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
Dispatch Moves Off Center. The communications center isn’t the only place for dispatchers. Many are coordinating response from in the field.

Dear Reader

President’s Message

Ask Doc

Readers Board

Navigator

Last Page First

Contributors

departments

OnTrack

Medical CDE. Action to take once the help in uniform comes onto the scene

Fire CDE. Fighting fires takes understanding the environment

Dispatch Workforce. Younger generations not keeping up with population fueled by post-war baby boomers

Software Secrets. AQUA reports designed to pinpoint compliance issues

Industry Insider

In The News

Best Practices

Triple Protocol. Unified Communications Center in Washington, D.C., adds police and fire protocols

Quality Improvement. Program is the tie that binds protocol consistency and accuracy

Making Changes. Proposal for Change shows who’s behind the evolution of MPDS

Frequently Asked Questions. Motorcycle helmet removal instructions

Dispatch In Action. Dispatcher sets sights on career since the second grade. Move doesn’t diminish ability to help people

Dispatch Frontline. Dispatchers pull together to coordinate five-alarm fire

The following U.S. patents may apply to portions of the MPDS depicted in this book: 5,857,966; 5,989,187; 6,004,266; 6,010,451; 6,053,864; 6,076,065; 6,078,954; 6,106,459; 6,607,481. FPDS and PPDS patents pending. Protocol-related terminology in this text is additionally copyrighted within each of the NAED’s discipline-specific protocols. Original MPDS, FPDS, and PPDS copyrights established in September 1979, August 2000, and August 2001, respectively. Subsequent editions and supporting material copyrighted as issued.
A good thing about this job is the information I pick up with each edition. For this issue, I had the opportunity to learn about incident dispatch teams (IDTs) from the founders of the organization dedicated to promoting and supporting on-scene communications. Although incident dispatch has been around, at least in concept, for 30 years or more, its value to the emergency response community is taking on even greater meaning in the wake of major disasters such as the seasonal fires destroying California homes and wildlife.

As explained by Bonnie Maney, telecommunications manager for the town of Palm Beach, Fla., Police Department and All-Risk IDT coordinator for the state of Florida, incident dispatch teams “take some of the workload off the communications centers.” They are at the scene, providing command post assistance by doing what they do best—radio traffic control, resource tracking, and multitasking. The work gives them a close-up view of the situations they have handled from inside the communications center.

During the same time I learned about IDT, I had the opportunity to listen in on a telephone conference among quality improvement (QI) coordinators working out of three provincial communications centers under the British Columbia Ambulance Service (BCAS). These QIs are fanatical about their work and devote time each month to a collective review of a random call in the interest of accurate auditing. They call it a “review of the reviewers” and it has led to more consistent scoring in line with standards of the National Academies of Emergency Dispatch® (NAED).

I also had the good fortune to meet, by phone, several dispatchers featured in the YourSpace section. Zachary Cannady, a dispatcher for the Albertville Police Department (Ala.), is working the dream job he has wanted since grade school. Haley Latimer kept calm when calling 9-1-1 after her mom suffered a tonic-clonic seizure. Haley was 12 years old at the time. Janet Jones, a dispatcher for the Sarasota County 9-1-1 Communications Center (Fla.), finds her career satisfaction in helping others, just as she did when helping a father in the birthing of his baby boy.

It’s not only the information that keeps the job alive; it’s also the people involved in the stories. In past issues, we’ve featured French toast breakfasts made in honor of CPR saves, the city of H aleylvne (Ala.) and its annual festivity to commemorate the first ever 9-1-1 call made in the United States, and dispatchers winning awards for helping others through the unexpected crises. Things don’t always end happily but there’s a lot that dispatchers do by simply being there.

I hope you enjoy reading this issue as much as we enjoyed putting it together. And, as always, please don’t hesitate to contact us about the stories shaping your days and life in the communications center.
Thirty Years and Growing. Protocol and profession mature into 21st century

Scott Freitag, NAED President

As you've probably heard by now, the National Academies of Emergency Dispatch® (NAED) recently released version 12 of the Medical Priority Dispatch System® (MPDS). This latest version provides major new innovations in EMS that deliver the high-quality pre-hospital patient care you come to expect from the Academy.

What you might not know is the amount of time and talent devoted to its development. A tremendous amount of volunteerism goes into a project of this magnitude and we have motivated and skillful experts from the industry who dedicated their time to make sure that the protocol stays the best it can be. In fact, when you consider the detail that went into version 12, it no doubt represents an investment of 100s of volunteer hours. In the formal round of action held in the Academy offices, the NAED’s 19-member Medical Council of Standards considered 302 Proposals for Change over eight full days of meetings. Additional Proposals involving High-Risk Pregnancy and Childbirth and for Transfer, Interfacility, and Palliative Care were considered at a later series of meetings held by three specialty focused subcommittees.

As anyone at these meetings will agree, the discussions are painstaking. Even what someone might think is a minor change can take hours of consideration. For example, the revision to the long-established Chief Complaint selection question, “What’s the problem, tell me exactly what happened,” involved evidence that has been mounting over the years. Many felt the question lacked clarity and encouraged the caller to report a “diagnosis” of the patient’s problem. Callers, eager for help to arrive, often started talking before waiting to hear the second part of the question, which meant the calltaker’s unnecessary repetition of the question. The new wording, “Okay, tell me exactly what happened,” is also more consistent with the Police and Fire Priority Dispatch Systems™.

The communications center has been more fully recognized as an integral part of the pre-hospital care team over the past several decades, and I believe protocol has a lot to do with that. The public has acknowledged the importance of telecommunications professionals and has a higher expectation of them when they make telephone contact. The protocol gives the public an edge. Calltakers trained in the use of protocol are able to provide pre-hospital instructions that help save lives and bring new ones into the world. Protocol helps us know how to do what’s best for those we serve.

At the time I was launching into my career, Dr. Jeff Clawson said we were witnessing the “Dawn of the Dispatch Decade” as municipal and public awareness recognized the increasing importance of EMS. As he predicted, the 1990s did serve as a template for the safe and efficient provision of EMS in the 21st century. Nearly a decade into the new century and the protocol is stronger than ever and reaching countries we once only dreamed possible. In 2009, we will be celebrating 30 years of protocol now used in communications centers worldwide. I hope you will share in the celebration of the event. Watch The Journal for more information.

Along the same lines, the role of the calltaker and dispatcher also continues to grow. Stories in this issue of The Journal show the many directions a dispatcher can take with his or her career. No longer is the dispatcher confined to a job without any opportunity to move beyond that position. The dispatcher can carry the skills of emergency 9-1-1 communications to the field and participate at a level once reserved for firefighters, police, paramedics, and other first responders. There are opportunities within the centers to work in training, quality assurance, and continuing education programs.

The communications center has been more fully recognized as an integral part of the pre-hospital care team over the past several decades, and I believe protocol has a lot to do with that.

Projections from the U.S. Bureau of Labor Statistics reinforce the future of communications specialists choosing this route. According to the bureau’s Occupational Outlook Handbook (2008–2009), employment of dispatchers is expected to increase six percent over the 2006–2016 decade. Population growth and economic expansion are expected to spur employment growth for all types of dispatchers. The growing and aging population will increase demand for emergency services and stimulate employment growth of police, fire, and medical dispatchers.

I have been involved in emergency medical services and emergency dispatch for 20 years and have watched the profession and protocol mature. I can only anticipate a bright future as the Academy continues in the forefront of emergency fire, police, and medical dispatch.
Dispatcher Discomfort. What to do about callers in public places

Jeff Clawson, M.D.

Sharyn asks:

We have just received our flip-chart cards for the Aspirin Diagnostic Tool and will be implementing them within the next few weeks. (Yes, we do have a sign-off from our local medical control.) Do you have any suggestions regarding the very personal and graphic questions? There is some discomfort among our dispatchers about that kind of questioning being yelled from person to person in a public place. Believe it or not, we still get many calls from corded phones, especially from restaurants, bars, and other places of business.

We know it is counter-protocol to ask to speak to the patient under normal circumstances, but can an exception be considered in this case, if the phone can be brought to the patient or if someone can call back from a cell phone the patient can use?

Also, what do you do if you cannot get a straight “yes” or “no” answer to the questions? What is considered the best course of action? Proceed or stop? There is no guidance for “I don’t know.” We get that answer all the time with grown children calling for elderly parents who can’t tell us if mom or dad has a heart condition or not. Which side do we risk erring on?

It would seem this is only to be used if the patient is alert, yet that is not on the flip-chart card anywhere. Shouldn’t it be? (I know it is mentioned on the “Special Update” circular that came with the cards.)

If we could get a quick response to these questions, it would be most appreciated. We would like to implement as soon as possible.

Sharyn Pachnek
Supervisor, EMD-Q
Boynton Beach 9-1-1, Police & Fire-Rescue Communications
Boynton Beach, Fla.

Sharyn:

Thank you for your questions about the Aspirin Diagnostic Tool. In answer to your questions:

Callers in public places: We suggest the protocol be adhered to as is. While we understand your EMDs’ concerns about public propriety, we have not received any feedback in this regard from probably a thousand or more centers actually using the Tool since last June. If someone possibly is having a heart attack, political correctness should not be an issue.

Speaking to the patient: We have discouraged this in general because its use was often to disprove what the caller was telling us. In this case, it would not be bad, but if the phone is corded, the distance issue is still present. Having someone call back on a cell phone is an interesting idea but that may mean another calltaker is now in the mix. Personally, I would not waste the effort to do this either.

“I don’t know” the answers issue: An unknown answer is to be considered “OK” to proceed. Since the only time ASA could be administered is if the caller and the patient are in the same vicinity, they most always know or can ask the patient. We have not heard that this has been a problem so far. Statistically, an unknown answer is highly likely to be a “good to proceed” situation.

Alertness issue: The alertness requirement on the manual pull-out card is listed as a pre-question qualifier in the first ASA Dx Tool question #1: (Chest pain and alert >16)...” In the ProQA® software version, it is in the blue CEI header: “Select one for alert patient >16: 1st-party or 2nd-party caller.” The second bulleted CEI under the PDIs includes the “alert” requirement also.

Hope this helps and best of luck with the initiation of this process ... Doc
We are pleased to introduce you to our Readers Board. The 11 members have volunteered to assist The Journal’s editorial staff and board in generating stories and story ideas that keep The Journal lively and relevant. As many long-time readers may have noticed, The Journal has gone through some substantial changes during the past year to better reflect the interests of our audience. We have added more stories about dispatchers at work—whether a call was taken solo or an incident involved multiple dispatchers and agencies—and more articles about the tools of the trade (protocol, quality assurance, and accreditation). We have increased the amount of news and current events by creating the Industry Insider section and brought the number of continuing education articles to two per issue.

The Journal has an audience of approximately 60,000 readers, and they are predominantly members of the 9-1-1 emergency services dispatch profession. This relatively wide range of readers extends from management and supervisory positions to the calltakers and dispatchers who use the medical, fire, and police protocols on a daily basis. Our publication also goes out to medical directors, physician groups, and others involved in providing emergency medical care.

