the two.

“She’s been more than a granny to Tyson,” he said. “You know how life goes. Things are constantly on the go but she’s always made sure we come first.”

The chance to reward children for outstanding 9-1-1 achievements is a favorite part of Eskew’s job. Not only because of the help provided during an emergency but, also, for the good message conveyed to the younger generation.

“We’re telling them to make sure you’re not playing on the phone,” she said. “Look at Tyson. He called 9-1-1 and saved a life.”

The importance of those life-saving actions hasn’t affected Tyson, at least to a degree his dad and granny have noticed.

“He has stayed humble as pie,” Daren said. “He’s the same great kid. Doesn’t brag about it or anything. This was all about helping his granny.”
Life Cut Short.  Tragedy shows dispatcher the best people can give

Tragedy has a way of bringing out the best in people. We want to console and, in any way possible, make everything all right in a world crushed by profound loss. We want to do more than simply say, “I’m sorry.”

For Nancy Jenkins, a dispatcher for Porter County (Ind.) 911, personal tragedy showed her the generosity of a town where she was born, attended school, married, and raised two children. The kindness of coworkers, friends, and neighbors has continued long after the darkest moment of her life.

“They are here for me,” Nancy said. “During the times I didn’t want to live, they helped me move on.”

Jenkins lost her older daughter Kelly [Mercaldo] in October 2008. The junior at Valparaiso High School (Ind.) was a passenger in a speeding car that went airborne over an elevated railroad crossing. The 16-year-old National Honor Society member was critically injured, her neck broken from the force of the crash against a tree.

Due to the severity of her injury, Kelly was airlifted to a trauma center in Oak Lawn, Ill. Nancy, who was visiting out of town when the accident occurred, knew the prognosis could be bleak. The plane she was able to catch, thanks to the diligence of coworkers, brought her to Kelly’s bedside.

“The dispatchers got me home that night,” Nancy said, noting the dozens of calls made to her cell phone before coworkers finally made contact over the hotel line. “Had they not tracked me down, I may have never seen Kelly during those final hours.”

Fourteen hundred people attended Kelly’s funeral, including every single teacher she had since kindergarten. The three flower shops in town ran out of flowers. Dispatchers from a neighboring county offered to fill in during their off time so everyone from Porter County 911 could attend services. A memorial bench placed in the high school courtyard, funded through dispatcher and police officer donations, bears Kelly’s favorite symbol, a peace sign. Friends still leave messages on Kelly’s MySpace page.

Nancy attributes the concern and the tremendous outpouring of support to the lifetime spent in Valparaiso and Kelly’s popularity. Nancy has been a dispatcher for the past nine years and the girls’ father, Vic Mercaldo, has been a firefighter/paramedic for 20 years. Their daughter Abby is a sophomore at the same high school.


Nancy took two months away from work, coming back when she could no longer endure the silence when alone at home and the feeling that Kelly was coming through the door every time she heard it open. She needed work away from home as a break from her bleak reality.

Nancy and Abby have good days and bad. A good day might be marked by a few words or a hug exchanged between close friends. A bad day might be a call Nancy takes at the 9-1-1 center keenly reminding her of Kelly’s accident. When overwhelmed, a coworker will take over, giving her a moment of respite.

Nancy has a hard time finding the right words when saying ‘thank you’ doesn’t seem enough. Sometimes, she believes Kelly is doing the job for her.

“She leaves me a peace sign,” Nancy said. “She wants us to know she’s good. She wants us to know we’ll be all right.”
Fred Hurtado has been in the emergency services business for a long time; his entire career, in fact, has been devoted to the line of work learned on the field.

The story begins with Hurtado’s decision to enlist in the Navy 24 days after he graduated from high school in 1964. He trained as a hospital corpsman, and following duty at a naval hospital in Yokosuka, Japan, he volunteered for the Fleet Marine Force. His assignment to the 3rd Marine Division’s 3rd Anti-Tank Battalion landed the 19-year-old in South Vietnam, 15 miles outside of Da Nang. He was Charlie Company’s corpsman—“the Doc”—for the company’s 100 Marines.

When the entire 3rd Marine Division was moved to the demilitarized zone dividing North and South Vietnam, Hurtado was in combat almost nonstop for three months. He was shot in the arm, blown off a track vehicle that hit a land mine, and finally, seriously wounded by a mortar round that went off behind him as he was kneeling to put a battle dressing on a wounded Marine.

After three months in the hospital, Hurtado’s three Purple Hearts earned him his ticket home. He was discharged from the Navy in January 1968, and he took advantage of the G.I. Bill by enrolling at a community college in Torrance, Calif. He majored in history education and transferred to UCLA for his junior year. During the summers he worked as an ambulance driver for local private ambulance companies. The medical assistance he was allowed to provide in Los Angeles was nowhere near the level of his Vietnam experience.