Sharon Torongeau is the director of communications for the Noblesville Communications Department (Ind.). She has been in the 9-1-1 public safety dispatch profession for 20 years, the majority of those years with the city of Noblesville. She started her dispatching career for a small town in northern Indiana and later transferred to Noblesville. She started as a dispatcher, from there was selected as the assistant director, and last year was promoted to director. The communications center dispatches police, fire, and EMS for Noblesville and neighboring Westfield.

April Tarrant is the emergency communications director at the Johnson County Central Dispatch Center in Warrensburg, Mo. Tarrant began her career in the medical field and six years later changed her career path and joined the Newton County Central Dispatch Center in Newton, Mo. She started as a dispatcher in April 1997, and then worked as a supervisor and training coordinator until leaving to be the director of Communications and Emergency Management for the agency near Kansas City, Mo.
Eastern US

Judy Capparelli is the EMD administrator for the Raleigh-Wake County 9-1-1 Center in Raleigh, N.C. The position involves performing quality assurance for the center, which received its Accredited Center of Excellence (ACE) in EMD in October 2007. She has been with Raleigh-Wake since 1996, starting as a telecommunicator and serving in the positions of supervisor and training coordinator before assuming her current position. She received her Emergency Number Professional (ENP) certification in 2003 and currently serves as secretary for the North Carolina Chapter of Public-Safety Communications Officials (APCO).

Tami Wiggins is the training and quality assurance supervisor for Harford County Emergency Operations in Forest Hill, Md. She serves on the NAED Police Council of Standards as well as the Call Processing Board. She is an ETC instructor and a quality assurance specialist in EFD, EMD, and EPD. She was the driving force behind her center becoming the first Accredited Center of Excellence in EMD (ACE) in Maryland. Wiggins is a member of a local volunteer fire department and has been for about 20 years. She has been employed at Harford County since 1994, beginning as a police dispatch supervisor. In 2002, Wiggins was transferred to the training division to oversee the training academy and quality assurance programs.

Southern US

Mark Braswell is an assistant chief with the Cy-Fair VFD, Houston, Texas, and has been there for 20 years. He oversees the operations of the communications center, IT, safety, and public information. The Cy-Fair VFD was the second agency to become an Accredited Center of Excellence in EMD (ACE) in EFD. Braswell is also a captain with the Houston Fire Department, working there for 15 years. He is EMD certified, an EMD-Q, an EFD-Q, and an ETC instructor. He serves on the NAED Fire Council of Standards and the Rules Committee.

Western US

Dave Brinton is a firefighter/paramedic with the Salt Lake City Fire Department where he’s worked since 1994. Brinton has been involved in EMS for nearly 20 years. He is responsible for the Salt Lake City Fire Department’s medical quality assurance program and is on the NAED® Curriculum Board-Medical. Brinton is an instructor for EMD, EFD, EMD-Q, EFD-Q, and ProQA®.

Shawn Pray has been with Deschutes County 9-1-1 (Oregon) for more than eight years. Currently, he serves as the administrative supervisor and training coordinator for the agency. Pray attended Navigator 2007 and from the information gathered at the conference, Deschutes County 9-1-1 started developing a quality improvement program. Deschutes County Operations became a consolidated public safety dispatching agency in 1985, taking calls for police, fire, and medical service assistance.
In recent years, there have been many scientific studies (Yu et al., 2002; Sato et al. 1997; 25:733) demonstrating the importance of uninterrupted cardiopulmonary resuscitation (CPR) in successful patient resuscitation. Coronary perfusion pressure drops rapidly when compressions are stopped, even for a short period of time (Berg et al., 2001; 104:2465). Brett Patterson, Council of Research chair for the National Academy®, wrote on the ED-Q forum in November 2006, “Make no mistake, stopping CPR, particularly compressions, results in a dramatic decline in survival rates.” In March 2008, the American Heart Association’s journal Circulation published an article about hands-only CPR, emphasizing the importance of uninterrupted compressions to a patient’s chance of surviving.

Not only must the compressions be performed continuously (when appropriate to do so), they also must be performed correctly. Medical Priority Dispatch System® (MPDS) versions 11.3 and 12.0 provide the following parameters for the performance of chest compressions on an adult:

- Hand placement: heel of one hand on the breastbone in the center of his/her chest, right between the nipples; other hand on top of that hand
- Depth: Push down firmly 2 inches (5 cm)
- Frequency: Pump the chest hard and fast... at least twice per second
- Release: Let the chest come all the way up between pumps

Each parameter is vital to the proper compression and decompression of the heart muscle. Professor Douglas Chamberlain, in his keynote address at Euro-Navigator 2007, spoke of the compression “pushing” the blood needed by the brain and the decompression “pulling” in blood for the heart; hence, “Let the chest come all the way up between pumps.”

So, what happens when the untrained bystander sees someone in uniform? Typically, they stop what they are doing, expecting that someone with more training is about to take over. But how far away is that person in uniform? Is that responder going to immediately take over performing chest compressions? If that responder is a police officer, does he or she have the level of training necessary to take over? EMDs often hear the responders walking into the room and/or approaching the caller with, “Hang up the phone.” The EMD is left to wonder if there is going to be an interruption in CPR. If so, what can the EMD do beforehand to minimize that interruption?

On a recent 9-1-1 call at the Sunnyvale Department of Public Safety (California), the patient had dropped to the ground while playing tennis. The caller, in the midst of being told how to perform chest compressions, interrupted the calltaker with, “The paramedics are here.” The caller was immediately asked, “Are they with
10 THE JOURNAL | emergencydispatch.org

the patient?” The caller responded, “He's walking onto the tennis courts now.” If the caller stopped performing chest compressions at that point, waiting for the responder to cross the tennis courts, how long would that interruption last? There’s no way to know how long that interruption could last, yet it is absolutely vital to the patient’s chances of survival that CPR continues uninterrupted until the paramedics take over.

As knowledge of cardiac arrest survival continues to progress, so does the MPDS. The advent of the Compressions 1st pathway in a majority of suspected cardiac arrest cases is an example of that progress. However, with the inclusion of so many additional PAI links, the previous “Arrival Interface” has been sacrificed in the cardset. There is a replacement found in ProQA®. The importance of continuing our efforts until the paramedics take over, however, has not diminished in any way. In fact, the aforementioned studies have reinforced the need to keep going until the responders take over.

In every cardiac arrest response, there are other factors worthy of study that can affect the length of the interruption in CPR:

• Are the field responders properly trained to take over CPR?
• How seamless is the transition from untrained bystander CPR to field responder CPR?
• Is it essentially detrimental to survival if the arriving responders say upon entering the room “Hang up the telephone and tell me what happened”?
• Perhaps they should be trained to say, “Keep doing what the dispatcher tells you until I’m ready to take over for you” as a better option.
• Does one field responder immediately take over CPR while another starts preparing the automated external defibrillator (AED)? Are common tasks pre-assigned? Is everyone familiar with his or her assigned duties?

The importance of making the transition from bystander CPR to field responder CPR as seamless as possible cannot be understated. As Patterson wrote in his November 2006 post on the ED-Q forum, “It seems to be that following the protocol and getting ‘hands on chest’ as soon as possible, and keeping ‘hands on chest’ as long as possible, gives the patient the best chance of survival.”

The importance of the Arrival Interface

The Arrival Interface remains an integral part of cardiac arrest survivability. All EMDs are strongly encouraged to insert “Don’t stop until the paramedics (EMTs) take over for you” as soon as it is appropriate to do so—and to repeat it as necessary. As has been shown in several studies, a compressions interruption of only a few seconds can significantly reduce the patient’s chances of surviving a cardiac arrest.

What is the Arrival Interface?

In MPDS v11.0, Panel C-18 read, “When you hear the paramedics (EMTs) arrive, don’t stop CPR (Mouth-to-Mouth) until they take over from you.”

“Is the door unlocked? (Send someone to open it now.)”

“Tell me when they’re with the patient.”

In the version 11.3 and 12.0 cardsets, that panel has been overwritten by the plethora of instructions and links needed to accommodate several different CPR pathways. Utilizing the benefits of computer technology over paper, ProQA users can still find the Arrival Interface in the Specific PAI Target Tool and on specific panels in the pre-arrival sequence. Those not using ProQA, however, can and should continue to emphasize the importance of continuous compressions through appropriate enhancement when the EMD suspects the caller may interrupt compressions. QA personnel for all MPDS users should be providing training and feedback on the importance of uninterrupted compressions for cardiac arrest cases. ProQA users see the following instructions on the Arrival Interface panel:

“It seems to be that getting ‘hands on chest’ as soon as possible, and keeping ‘hands on chest’ as long as possible, gives the patient the best chance of survival.”

Brett Patterson
### CDE-Quiz G Medical

Answers to the CDE quiz are found in the article “Arrival Interface,” which starts on page 9.

1. When advising compressions, how deep should EMDs advise callers to push down on an adult’s chest?
   - a. 1 inch (2.5 cm)
   - b. 2 inches (5 cm)
   - c. 3 inches (7.5 cm)
   - d. As deep as possible

2. When advising compressions, how frequently should EMDs advise callers to push down on the chest?
   - a. at least once per second
   - b. at least twice per second
   - c. at least three times per second
   - d. as fast as possible

3. When advising compressions, how far should EMDs advise callers to let the chest come up before providing another compression?
   - a. all the way up
   - b. halfway up
   - c. just far enough to make another compression possible

4. According to the article, what do untrained bystanders typically do when they see someone in uniform?
   - a. continue what they are doing until they receive further instructions.
   - b. stop what they are doing, expecting someone with more training to take over.

5. The Arrival Interface helps EMDs minimize CPR interruptions when responders arrive by:
   - a. advising callers “Don’t stop CPR until the paramedics take over for you.”
   - b. advising callers to “guide the responders directly to the patient.”
   - c. directing callers to hand the phone to responders.
   - d. directing callers to tell responders exactly what happened.

6. The Arrival Interface was removed from the MPDS cardset because:
   - a. these instructions are no longer appropriate in the DLS environment.
   - b. it is the responder’s job to make sure the caller continues CPR until they can take over.
   - c. space was needed for the plethora of instructions and links needed to accommodate several different CPR pathways.
   - d. only ProQA users are authorized to provide these instructions.

7. ProQA users can still find the Arrival Interface:
   - a. by using the Specific PAI Target Tool.
   - b. by using the Summary Tab.
   - c. by clicking on the Additional Information menu option.

8. According to the article, cardset users can and should continue to use the Arrival Interface instructions, even though they are no longer listed in the cardset.
   - a. true
   - b. false

9. According to the article, following the protocol and getting “hands on chest” as soon as possible, and keeping “hands on chest” as long as possible, gives the patient the best chance of survival.
   - a. true
   - b. false

10. A compressions interruption limited to 10 seconds or less generally has no significant impact on the patient’s chances of surviving a cardiac arrest.
    - a. true
    - b. false

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To be considered for CDE credit, this answer sheet must be received no later than 10/31/09. 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 at 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.
Smoke Kills. Fighting fires takes understanding the environment

By Dave Brinton & Brian Dale

An airplane crash in Salt Lake City, Utah, 43 years ago killed 40 of the 90 people onboard when passengers could not make it outside through the emergency exits and died from smoke inhalation. Within several days, five more died from injuries suffered at impact, including burns and, also, respiratory problems again related to the smoke inside the cabin.

Smoke inhalation is the primary cause of death in most aircraft accidents, and in all cases an aircraft accident is considered an entrapment situation until proven otherwise. Most die because of their inability to escape the burning craft. That's because the smoke and gases resulting from a fire in a confined space soon make the interior atmosphere intolerable for humans. The smoke inside the cabin is usually thick and contains poisonous gases (such as carbon monoxide, hydrogen cyanide, benzine, and hydrogen chloride). It's critical to get out of the aircraft without delay— if fire or smoke is present, you will generally have less than two minutes to safely exit the plane.

Reaction at the time of the crash is the key to survival. Crash investigators have found time and time again that those who survive are those who are evacuated from the aircraft swiftly. They have an escape plan and do not stop to retrieve their personal belongings. An escape plan means understanding the brace position, counting the rows to their nearest emergency exit, and, yes, listening to the safety briefing.

In many cases, as firefighters will tell you, victims are often found near or next to exits where, sometimes frozen in panic, they were overcome by the smoke. This is what happened in the 1986 death of Ricky Nelson, his fiancé, and five band members when the plane they were traveling in burned after making an emergency landing in an East Texas pasture. Their bodies were found in the front of the cabin, just outside the cockpit door. Cause of death was smoke inhalation.

Several years ago, Salt Lake City Fire Department Battalion Chief Brian Dale wrote an article explaining structural fires and why they are so deadly. This information, which can be applied to any type of structural fires including aircraft, is well worth repeating as we approach the 10th anniversary of the Academy's® Fire Priority Dispatch System™ (FPDS) protocols. As Dale stated in the article (Fall 2003), the EFD holds the pivotal role of managing fire incidents and decreasing the potential for loss of life prior to on-scene arrival of trained fire suppression personnel.

The FPDS protocols empower the EFD to intervene in life-threatening situations involving structure fires by obtaining necessary information from the caller,
dispatching the appropriate resources, and providing life-saving directions to those who are threatened. The FPDS enables a certified EFD to systematically and confidently process emergency calls for confirmed structure fires.

Fire behavior

In order to understand how to better interact with this special environment, it is important to understand what you’re up against. What is fire? How does it behave? What should the role of the EFD and firefighters be in suppressing this force?

Simply put, fire is the result of fuel interacting with a heat source and oxygen in the correct amounts to form a chemical chain reaction. These four elements are known as the “Fire Tetrahedron.” A fire confined in an enclosed space will have three distinct phases: the incipient phase, the steady state or free-burning phase, and the smoldering phase. These phases differ from those of a fire out in the open because the oxygen supply is limited in a confined space.

The incipient phase is marked by the production of smoke, small increases in heat, and little or no visible flame. Once initiation is made, fire moves into the free-burn phase with a marked increase in temperature, smoke, and radiant heat from the flame source; room temperatures rise to near 1,200 degrees Fahrenheit at the ceiling and around 300 degrees Fahrenheit at the floor level. Flames given off by an enclosed fire are trapped within the structure, such as the cabin of an airplane, and are unable to escape without ventilation. The resulting smoke and gases soon make any interior atmosphere intolerable for humans.

One phenomenon seen during the free-burn phase is mushrooming. As fire grows inside any given area, the heated gases and smoke rise to the ceiling, roll across its surface, and then begin to bank down lower and lower toward the floor. Visibility decreases to zero very quickly when this occurs, and all available oxygen is rapidly depleted. As the fire consumes more and more fuel, heat increases until everything in the room spontaneously ignites. This condition is known as “flashover” and usually occurs when the heat reaches around 1,000 degrees Fahrenheit. The chance of survival for anyone inside a room during a flashover is very low. Even a firefighter in full turnout (protective gear) caught in this environment would be at extreme risk.

As available oxygen decreases, fire enters the smoldering phase. The area still has immense heat and fuel, but oxygen availability is limited. All that is needed to surge back to a free-burn is the introduction of that missing piece. When a fire has entered this stage and someone opens a door, introducing a fresh supply of oxygen, a dangerous situation erupts. The fire can rapidly enter a free-burn state, or cause a more serious condition known as a backdraft or smoke explosion. A backdraft occurs when a fresh supply of oxygen enters a superheated atmosphere where there is still sufficient fuel, causing a rapid expansion and blast of the flame and fire gases.

From the onset of the incipient stage, oxygen is being used in the burning process and poisonous gases are being produced (carbon monoxide being the most prevalent). For the person trapped in a structure fire, this causes severe difficulty breathing, disorientation, and asphyxiation. Again, most victims of structure fires do not die because of the heat, but rather succumb to severe smoke inhalation.

Disorientation from gases, combined with zero visibility from smoke and intolerable heat, can easily transform what would be a simple walk to an exit, into a desperate crawl though a hellish maze of dead-ends and ultimate suffocation. As stated previously, victims who have attempted but failed to escape from these conditions are frequently found incredibly close to doors and windows.

Fire suppression

So how do suppression teams combat this destructive force? Put the wet stuff on the red stuff is probably the most famous saying in the fire service relating to suppression. Fire is an escalating emergency that spreads and grows until someone suppresses it, usually by applying water to the heated environment. Remember the Fire Tetrahedron? To extinguish a fire, one has only to remove one or more of the four elements. While this sounds simple in theory, it isn’t in practice.

There are three or four tasks that must be completed in rapid succession to bring success. The fire must be attacked, the structure must be searched for victims and
ventilated, and there must be a non-stop flow of water both into and out of the fire truck supporting the suppression team inside. When done correctly, it is a well choreographed art form. The Incident Commander (IC) on the scene assigns teams into sectors identified by task assignments (attack, ventilation, rescue, medical) or by geography on the fire ground (east, west, interior, exterior, roof).

There is a tremendous amount of coordination and communication necessary between the IC, the attack team, sector officers, and the communications center. Once on scene, the first arriving engine company sets up to make either an offensive attack, which means going inside the structure, or a defensive attack; this is done from the outside in cases where there is extreme danger. If an IC chooses a defensive attack, the structure will be written off as a total loss. Operations are then designed to simply contain the fire and keep it from spreading to uninvolved structures.

One of the common tools an IC uses to make this decision is the principle of Time, Life, and Value (TLV).

Time: When did the fire start and how has the structure weakened? This is a vital initial piece of combat information for responders.

Life: Are there imminent life threats within or near the structure? Is someone trapped without a viable exit? Part of the response configuration for aircraft incidents is driven by the size of the aircraft involved. This is expressed in the number of souls (occupants) the aircraft is capable of carrying, including the crew, not the number actually on board.

Value: Is it worth the risk of sending an attack team inside? What is the value of saving the structure? If, upon arrival, the structure is 75 percent involved, what is the risk–benefit ratio of an aggressive, interior attack? A non-IC rarely places the lives of a fire company at risk by sending them inside when any of these factors are questionable.

 Obviously, there are other considerations beyond TLV. However, this gives you an idea of the kind of decisions that must be made quickly. One can also see the value of Key Questions the EFDs are trained to ask when an aircraft emergency occurs. This is one of the reasons it is said that the EFD is the first Incident Commander.

If the decision is made to enter a burning structure, the interior attack team needs a supply of fresh air. This is the responsibility of the ventilation crews (usually truck companies), and the importance of this task should not be underestimated. Besides making the air and visibility better for interior teams, proper ventilation may improve the chances for survival of anyone trapped inside the structure. In the United States, the practice of Positive Ventilation Attack is becoming a commonplace procedure for interior operations. This involves placing a fan at the attack team entry point and ensuring an exit on the opposite side of the structure for heated gases and smoke.

One way that EFDs can decrease danger to interior crews is by clearing up any miscommunication heard between the IC and fire ground crews as prescribed in the EFD course. With so many activities going on at the fire ground you can see why one of the important functions of an EFD is to be a logistics coordinator. Dispatchers have a vital role in assisting the IC in completing his or her objectives. Helping the IC by making phone, radio, or pager notifications, providing important information, evacuation, safety and disaster materials recommendations, poison control,野生动物, and instruction segments are written in a uniform format based on current guidelines and administrative protocols. The purpose of these instructions is to ensure improvement, rather than deterioration of the situation, and that the service requester or victim is kept safe. The function of the public safety telecommunication might include the use of pre-determined questions, pre-arrival telephone instructions, and pre-assigned actions that are an integral part of the responsibility to prioritize calls and assist in the stabilization of the incident. A pre-arrival reference system should be a written, reproducible document in a uniform format based on current guidelines and administrative protocols. (NFPA 1061 A-2-4.2.1)

Lack of approved protocols is a significant dispatch danger zone that can be easily avoided through EFD training.

Conclusion
Structure fires are extremely dangerous environments that need to be respected and dealt with using methods and procedures proven to prevent future harm to life or property. This is why FPDS interrogation and instruction segments are written the way they are. Fire and rescue environments are considered escalating incidents and safety issues are of primary concern at all times.

Since the introduction of the EFD almost 10 years ago, more than 2,500 dispatch personnel have been trained and certified in the proper use of the Academy’s FPDS protocols. Their use of Pre-Arrival Instructions is as important in fire incidents as they are in medical emergencies. In fact, the NFPA standard 106 states, in part: “Pre-Arrival instructions or information, when authorized by the authority having jurisdiction, might include law enforcement, fire or medical protocols, hazardous materials recommendations, poison control information, evacuation, safety and disaster instructions. The purpose of these instructions is to ensure improvement, rather than deterioration of the situation, and that the service requester or victim is kept safe. The function of the public safety telecommunication might include the use of pre-determined questions, pre-arrival telephone instructions, and pre-assigned actions that are an integral part of the responsibility to prioritize calls and assist in the stabilization of the incident. A pre-arrival reference system should be a written, reproducible document in a uniform format based on current guidelines and administrative protocols.” (NFPA 1061 A-2-4.2.1)
CDE Quiz Mail-In Answer Sheet

Take this quiz for 1.0 CDE unit.

Answer sheet found in article "Smoke Kills," which starts on page 12.

1. Which of the following is not part of the Fire Tetrahedron?
   a. fuel source
   b. humidity levels
   c. chemical chain reaction
   d. heat source

2. At least 50 percent of all fire deaths are due to smoke inhalation.
   a. true
   b. false

3. Statistically, how much time do you have to safely exit an aircraft following a crash?
   a. no time (there's nothing you can do once the plane goes down)
   b. 30 seconds
   c. two minutes
   d. since you should never leave a downed aircraft, the time is determined by the arrival time of first responders

4. A condition where everything within a room spontaneously ignites is known as:
   a. smoke explosion
   b. backdraft
   c. flashover
   d. free-burn

5. Which of the following is not indicative of the free-burn stage?
   a. marked increase in heat
   b. heavy smoke conditions
   c. little or no flame conditions
   d. mushrooming

6. During the smoldering stage, which one of the following elements is needed for the fire to surge back to a free-burn?
   a. fuel
   b. oxygen
   c. heat
   d. water

7. When an environment is in danger of a backdraft, which element is needed to complete the dangerous cycle?
   a. a new source of oxygen
   b. a stronger chemical reaction
   c. a new source of fuel
   d. more heat

8. Which of the following describes a defensive attack?
   a. an attack beginning on the outside, then moving inside.
   b. a process of using both master streams and interior headlines.
   c. a process where only chief officers work to suppress a fire.
   d. a tactic where the fire is attacked from the outside and the structure itself is considered a complete loss.