“What I had been trained to do in Vietnam wasn’t an option here,” he said. “There was no civilian equivalent to what a Navy corpsman was allowed to do in the military. As ambulance drivers all we were required to have was an advanced first aid card from the Red Cross.”

Hurtado wanted to do more; he saw the work done by the Los Angeles County Fire Department paramedics and that’s what he wanted to do. After all, Hurtado had returned to a country plagued by a growing
number of traffic and coronary deaths occurring nationwide. During 1965, there were more fatalities from auto accidents (50,000) than from soldier deaths during the eight years of the Vietnam War. More than half that number in Los Angeles County alone, 25,230 people, had died from heart attacks.

In California, the third-year education major got wind of a Los Angeles City Fire Department program that could lead him back to field medical care. The Wedworth-Townsend Act Gov. Ronald Reagan had signed on July 14, 1970, gave paramedics the power to treat a patient on scene under radio guidance from an emergency physician or nurse at a base hospital; it also set aside funds for establishing a regional EMS system.

Hurtado made it into the program and became a paramedic, a position that led him into the politics of EMS policy in Los Angeles County. He helped organize the United Paramedics of Los Angeles and became its founding president. As union president, he worked with those behind the movement to push for the autonomy the Wedworth-Townsend Act guaranteed to paramedics. It was a tough fight. The idea was divisive and for many, much too audacious.

"Who wanted a bunch of medical nonprofessionals treating patients with the drugs and needles capable of killing them?" Hurtado asked. "Any type of pre-hospital care was considered controversial, especially among the doctors."

Doctors who did agree — powerful figures like Dr. Walter Graf and Dr. Michael Criley — were among Hurtado’s peers and the same people testifying later in support of the national Emergency Medical Services Systems Development Act of 1973.

Testimony given in favor of this act, signed in 1973, highlighted not only the discrepancies and fragmentation in EMS services nationwide but, also, the life-saving potential of pre-hospital care.

Dr. Graf, a cardiologist at Los Angeles’ Daniel Freeman Hospital, supported the vital role of pre-hospital care through data from his mobile coronary care unit funded by the local chapter of the American Heart Association. Initially staffed by a coronary care nurse, on scene care was eventually switched to paramedics.

According to Dr. Graf’s three-year evaluation of paramedics emergency heart care, properly trained firemen could deliver a level of emergency heart care equivalent to that of a coronary care unit nurse. Furthermore, the study found the public generally less resistant to calling a paramedic or fire department for emergency assistance, than a physician, because of the shorter waiting period in receiving care.

Dr. Graf told the Senate Subcommittee on Health about the excellent care Los Angeles paramedics were providing and could provide — assuming his recommended scope of paramedic actions was approved for use.

“I visualize the day when such fire rescue personnel who are functioning as paramedics could easily be part of a separate department,” Dr. Graf said. “They could provide health delivery much the same way as we get fire help or police help as a separate, independent arm of government.”

Dr. Graf was also the personal physician of the politically powerful and much revered Kenneth “Kenny” Frederick Hahn, supervisor of Los Angeles County. That connection proved most beneficial and Hahn, who served on the Los Angeles Board of Supervisors for 40 years (1952-1992), gave testimony in overwhelming support of the paramedic program.

“I don’t know of a project that I have been more thrilled with in all of my 25 years than of developing this paramedic program,” Hahn said during his pages long testimony preserved in the archives of the Congressional Record. “I take great pride every time I read a report that someone’s life was saved by the fire department’s rescue unit.”

Hurtado didn’t give testimony during the two days of subcommittee hearings in California (one day in San Francisco and one day in Los Angeles) or the two days devoted to hearings in Washington, D.C. The once aspiring history teacher was busy on the streets of Los Angeles, doing exactly what he had learned during the war.

In addition, he and his fellow paramedics on the union’s executive board were evaluating the City of Los Angeles’ Fire Department’s management of EMS.

“Fire chiefs at that time did not have an appreciation of the level of medical sophistication that the paramedic program entailed,” Hurtado said. “Many of them thought that EMS was just a matter of throwing the patient on the stretcher and hauling him to the hospital.”

One L.A. fire chief, he recalls, had particular disdain for paramedics, saying “a wino with a wheelbarrow could do their job.” Hurtado says in many cases non-medically trained fire chiefs were making medical decisions without even realizing they were making medical decisions affecting patients.

In 1979 the paramedics’ union issued the report: “Problems in the Fire Department’s Management of EMS and Cost Effective Solutions,” which among other recommendations included a dispatch “telephone triage” system. The plan outlined in the report was, conceptually, nearly identical to the Medical Priority Dispatch System® (MPDS) introduced at the Salt Lake City (Utah) Fire Department that same year.

“Those were extraordinary times,” Hurtado said. “Looking back, I’ve got to say it was my great privilege to be a part of the political and EMS policy development process in L.A. County during the early years of the paramedic program. A lot of what we were doing had implications for and influenced EMS nationally.”