9. All aircraft accidents are considered entrapment situations until proven otherwise.
   a. true
   b. false

10. The size of the aircraft involved is expressed in:
    a. the type or series of commercial jet airliner (e.g., 727, 737, or 757)
    b. gross weight of the aircraft
    c. the number of souls (occupants) the aircraft is capable of carrying
    d. the number of occupants actually on board

To be considered for CDE credit, this answer sheet must be received no later than 8/31/09. 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 at 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.

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.

Name ________________________________
Organization __________________________
Address _______________________________
City__________________St./Prov.___________
Country__________________ZIP___________
Daytime Phone ( ) ____________________
E-mail: ______________________________

PRIMARY FUNCTION
☐ Public Safety Dispatcher (check all that apply)
   ☐ Medical ☐ Fire ☐ Police
☐ Paramedic/EMT/Firefighter
☐ Comm. Center Supervisor/Manager
☐ Training/QI Coordinator
☐ Instructor
☐ Comm. Center Director/Chief
☐ Medical Director
☐ Commercial Vendor/Consultant
☐ Other

ANSWER SHEET F  FIRE
September/October Journal 2008 VOL. 10 NO. 5 (Smoke Kills)
Please mark your answers in the appropriate box below.

1. ☐ A ☐ B ☐ C ☐ D
2. ☐ A ☐ B
3. ☐ A ☐ B ☐ C ☐ D
4. ☐ A ☐ B ☐ C ☐ D
5. ☐ A ☐ B ☐ C ☐ D
6. ☐ A ☐ B ☐ C ☐ D
7. ☐ A ☐ B ☐ C ☐ D
8. ☐ A ☐ B ☐ C ☐ D
9. ☐ A ☐ B
10. ☐ A ☐ B ☐ C ☐ D

Expires 10/31/09

THE JOURNAL | September/October 2008 15
Boom and Bust. Younger generations not keeping up with population fueled by post-war baby boomers

By Audrey Fraizer

Mark Knold’s trees tell the story. The economist for the Utah Department of Workforce Services has a presentation based on age and population that puts the baby boom generation into perspective.

If you are in Utah, the shape of the tree for 2005 is enviable for employers in other states. Utah is one of the few, if not only, states with a high enough birth rate to replenish its numbers from generation to generation. In fact, the number of people between the ages of 25 and 29 represents the greatest percentage of those available to the workforce, and, without coincidence, they are most likely the ones who are responsible for producing the largest segment of the state’s population (those up to the age of 4 years old).

However, the same does not apply for the rest of the country, at least that’s what the shape of the national tree for 2005 shows, based on statistics from the U.S. Census Bureau. That tree bulges at the lines designating the ages between 40 and 49. The lines below and the lines above diminish in comparison. Old age and associated mortality account for the lower numbers ascending the tree, while below the bulge it’s obvious that Americans—except in Utah—are having fewer children.

In other words, the younger generations nationally just can’t compete with the population numbers generated by the baby boomers. In fact, the Bureau of Labor Statistics estimates that during the next 10 years, there will be a 15 percent decline in workers ages 35 to 54, concurrent with a 25 percent increase in demand.

“There’s a worker vacuum that’s starting to happen in most of the United States,” Knold said. “The body count isn’t strong enough.”

Baby boomers departing

Welcome to the retirement phase of the baby boomers, a generation spurred by the return of soldiers from World War II during a period of optimism and economic expansion that resulted in the tendency for people to have large families. This demographic bulge, which correlated with birth years between 1946 and 1964, swept through childhood, youth, young adulthood, middle age, and is now looking at leaving the workforce.

Future impact depends on occupation

With the first wave of boomers turning 62 this year, the anticipated high rate of retirement due to many factors—the retirement programs offered as incentives to highly skilled individuals or in occupations where age reduces performance (such as police work or airline piloting)—could reach crisis proportions in the early years of the next decade.

“It’s certainly going to be an issue for many occupations 10 to 15 years down the road,” Knold said.

Future impact will differ depending on the occupation, as Knold indicates. Some, but not all the jobs, will be created by the need to replace those retiring. Others will be difficult to replace because of the education and experience level required or, conversely, the inability to find employees for lower-paying jobs an educated workforce doesn’t want and, because of the economy and job market, won’t have to take.

Lower-paying jobs could lose out in terms of finding workers, Knold said.

There’s also job appeal and in the case of public service, the past generation may not share the same zeal as the post-war generation.

“We’re not able to attract the younger people into public service like we used to,” said Dave Beach, director of the Utah Highway Safety. “It’s not to the extreme but there is a concern.”

Beach compares figures for the Utah Highway Patrol that 25 years ago would have attracted 1,500 to 2,000 applicants once the call went out for anticipated openings. Now, he said, they are lucky to get 100 people responding to their ads, a trend he attributes to changes in the workforce and the shifting attitudes about public service jobs. Even among existing staff, he said, the attitudes have changed.

“There’s a worker vacuum that’s starting to happen in most of the United States.” Mark Knold

“In the old days overtime shifts were gobbled up,” Beach said. “Not any more. We have trouble filling them.”

Beach said his department offers an incentive program that includes signing bonuses and education incentives for employees of the communications center. The extras are
particularly helpful in a competitive market climate, he said, especially since jobs in the public sector often can’t compete against traditionally higher paying jobs offered by private industry.

Another approach is developing an effective advertising campaign that employs the types of mass information platforms frequented by younger job applicants. For example, the Richmond area in Virginia initiated a three-month multi-jurisdictional campaign that attracted 4,500 applicants for 27 dispatch positions at three communications centers. According to local news reports, a $289,400 grant from Virginia’s Wireless E-911 Services Board was spent to blanket the area with television and radio spots, billboard ads, brochures, and promotions on social networking sites such as Facebook, MySpace, and YouTube.

The results were so good that they’re hoping to spread it to other localities in Virginia and the rest of the country.

Already feeling the pinch

Public sector careers are already experiencing the effects of mass retirement, especially in areas such as education, public administration, and criminal justice.

Among the hardest hit will be federal and state agencies. According to the Bureau of Labor Statistics, 50 percent of federal employees and 70 percent of federal senior managers will be eligible to retire by 2010. The Government Accountability Office estimated in 2003 that by 2007, 55 percent of senior executive service employees would retire or leave office. On the state and local levels, police agencies will also have a lot of vacancies, according to the statistics, and many have been experiencing difficulties filling the vacancies in their police departments, established to cope with the influx of boomers moving to the suburbs.

So what about those industries and agencies, like the federal and state government agencies, that want to keep their senior executives and managers—the ones who can afford to retire—or lure the top executives out of retirement and back into the workforce? “No one has the answers, although it’s obvious from discussions that this is an issue for many states, including Utah,” said Reen Henry, executive director of the Utah Commission on Aging.

A major emphasis is eliminating the barriers to a senior workforce. Some companies have developed innovative campaigns to attract older workers. The state of Utah, for example, initiated a three-month multi-jurisdictional campaign that attracted 4,500 applicants for 27 dispatch positions at three communications centers. According to local news reports, a $289,400 grant from Virginia’s Wireless E-911 Services Board was spent to blanket the area with television and radio spots, billboard ads, brochures, and promotions on social networking sites such as Facebook, MySpace, and YouTube.

The results were so good that they’re hoping to spread it to other localities in Virginia and the rest of the country.

Baby Boomers Dominating the Labor Force

Baby boomers number about 77 million people out of a population of 285 million. They comprise about 60 percent of the U.S. workforce between the ages of 25 and 64, and their presence in the national economy is so powerful that the U.S. Bureau of Labor and Statistics estimates that by 2008, the year the first baby boomers begin to retire en masse, the United States will face a skilled labor shortage of about 10 million people. This will signal the beginning of a 20-year transition until the youngest of the boomers reaches age 65 in 2029. By 2030, all surviving boomers will be ages 66 to 84, representing one in five Americans.

Baby boom statistics

According to the Bureau of Labor Statistics, 50 percent of federal employees and 70 percent of federal senior managers will be eligible to retire by 2010. The Government Accountability Office estimated in 2003 that by 2007, 55 percent of senior executive service employees would retire or leave office. On the state and local levels, police agencies will also have a lot of vacancies, according to the statistics, and many have been experiencing difficulties filling the vacancies in their police departments, established to cope with the influx of boomers moving to the suburbs.

The next generation

Employers will also have to consider how younger workers view their careers. The federal government will be increasingly competing with the private sector for the technologically savvy employee who no longer plans to spend 20 to 30 years in an agency, which has historically been the case. Statistics show workers between the ages of 18 and 38 change jobs, although not careers, an average of 10 times.

By the way, these are not statistics from the U.S. Department of Labor (DOL). The DOL has never published statistics about career change, according to an article in the summer edition of the Occupational Outlook Quarterly Online, but the department does keep statistics on the number of times people change employers or change occupations while working for the same employer.

For organizations that have struggled to effectively manage the workforce challenges associated with grueling and emotionally draining work, as well as shrinking pay and benefits, the emerging employee shortage is especially alarming. It will demand a much better job of recruiting, retaining, and engaging younger workers, Henry said.

For public service, she said, it’s a perfect storm of economic expectations, aging, and attitudes about working in government jobs. “This is an immensely complicated situation,” Henry said. “We’re just beginning to develop good models that change the paradigm of both those planning to retire and those entering the workforce.”
Falling in Line. AQUA reports designed to pinpoint compliance issues

By Tamara Haislip

Have you ever wondered how the reports in AQUA™ are calculated? This article explains that as well as the purpose of each report. Many of the reports make use of standard scoring, which is explained at the end of the article.

Note: Recently a few of AQUA’s reports have undergone name changes. If the report name has changed, the former name will be in parentheses after the new name.

Case evaluation record
This report is a detailed look at the Emergency Dispatcher’s (ED’s) activity during each stage of the reviewed case; the compliance scoring is sub-totaled for each stage. This report shows the total protocol compliance as well as the customer service score.

Determinant drift report
This report measures the accuracy of Determinant Levels.
- All Determinants found in the GREEN section are ideal, meaning the calltaker and reviewer agreed.
- Determinants found in the PINK section are considered a RISK to the patient, meaning the calltaker selected a lower determinant than was appropriate. The patient’s well-being is at risk.
- Determinants found in the YELLOW section are considered a WASTE, meaning the calltaker selected a higher determinant than was appropriate. The extra resources needed for a higher determinant are wasted.
- Anything found in the GRAY area is an unknown determinant, or in simpler terms, either the assigned level was not entered or the reviewed level was not entered in the case.

Note: Determinants ACROSS are from the CALLTAKER, and the determinants going DOWN are from the REVIEWER.

This report shows the accuracy with which calls are classified and dispatched. The report is grouped by calltaker, with the final group consisting of all calls. Under-response and over-response amounts are accumulated for each possibility. Total response numbers are simply sums of their type.

Communications center protocol compliance (protocol compliance report)
This report shows the average level of compliance to protocol for each ED in each section of the case review process.

This report shows the scores of cases grouped by the calltaker who took the calls. The weighted score is shown for each calltaker. The standard scoring system is used.

Cause-Effect (protocol compliance summary)
This report shows cause and effect, meaning how segments in one part of the call [Case Entry (CE) or Key Questioning (KQ)] can impact other segments [Chief Complaint (CC) or Final Coding (FC)]. The report also shows a trend and, in this case, when compliant with CE and KQ the calltaker is more often correct in the CC and FC. This is the only other report that shows customer service compliance.

This report is grouped by calltaker and shows five lines of information in each group, four of which are differentiated by:
This report provides a context that explains factors that may cause a calltaker to lose focus during a call, and indicates the calltaker’s areas of strengths and weaknesses.

Individual employee protocol compliance
This report shows the average level of compliance in all areas of the protocol, and it provides case score details for each calltaker. The top line is the total compliance score for all cases listed. It displays one calltaker per page.

The standard scoring system is used.

Shift/team protocol compliance
This report shows the average level of performance/compliance grouped by team. Each line represents a team.

The standard scoring system is applied to cases handled by each particular team.

QI summary report
The quality improvement (QI) summary report is the most detailed report since it shows the agency as a whole.

- Distribution shows the distribution of determinants in percentages
- Gives the percentages of reviewed cases
- Gives the percentages of total cases
- Statistics shows all Chief Complaints broken down individually and scored per segment
- Gives the compliance levels achieved in each section of each CC and the total average score by center
- Gives possible areas for improvement

Each line is computed with the standard scoring system. The groups of numbers between sections are as follows:

- Total Cases Reviewed: The number of cases reviewed in the time frame given for the report
- Total Cases Entered: The number of cases entered when call date is within the range specified for the report

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### Individual Employee Protocol Compliance Report

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<th>Case Number</th>
<th>Case Entry</th>
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### Reviewer Comparison Report

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Totals: (2859) 97.03% 98.25% 98.37% 91.18% 98.04% 99.25% 99.95% 98.12%
Note: The following must be done on each case evaluation record for it to show in this report:

- Review completed check mark in customer service area
- Assign a valid level in final coding
- Reviewed For Period: Total cases entered / (# of days covered in report * calculated calls per day)
- Call Volume: Enter annual call volume for the agency / 365 * # of days included in the report

(* is multiplication) (/ is division)

Reviewer comparison
This report compares the reviewers within the agency. It lists the scores of the cases entered and reviewed in the date range covered by the report and is grouped by the reviewer.

The standard scoring is used.

Exemplary performance
This report generates individual forms for each case that has a score equal to or higher than the level set for high performance.

This score is agency specific and is set in case list maintenance settings.

Noncompliant performance
This report generates individual forms for each case that has a score equal to, or lower than, the level set for minimum performance.

The score is also agency-specific and is set in the case list maintenance settings.

Trends
The trends report prints out the information seen on the trends screen when you launch AQUA.

Standard scoring
The total for each line is the average of the Case Entry, Chief Complaint, Key Questions, Final Coding, if no Pre-Arrival Instructions (PAIs) or Post-Dispatch Instructions (PDIs) exist; otherwise, the combined PAI/PDI score is computed into the average.

Case Entry, Chief Complaint, Key Questions, Final Coding, and Customer Service are all averages.

PAIs and PDIs are weighted
Since no case will have both PAIs and PDIs, a single score is needed for both. Also, not all cases will have either PAIs or PDIs, so the calculation is done using the number of cases that actually has this component.

Scoring calculations are completed in the following way:
- Determine the count of cases with PAIs and calculate the average PAI score for them
- Determine the count of cases with PDIs and calculate the average PDI score for them
- Calculate the ratio of PAIs and PDIs to the total number of cases with those values
- Multiply each score by its ratio of the whole and add the two together; the result will be a valid percentage score at or below 100

NOTE: If the report includes no cases with PAIs or PDIs, the report’s calculation will not count those columns.
Multi-story buildings influence vertical response

Never mind the delays in emergency response due to traffic snarls and packed sidewalks; the height of a building may be a bigger obstacle when it comes to timely arrival getting in the way of reaching a patient’s side.

According to a study published in *Academic Emergency Medicine* (14:772-778), the time from dispatch to arrival on-scene and to the patient for high-priority call types varied by place, all other factors being equal: The median on-scene to patient interval was 2.8 minutes for residential buildings, 2.7 minutes for office complexes, 1.3 minutes for private homes (less than four stories), and 0.5 minutes for outdoor calls.

Specifically, for office, apartment, or medical buildings 10 stories or higher, the on-scene to patient interval was 3.5 minutes, compared with 2.3 minutes for buildings three to 10 stories in height. When the patient was on the first or second story of a building 10 stories or taller, the interval from on-scene to patient was 2.8 minutes; for the third through ninth floors, the interval was 3.1 minutes, and for the tenth floor or higher, the interval was 3.3 minutes. When an elevator was necessary for reaching the patient, the median interval for all types of buildings—from approaching the elevator at ground level to stepping out of the elevator—was 51 seconds, unless additional stops were made and, if that was the case, another 54 seconds was usually added to the response time.

The authors conclude that measuring variables such as building height provides a more meaningful representation of the EMS response (from dispatch to on-the-scene) than simply measuring time based on call assignment to arrival exclusive of the factors urban living brings to the puzzle.

The study was conducted from July 2001 to December 2003 using calls to the New York City 9-1-1 system for EMS assistance requiring a priority 1, 2, or 3 ALS response. A total of four of the 32 primary New York City Fire Department stations were sampled with an estimated 51 of the 598 paramedics observed.

Dispatchers describe skills they value

Have you ever asked your dispatchers about the skills that make them proud to be part of the communications center team?

Well, the instructional coordinator for Public Safety Training Consultants, Kevin Willett, did at a recent public safety training class he held, which attracted more than 40 dispatchers from all over northern and central Utah, Nevada, and Wyoming.

This is a partial listing of what the dispatchers told him:

- Ability to mine data so police have a possible status check on occupants of a pulled over car, and the same goes for investigating addresses and providing a “heads up” about what police could encounter at the scene; getting the information is like being an artist, according to one student. “You’re painting a picture of what the officer might be walking into.”
- Ability to communicate with the caller whether it’s through the aptitude to speak a language other than English when needed, use a tone of voice that de-escalates a crisis situation, or to ask the questions in a way that both calms the caller and provides the necessary response; one student said good communication meant never diminishing the importance of any call no matter past experiences, such as a plethora of alarms from the same business or private establishment.

- A ability to get the details, including asking the caller how she or he would like to be addressed (M’am, Mrs., Ms., Mr., or first name), the exact name of an apartment complex or mobile home park, and the address plus additional identifying information to get responders to the right location.

- A ability to put aside any biases—for example, slurred speech may be an indicator of a disability but even if a difficulty in speaking is related to drugs or alcohol, the dispatcher has a responsibility to give the highest standard of care and attention without judging the person at the other end of the call.

An irksome issue is the “just a dispatcher” label students said they sometimes hear around their police and fire departments or from people in the business. But that’s changing, Willett said. “Look for a person at Apple [Inc.] who has saved a life, and you probably wouldn’t find one,” he said. “There’s nothing like this. People can see that.”

Play it safe with children and cell phones

A recommendation from a March 2008 study based on more than 110,000 interviews with prepaid and other cell phone users could save parents the embarrassment of learning their children are spending summer vacation placing prank calls to 9-1-1.
According to study author Nicholas P. Sullivan and David Aylward, director and founder of COMCARE Emergency Response Alliance, parents should teach their children how to access the 9-1-1 system using a cell phone in case of an emergency while, at the same time, warning them that calling the number erroneously is a serious mistake because it could jeopardize the help someone in an actual crisis may need. Their pointers:

• Explain that “emergency” for 9-1-1 means threat to body or life—“afraid you will be hurt”
• Don’t assume that because you know how 9-1-1 works that your child also understands the concept
• Don’t assume a child who knows how to dial 9-1-1 on a landline will know how to do the same thing on a cell phone, which requires the extra “call” or “send” button stage

Sullivan and Aylward said parents who teach their children how to use cell phones responsibly in emergency situations may be able to avoid the public humiliation and even prosecution that can result from “prank” 9-1-1 calls placed on cell phones by youths. In one case currently under investigation in Salt Lake City, Utah, a 14-year-old was arrested after placing more than 1,500 bogus wireless 9-1-1 calls from cell phones. Similar incidents involving preteens and teens abusing wire-

China’s emergency medical officials endorse use of MPDS

The Emergency Medical Center (First Aid Station) Branch of the Chinese Hospital Association has endorsed the use of the Medical Priority Dispatch System® (MPDS) for use in its affiliated emergency medical centers.

According to the announcement issued in July 2008 by the organization, China’s national 1-2-0 emergency telephone call volume and pre-hospital emergency workload trends are increasing every year and the sooner the country uses MPDS, the faster it will advance in the quality of pre-hospital response to patients.

“MPDS resolves pre-hospital problems quickly by obtaining the patient’s on-scene information, using this information to determine the condition based upon scientific judgment to make the most appropriate response,” the announcement states. “At the same time, MPDS provides standardization to the dispatchers to ensure quality service. In fact, during the telephone interrogation and dispatch period, MPDS quickly identifies the medical factors involved in the emergency incident.”

The Emergency Medical Center (First Aid Station) Branch of the Chinese Hospital Association is an exclusive national professional organization for Chinese emergency practitioners/administrators. It is a non-profit, grass-roots-based organization formed by 26 emergency medical centers around China on a voluntary basis under the direct leadership of the Ministry of Civil Administration and Ministry of Health, in addition to the Chinese Hospital Association. It was officially founded in Qingdao in April 2002 with its organizational secretarial department set at the Beijing Emergency Center.

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The use of MPDS in the country can greatly accelerate the work of pre-hospital emergencies and reach the speed and level of international standards.

In conclusion, the announcement of MPDS is entirely feasible and practical; therefore, the branch encourages the introduction of MPDS into the emergency center. It is hoped that the full use of pre-hospital emergency treatment will continuously promote the development of China’s emergency industry.

MPDS is used in 3,000 communications centers around the world, including centers in the United States, Canada, Europe, United Kingdom, Africa, Australia, and New Zealand.

Stress of helping survivors of rolled vehicle is part of the job

The stress of responding to a crisis doesn’t seem to be an issue among the emergency dispatchers honored at the annual emergency services awards ceremony sponsored by the Utah Bureau of Emergency Medical Services, Utah Department of Health.

At least, the stress doesn’t hit them until the event is over on their end and the dispatcher has a moment to reflect on what just happened.

“Our job is responding to whatever call we get,” said Camille Critchlow, a dispatcher for the Tooele County Sheriff’s Office in northern Utah, along the south shores of the Great Salt Lake. “There are some calls that get to you more than others and when that happens, Heather [her co-worker] and I talk about it. But generally you let it go. You have to. You can’t take the job home.”

The award their agency received for Outstanding Dispatch Agency Performance recognized the dispatchers’ efforts in response to a horrific rollover traffic accident off Utah’s Interstate 80 that involved a family of seven. According to the award, Critchlow and Heather Prescott “stayed locked on to the 9-1-1 calls gathering victims’ conditions and witness scene descriptions until the first unit arrived on scene.”

A great many people know 9-1-1 is the number to call in case of a medical emergency, but oftentimes the calls placed are for conditions—like a nosebleed or scrape from an accidental fall—that don’t warrant an ambulance trip to the hospital.

That’s why four years ago the Richmond Ambulance Authority (RAA) (Virginia) introduced a pilot tele-nurse program at its communications center. The service, known as the Community Health Access Program (CHAP), went live in 2006.

“Many calls we receive are for a non-emergency,” said LeeAnn Baker, chief administrative officer for the RAA. “This was a way to get the right resources to a person without always having to send an ambulance.”

What it takes

The CHAP process involves an initial screening by a dispatcher who goes through the Medical Priority Dispatch System® (MPDS) protocol. If, from the caller’s answers, the dispatcher determines the medical situation is for a low-acuity situation (an Omega-level call), the dispatcher asks the caller if he or she would like to consult a nurse. If the patient answers “yes,” the call is transferred to the registered nurse (RN) working the daily 12-hour shift at the RAA communications center.

The RN goes through a separate set of questions using Priority Solutions Integrated Access Management (PSIAM) software that integrates triage algorithms with emergency medical calltaking. The software helps the nurse gather information from the caller, which is used to decide the course of action. The patient may be provided with self-help direction or the nurse may connect the patient to the appropriate community health care provider.

If the caller needs a ride to a facility other than an emergency room, RAA provides alternative transportation to the facility and back.

Switching the call to the RN, however, does not in any way pre-empt ambulance services. And, the caller can say “no” when asked if RN assistance is preferred and instead have an ambulance dispatched to the specified location.

“At any time, the nurse can determine that the patient does need immediate transport, and an ambulance is sent,” Baker said.

The 18-month pilot program RAA initiated four years ago required dispatch to send an ambulance on each call, no matter whether the patient was subsequently transferred to the nurse on duty or elected to stay on the line with the dispatcher. Each call was tracked to determine the outcome.

Baker said they found no adverse outcomes during the pilot, which prompted them to go live with the program in 2006. From March 2006 to March 2007, RAA processed more than 400 calls through CHAP. Over the two years since the program went live, RAA has saved 750 ambulance trips without any negative impact on patient care.

“We’ve never had a transferred call that turned out to be an actual emergency,” Baker said.

Two other EMS systems—East Anglia Ambulances Trust in England and the Ambulance Service of New South Wales Sydney operation in Wales—successfully tested and implemented their own versions of the CHAP program during the same time frame as the RAA pilot program. There are now over 25 sites worldwide with the CHAP system in place.

The good attention the CHAP program has received over the past two years may be one reason that the Houston, Texas, city council recently approved a $6.8 million, five-year contract with HealthCare Alliance to provide registered nurses 24 hours a day for first-aid advice and medical referrals to 9-1-1 callers.

“They haven’t contacted us, but the program seems very similar to ours,” Baker said.

The RAA is an NAED Accredited Center of Excellence (ACE).
Critchlow and Prescott have had their share of tough calls. Critchlow, a dispatcher for three years, said this incident, which occurred in September 2007, was particularly difficult because five of the victims were children. Two people were killed.

“It was intense, especially because of the kids involved,” Critchlow said. “But we were a little fortunate in this event because the hospital did call us with updates about how they were doing. That doesn’t happen very often.”

The awards were among several presented in cooperation with the Sandy City Fire Department during the 2008 National EMS Week.

The Tooele County Sheriff’s Office dispatches emergency services for 46 individual agencies, covering 7,000 square miles of Tooele County. The once predominantly county has experienced phenomenal population growth over the past decade, from 26,672 to 40,735 residents, or roughly a 53 percent increase.

TIMELY ADVICE

Aspirin Diagnostic is frequently used over-the-phone advice

During the past several months, the Manatee County 911 dispatchers have advised the use of aspirin among many callers, especially since chest pain is one of the most common complaints the center receives from callers.

“We use it all the time,” said Laura Liddell, Manatee County Emergency Communications Center training coordinator. “It’s one more thing we can do before the ambulance gets there and one less thing the paramedics have to do once they arrive. They can concentrate on what else needs to be done.”

Liddell trained the dispatchers on the use of the Aspirin Diagnostic in March, soon after the National Academies of Emergency Dispatch® (NAED) issued the instruction tool. She said the dispatchers had little trouble learning the addition to their Medical Priority Dispatch System® (MPDS) protocol and actually enjoy the ability to give the advice to people making emergency calls in response to the pain and discomfort they fear may be an indication of a heart attack.

“The protocol is awesome,” she said. “Before this protocol, we weren’t able to tell people anything about what to take. Now, we’re able to give the advice and callers have the opportunity to help themselves while help is on the way.”

If there is any hesitancy over the protocol, it’s on the part of the caller, but not because the advice is coming from someone other than a physician, Liddell said.

“One of the biggest problems is
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Topics and speakers are subject to change. Visit www.emergencydispatch.org for the latest updates.

**Tuesday, April 28**

6:00 PM–8:00 PM  | Opening Gala Reception  | Exhibit Hall 6:00 p.m.–8:00 P.M.

**Wednesday, April 29**

7:30 AM–8:30 AM  | Registration and Continental Breakfast

8:30 AM–10:30 AM  | Opening Session Welcome 30 Year Protocol Celebration

10:30 AM–10:45 AM | Coffee Service

10:30 AM–12:30 PM | Exclusive Exhibit Hall Hours

11:30 AM–12:30 PM | Box Lunch in the Exhibit Hall

**Thursday, April 30**

6:00 PM–8:00 PM  | Registration and Continental Breakfast

7:30 AM–8:30 AM  | Coffee Service

8:30 AM–10:30 AM | Exclusive Exhibit Hall Hours

11:30 AM–12:30 PM | Box Lunch in the Exhibit Hall

**Hall Hours**

- **Kind 1**
  - 10:30 a.m.–4:00 p.m.
  - Exclusive Hours 10:30 a.m.–12:30 p.m.
  - Box Lunch 11:30 a.m.–12:30 p.m.

**Special Interest**

- The Employee: From Hire to Leader
  - Bill Kinch
- Bullying in the Communications Center
  - Jim Lake
- Through the Looking Glass
  - Dr. Jeff Clawson, Brett Patterson
- New Science – Chapter Two
  - Dave Brinton
- Major Incidents and the Telecommunication Specialists that Handle Them
  - Dan Brinton
- Catching the Bad Guy — Keeping the Caller Safe
  - Michael Spath
- Customer Service — Beyond the Score
  - Tammy Spath
- NFPA 1221 — Call Processing Standards
  - Jay Dornseif
- Fighting Crime and/or Evil
  - Jaci Fox, Harley Keder, Eric Parry
- Appreciative Inquiry
  - David Nelson
- Communications Center Shifting
  - Jim Lake
- Creating a Training Program that Breaks You at Full House
  - Melissa Blessing, Tami Wiggins
- Low Acuity Calls — Omega and Beyond
  - Greg Scott
- Version 5 Fire
  - Gary Galasso, Mike Thompson
- Implementing EPD: Secrets to Success
  - Bill Kinch, Eric Parry, Michael Spath, Ross Williams

**Priority Dispatch Systems® Protocols**

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- Years
- 30

**At the end of the document:**

**Attendee Pool Party**

- 7:30 AM–8:30 AM  | Registration and Continental Breakfast
## Exhibitions Hall

**8:30 AM–10:00 AM**

- **Hall Hours**
  - Open 10:00 a.m.–2:00 p.m.
  - Exclusive Hours & Box Lunch 11:30 a.m.–12:30 p.m.

**10:00 AM–10:15 AM**

- **Leadership**
  - TBA
  - Dr. Jeff Clawson

**10:15 AM–11:30 AM**

- **Management & Operations**
  - Why Do You Keep Asking Me All Those Questions?
    - Grant Kinney, Nadine Boulanger, Lori Daubert

**11:30 AM–12:30 PM**

- **Special Interest**
  - Forgiving: The Art of Learning to Let Go
    - Chris Bradford

**12:45 PM–2:00 PM**

- **CDE—To Boldly Go Where no Instructor Has Gone Before**
  - Tracey Baron, Louise Ganley

**2:15 PM–3:30 PM**

- **Technology**
  - Chip ‘n Dale’s EMD Review
    - Chip Hlavacek, Tammy Haislip

**3:30 PM–3:45 PM**

- **Medical**
  - ProQA 5: Police Version 4
    - Eric Parry

**3:45 PM–5:00 PM**

- **Quality Improvement**
  - ProQA Tips and Tricks
    - Chip Maravak, Tammy Haralip

**7:30 AM–8:00 AM**

- **Coffee Service**
  - Picnic Lunch in the Exhibit Hall

**8:00 AM–9:15 AM**

- **Registration and Continental Breakfast**
  - Coffee Service

**9:30 AM–10:45 AM**

- **Leadership**
  - I Dub Thee Supervisor
    - Robert Hodges

**10:00 AM–10:15 AM**

- **Management & Operations**
  - LA Commuter and Freight Train Crash
    - Thomas Somers

**10:15 AM–11:30 AM**

- **Special Interest**
  - Critical Incident Stress and the Emergency Dispatcher
    - Kim Rigden

**11:30 AM–12:30 PM**

- **CDE**
  - Game Show CDE—Making CDE Motivating While Educational
    - Ron Two Bulls, John Farraro

**12:45 PM–2:00 PM**

- **Technology**
  - The New Qi
    - Brian Dale

**2:15 PM–3:30 PM**

- **Medical**
  - Methodology 101 — Dealing With Conflict
    - Jim Lanier, Sharon Lanier

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  - Continuing Education Tips and Tricks
    - Christina Bean, Alice Valle

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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.

Presented by Fitch & Associates on behalf of NAED

NENA has approved this course as credit toward recertification for the Emergency Number Professional designation.
What could be more important than protecting our children?

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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

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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
Dispatch Moves Off Center

Dispatch teams and mobile units take the art of communications into the field
The increasing use of incident dispatch teams and mobile dispatch units are taking emergency communications centers to a new level of involvement.

And for very good reasons.

Dispatchers going to the field to assist in a major incident take the stress off the central communications center; they can concentrate on the fire or other emergency leaving those at the center the ability to stay focused on the other 9-1-1 calls coming in. An added bonus is the experience the dispatchers bring to the scene.

As Randall Larson, San Jose Fire Department Communications shift supervisor, said, the career dispatchers staffing mobile units during major incidents make better and more intuitive communications personnel than line personnel pulled off the incident to staff these positions. In turn, the line personnel are in the field responding to the emergency.

The idea of sending dispatchers to a major incident goes back a good 30 years, but it wasn’t until the last decade that it began to gel on a larger scale, thanks to the efforts of a group that has since gone on to organize the National Incidence Dispatcher Association (NIDA). Incident dispatchers provide on-scene emergency communications support to field operations. These specially trained safety dispatchers are integrated into the scene—such as a major fire or police standoff—to coordinate communications using the same skills they’ve developed in their centers (hearing and repeating accurately, managing multiple resources, and tracking personnel involved at the scene).

Mobile dispatch units also bring the team closer to the incident. The dispatchers and incident supervisors of Metro Nashville Field Incident Response Situation Team, or FIRST, take command from a 40-foot bus in response to HAZMAT and rescue operations as well as to situations requiring crowd control. Mark Hutchison, a FIRST team member and a fire instructor for the National Academies of Emergency Dispatch (NAED) said the bus gives them full access to whatever they need. “If it can be done at the center, it can be done here,” he said. The same goes for the vehicles used by emergency agencies in Wisconsin, as described in related stories you’ll read in the following feature section. These centers away from the home base provide a close up and personal approach for dispatchers to assist where their skills may be needed most.
California burning

The Summit Fire in the Santa Cruz Mountains, Calif., burned some 4,270 acres and destroyed 31 homes when it roared across the summit along ridgelines and deep into steep mountain valleys during the last week of May.

Local televised news reports compared the area burned—approximately 1.5 miles east to west by five miles north to south—to the campus of UC Berkeley, but 18 times larger. Videos of the fire captured by amateur photographers and posted on YouTube show smoke and flames billowing from the ridge tops, giving the viewer only a sense of what must have been sleepless nights of worry for the hundreds of residents desperately hoping that firefighters would beat back the fire before it reached their homes.

It was this scene that must have played in the minds of incident dispatchers from the Santa Clara County Communications Center and San Jose Fire Department (SJFD) responding on duty to the Santa Clara County's Mobile Communication Unit. The county's mobile unit was set up for operations at the Christmas Hill Park base camp not long after the first call about the fire was received by San Jose Fire dispatchers.

The team was ready, said Santa Clara Communications Center Chief Dispatcher Curtis Darnell. "Two of our dispatchers getting their ROSS training drove down to help and were drafted into the incident from the start."

ROSS, or the Resource Ordering and Status System, is a Web-based data system developed by the National Wildlife Coordinating Group for managing wildfires.

On-scene communicators

Incident Dispatch Teams (IDTs) provide an on-scene emergency communications support group to field operations, including firefighting and law enforcement; the specially-trained public safety dispatchers are integrated into the scene to release ground units for tactical operations and provide command post assistance to an already overburdened incident commander.

"They take some of the workload of the incident off the communications center," explained Bonnie Maney, telecommunications manager for the town of Palm Beach, Fla., Police Department and All-Risk IDT coordinator for the state of Florida. "They are on the scene, allowing the incident commander to truly manage the situation while IDT handles the communications traffic."

IDT takes hold

The idea of sending dispatchers to a major incident goes back a good 30 years, but it wasn't until the last decade that incident dispatch began to gel on a larger scale.

Don Stabler, who retired two years ago from the Contra Costa County Fire Department as a senior fire dispatcher, remembers the day in 1970 when he volunteered on his off-duty day to assist in the field on a major fire. The fire chief, who was the incident commander at the scene, handed Stabler a pad of paper and radio and left the dispatcher in charge of communications traffic.
at the command post established at a base camp not far from a border of smoke and flames. He answered calls and coordinated emergency response.

"This gave him the ability to do other things while I handled the job I did on a daily basis," Stabler said.

Over the last three decades, Stabler has responded to more wildfires than he can count, along with other major disasters like the flooding that can result from brush loss in the aftermath of a wildfire. Although technically retired from public service, Stabler is the communications officer for the Cordelia Fire District in Solano County, Calif., and is still very active in incident dispatch. By July, he had responded to four major fires in the 2008 California fire season as part of an IDT team, including a 10-day stint at the operations center set-up at the Konocti Conservation Camp to fight the Walker fire, which destroyed nearly 15,000 acres in a mostly wildland area.

"By all means, IDT helps," Stabler said. "The workload is taken off the comm. center because we can get at least 90 percent of the work done on the field."

Wildfire beginnings

Incident dispatch grew out of the need to train dispatchers to staff overhead communications unit positions during major wildfires in California, said Randall Larson, SJFD Communications shift supervisor and director of its IDT since the inception in 1992.

As Larson explained, historically, line personnel were pulled off the fire line to staff administrative positions in mobile communications units during major fire incidents. They were not trained dispatchers. As incidents increasingly depended on specialized communications support, it was recognized that trained dispatchers, who do that job every day in their communications centers, would be ideal to staff the mobile communications unit.

Among the other skills needed for the job, dispatchers can multi-task, hear and repeat accurately, manage multiple resources and conversations, anticipate the needs of field units, and track resources and personnel.

"Civilian dispatchers who dispatch for a living simply make better and more intuitive communications personnel, and in the midst of an escalating, major wildfire, those skills have been shown to be extremely valuable," Larson said. "They can release field units to go back and do what they do best—fighting fires and staffing command positions."

Over the years, the concept has become much more recognized, both within the fire service and also in law enforcement, where tactical dispatchers have been used for almost as many years to support SWAT and hostage negotiation team tactical command posts, Larson said.

SJFD Dispatch Shift Supervisor Traci Jackson was one of those ears and voices assigned to the command post supporting the Summit Fire fight. She said IDT gives the advantage of total dispatcher dedication to a major incident.

"The dispatchers are there from the beginning to the end," she said. "We can handle the situation from a remote location, and we get it done without bogging down operations at headquarters."

"By all means, IDT helps. The workload is taken off the comm. center because we can get at least 90 percent of the work done on the field." Don Stabler

Dispatch on wheels

When called into the field to dispatch a major event, IDTs generally work a 10- to 12-hour shift. The mobile unit serving as their workstation for the extended period they are in the field depends on the incident location. For example, incident dispatchers from both SJFD and Santa Clara County assigned to the Summit Fire used the Santa Clara mobile unit because of the fire's proximity to the county line. It was a jurisdictional decision.

The Santa Clara County unit is a former sheriff's department prisoner transport bus that was extensively overhauled to provide an enclosed work area for the dispatchers, incident commander, and support staff. The unit is equipped with three radio positions, computer workstations, cellular communications, a mobile repeater, generator, radio battery chargers, and other tools to support tactical communications, resource accountability, and incident documentation.

The unit is brought out any time a situation demands direct contact between incident command and dispatch, including wildfire control and major holiday or political events, such as Fourth of July celebrations and anti-war demonstrations.

"There's everything we need," Darnell said. "The mobile van duplicates everything that we can do at the center."

IDT energizes

Darnell has pushed for an IDT program in Santa Clara County because of advantages that make it a "win-win" situation for his dispatchers, the communications center as a whole, and the overall handling of California's wildfires. This year has been one of the worst fire seasons since the state began keeping records. As of mid-July, fires in the state had consumed almost 840,000 acres in national forests as well as state, private, and local lands, according to a story posted by International Fire Fighting News (July 15, 2008).

"IDT energizes the dispatcher," Darnell said. "It gives them a close up view that they don't get in the comm. center. To be there in the incident and to have the great visual appraisal is a great opportunity. The dispatcher is devoted to that incident."

"The job, however, isn't open to just anyone. Standardized training for Santa Clara County's IDT dispatchers includes a 24-hour state fire marshal's office certified ICS (Incident Command System), a 24-hour Incident Dispatcher course developed by the California Fire Chiefs Association-Communications Section, and additional training in local resource management provided by the dispatcher's agency.

Each member of California incident dispatch teams must be certified as a Radio Operator (RADO), Incident Dispatcher (INDI), and Status/Check-In Recorder (SCRN) within the state of California mutual aid system. Local agencies like San Jose, which regularly deploy IDTs on local incidents, also have a qualifying IDT selection exam. Requirements, however, vary by state and few states outside of California and Florida have as of yet formalized IDT standards.
National Standards

It's the inconsistency in standards despite the growing use of IDT that prompted Dave Larton to establish the National Incident Dispatcher Association, Inc. (NIDA).

Larton, Coastal Region Auxiliary Communications Service (ACS) officer for the Communications and Technology Development Branch of Governor's Office of Emergency Services, Calif., recruited long-time incident dispatcher advocates Maney, Stabler, Larson, and tactical dispatch trainer Tammy Smith. Over the past two years since NIDA's founding, they've consolidated their resources and standardized IDT training not only for the fire dispatcher but also for law enforcement officials and medical dispatchers trained and certified to respond in the field. Chuck Berdan, dispatch manager for the Alameda County Regional Emergency Communications Center (California), currently serves as NIDA's president.

Larton said IDT helps to coordinate incident command using the skills and talent inherent to the dispatcher's job.

"Dispatchers have been working on having people play well together for a long, long time, and that's where IDT goes," he said.

Maney said developing minimum standards is a primary goal behind NIDA.

"Dispatchers are known to rise to the occasion, but we wanted to create something that teaches them a specialty," she said. "We want them to be able to apply the skills no matter where they are called to go."

Maney's interest in incident dispatch stems from her experience in the profession, including receiving emergency 9-1-1 calls from people seeking help related to any of Florida's catastrophic hurricanes. Similar to IDT programs in California, the dispatchers receive intensive specialty training for incidents that are never considered short-term assignments once out in the field.

"Not every dispatcher can do this," she said. "They handle stand-offs, hurricanes, high-rise structure fires, school shootings, and brush fires. They are called in when needed, at any time an incident commander believes they will be of benefit."

Berdan looks to the NIDA for raising educational awareness about the importance of dispatch in the field. For example, there is the need to clarify the difference between an IDT dispatcher, who goes out into the field, and the dispatcher on a Telecommunicator Emergency Response Taskforce (TERT) initiative team, who offers relief during a major incident from inside the walls of the partnering communications center.

There is a need for both—TERT and IDT—and the latter does offer the advantage of putting a communications professional on the field as opposed to pulling firefighters off the line to staff the communications position during a major wildfire incident. IDTs can also be deployed through the TERT requesting process.

"You get one of those large fires and it's a huge responsibility," Berdan said. "Communications can be a nightmare without the unique skills of a dispatcher."

IDT by fire

Berdan knows about these types of nightmares. The dispatcher many refer to as the "grandfather of IDT" got his incident dispatch baptism by fire in 1990 when left alone in the operations van at the site of a major wildfire. A firefighter who had been assigned along with Berdan was called back to his agency to work in that role.

"I was the only one there and the fire grew to huge proportions," Berdan said. "At one point I had a radio in each hand. Those were some pretty intense days."

Berdan was sent help during the eight days he spent at the fire site, which eventually scorched 80,000 acres. The assistant sent, however, was not trained in incident command and Berdan wound up in the position of a dispatch trainer. The experience led him to write some of the first IDT fire training material that has since been expanded for use by other disciplines that can incorporate the IDT concept.

"I wanted to make sure that if found again in that situation, I'd be with someone who could work alongside me," he said. "This is not a slight against the person who was sent, but these situations require someone with the right background."

Look to the future

Stabler believes the need for IDT will grow nationally, especially if the size of California's operation can be used as a yardstick.

Over the 15 years SJFD has been involved with incident dispatch, the team has responded to more than 300 emergency incidents within the city limits, including major fires, both structural and wildland; mass casualty incidents; hazardous materials situations; and special events such as the San Jose Grand Prix and countywide mutual aid wildland and high rise drills.

Since San Jose Fire and neighboring Mountain Fire established the Fire Dept. Incident Dispatcher Team in 1992, the team has served as a model for similar teams throughout the Bay Area. Fire departments in Sunnyvale, Palo Alto, San Mateo County, Napa, and Contra Costa County are among agencies that have established local response IDTs. While these and other IDTs continue to support local incidents, more than two dozen incident dispatchers have deployed as mutual aid overhead resources to California's 2008 fire season—so far. There is also some state recognition, although the federal government has yet to give its full support to an official position.

As Larson explained, within the national wildfire environment, the Incident Command System (ICS) position of RADO (Radio Operator) has traditionally referred to the incident dispatcher. In California an incident dispatcher does more than just "operate" the "radio." They are charged with managing communications on incident command and tactical channels, assisting with resource accountability, and documentation.

"We're recognizing an ICS position called IND—Incident Dispatcher—as a higher level of qualification than RADO," he said. "But this is not yet recognized nationally within the federal ICS structure."

Crews got the Summit Fire under control during the Memorial Day weekend after cooler and moist weather gave fire-
fighters a strong handle on stopping the blaze. The eight days it took to battle the fire, sparked, officials believe, by someone clearing brush, involved more than 2,600 firefighters at a cost of $11.2 million.

Jackson said it was a thrill to be part of the incident team.

“It’s like being in the dispatch center but with the ability to dedicate our time to the situation,” she said. “We’re doing exactly what we do best.”

Larson believes IDT participation will continue to grow due to the complexity and actual size of incidents.

“The ongoing recognition of the incident dispatcher as a part of the incident management team, as well as the understanding of the need for a professional dispatcher, as opposed to somebody who can just talk on a radio, is encouraging incident communications unit leaders and agencies to call for certified/qualified incident dispatchers to staff their comm. units,” he said.

Stabler agrees

“IDT will spread,” he said. “In a bad burn year like this one, you need someone there around the clock. Dispatchers from all over are signing up for training.”

Built to Command. Mobile units used in Wisconsin let dispatchers get to the heart of an emergency

St. Croix County

The St. Croix County’s (Wisconsin) mobile command center has come a long way since the days it traveled to emergencies looking like a glorified delivery truck.

“The truck had side doors that slid open,” said Casey Swetlik, director of the St. Croix County 9-1-1 Communications Center. “But it had the ability to take communications out of the center and that’s what we wanted.”

The “delivery truck” version was a 1982 Chevy Stepvan-20, which has since been replaced. The current unit, a specially designed, 30-foot recreational vehicle built by Winnebago’s commercial division, has all the amenities of the county’s permanent dispatch center and it’s used for much of the same reasons as its predecessor.

“The dispatch pressure from a large event could cripple a center,” Swetlik said. “The mobile unit takes some of that pressure off.”

The upgrade was made possible through the support of Charlie Mehls.

“Charlie was the chairman of my planning committee at the time and worked very hard to make this vehicle a reality,” Swetlik said. “It was eventually purchased in conjunction with the St. Croix County Emergency Management office.”

The mobile unit is equipped with everything a dispatcher needs on the road. There is a link to the central CAD system, which gives dispatchers the ability to maintain communications during a large-scale emergency. They are equipped with 11 multi-channel mobile radios, dozens of portable radios, a dispatching and paging console, cellular and satellite phones, maps, a television to keep up with news and weather reports, and basic office equipment. The vehicle’s power comes from a large generator.

Steve Bahneman, St. Croix County’s technical lead communicator, takes care of the maintenance and design layout.
A major benefit of having the unit is the mobility it provides, allowing dispatchers to get into the heart of an emergency or otherwise tense situation.

In the late 1980s, for example, the unit came in handy when it was deployed to protect Native Americans over spearfishing rights. According to information from the Wisconsin Historical Society, tensions boiled over in 1989 when the United States Supreme Court upheld a lower court decision that gave the Ojibwe rights to hunt and fish off-reservation without regulation by the state of Wisconsin. Confrontations between the Ojibwe and anti-spearfishing protesters became increasingly violent, and places where the Ojibwe launched their boats became prime targets for many of the attacks.

That’s when the mobile command unit started making its mark, explained Swetlik, who has been with the county since 1988.

“We'd take the van to different counties to keep the Native Americans safe,” he said. “The extra presence curbed the attacks and the spearfishing could continue without incidence.”

Spearfishing is still allowed, but the controversy has since died down. Now it’s more likely to see the mobile command center deployed in support of SWAT call-outs, special events, or large-scale emergencies such as the F-2 tornado that ripped through the city of Ham mond in 2005 and the tornado that knocked the power out in the city of New Richmond in 2007 during a particularly heavy tornado season.

Both times, the mobile command unit parked in a centralized safe area doubled as a dispatch center and as a headquarters for firefighters. Once again, the goal was safety. The firefighters went door-to-door checking residences for damages and gas leaks.

Swetlik said mobile command units are not uncommon in the state, and a major rationale is the number of tornadoes that touchdown in the state each year. According to National Weather Service statistics, Wisconsin averages 21 confirmed tornado touchdowns each year. In 2005, Wisconsin had a record 62 tornadoes reported, including 27 that occurred on August 18.

River Falls
A community disaster resulted in a financial outpouring to fund the city’s disaster relief trailer, according to River Falls, Wis., Ambulance Director Jeff Rixmann.

“We threw it out there and told it like it was,” Rixmann said. “We did not have the capability of responding to a crisis of any magnitude. The money poured in.”

The crisis prompting the fall 2001 purchase of the disaster relief trailer was the straight-line winds that did heavy damage to buildings on the University of Wisconsin-River Falls campus. No one was killed, but the destruction showed the city needed a better way to respond rather than solely from the indoors of the communications center.

The fully equipped emergency communications and supply trailer, purchased mostly through community donations and some state and federal funding, provides help on multiple levels. It is a mobile command unit, a treatment facility with the potential to carry all supplies necessary to respond to a mass casualty incident. A generator powering the unit can run on three types of fuel.

“We try to get as much use out of it as we can," Rixmann said.

The trailer is called out about two times a month, and most of these trips are related to the mobile command center function and crowd control. For example, the trailer is on scene for big events like the local River Falls Days, a huge celebration held each year in July, and for football training camps and other activities.

The treatment facility function comes in handy at the same events. There are two cots paramedics and EMTs use to administer medical help as well as medical supplies, a defibrillator, and enough oxygen bottles to keep 20 people breathing. It can also serve as a rehab center for firefighters reporting to intense fires including multiple structure scenes.

The 20-foot Haulmark trailer, similar to the type used for hauling racing cars, has room enough to serve as a temporary tactical headquarters for SWAT teams and as a mini-police headquarters for officers responding to any major situation. The space accommodates two dispatch stations, and a third is in the planning stages.

Rixmann said the mobile dispatch station has almost the same amenities as the permanent communications center, with a few exceptions such as the lack of data-mining capabilities for tagging license plates.

“But if we need that, local law enforcement has their laptops,” he said. “Basically, the trailer provides a scaled-down version of dispatch to provide us with exactly what we need.”

Rixmann doesn’t hesitate when asked if the disaster relief trailer was worth the cost.

“Definitely,” he said. “There’s no doubt it prepares emergency services in River Falls to better respond to any disaster that comes our way.”
It's not unusual for dispatchers from the Metro Nashville Office of Emergency Communications Center (ECC) to arrive at a police or fire situation ready to take their place in the Metro mobile emergency operations center (EOC-2).

The EOC-2, which can also be found at large spectator events like Titan football games, is the location of choice for the center’s Field Incident Response Situation Team, or FIRST. The team of dispatchers and incident supervisors takes their seats in the rough and ready mobile control center that was retrieved several years ago from a city salvage yard.

The EOC-2 is the best way to go when it comes to face-to-face contact, either for emergency purposes or anytime when a major event might require a dedicated dispatch team.

“We have full access to whatever we need,” said Mark Hutchison, a FIRST team member of the Metro Nashville ECC and a fire instructor for the National Academies of Emergency Dispatch® (NAED). “If it can be done at the center, it can be done here.”

The bus is actually under the jurisdiction of the Emergency Operations Center (EOC) of the Mayor’s Office of Emergency Management (OEM). The EOC is the primary center for coordinating resources at major disasters (severe weather, terrorism alerts, and other developing situations) so its bus features everything found in a disaster-ready communications center. The bus is also well-suited for all the major fire, police, and medical incidents ECC FIRST dispatchers handle.

There are seven workstations with programmable 800 MHz radios, cell phones, laptop connections, and electronic devices that hold business contact information. There is a Doppler radar onboard, as well as satellite television (for keeping up with the local and national news reporting surrounding a particular event), a VCR, video cam, portable radio battery chargers, and a conference room.

The people working inside the bus, whether they are from the ECC or another Metro public safety department, are even more impressive.

The Metro Nashville FIRST dispatch team is trained in the Federal Emergency
The management agency's (FEMA) Incident Command System and the National Incident Management System (NIMS). Since their operations are extending into tactical response, they are eligible to receive training to learn negotiating skills when assigned to SWAT call-outs. Each member documents information, keeps a running log of the events that occur during a particular situation, and runs the radio.

Where it started
The event that gave rise to incident deployment happened four years ago when an 18-wheeler overturned on a main thoroughfare in downtown Nashville, subsequently creating a logistics nightmare for public services. The traffic snarl from the accident made it close to impossible for emergency vehicles to reach the scene of the truck accident, not to mention the other emergencies affecting citizens in the busy city that day.

“Where it started”

“Great source for relieving their stress.”

Their response to Macon County may result in a state initiative for a Telecommunication Emergency Response Taskforce (TERT). States involved with TERT train teams of 9-1-1 dispatchers and calltakers that can be mobilized quickly and deployed to assist communications centers during disasters. At least 20 states either have a TERT program in place or are in the planning phase.

Hutchison said the state TERT initiative is a goal along with educating the public and public officials about what their emergency offices can do for people in Tennessee.

“We need to show people what we can do given the right resources,” he said. The Metro Nashville ECC is the PSAP for Davidson County, which has a population of nearly 610,000 people residing in a 526 square mile area. It is a consolidated center providing police, fire, and medical response to 9-1-1 callers. According to information available on its Web site recordkeeping and statistical report have shown that the 9-1-1 calls are being answered a full eight seconds faster than before. The compliance levels for emergency medical dispatch have risen to just over 95 percent. The ECC has maintained the standard acquired by NFD Communications as an Accredited Center of Excellence (ACE) through the National Academies of Emergency Dispatch. The error rate for the ECC is below 1 percent.

“We have full access to whatever we need. If it can be done at the center, it can be done here.”

Mark Hutchison
It's clearly an understatement to say Washington, D.C., is a unique city when it comes to emergency preparations. Not only is it the nation's capital, which is a tremendous public safety responsibility considering the national security issues, but the district also serves a vast commuting public intent on getting to work everyday and tourists visiting the sights many are able to see only once in a lifetime.

At the level of emergency operations, the summer months always bring an increased call volume to the district's relatively new and altogether state-of-the-art communications center. For example, the spate of violence in April 2008 had the dispatchers and calltakers who work out of the Unified Communications Center (UCC) located in Anacostia D.C., busier than usual. The mood on the streets in April was an indication of hectic days to come during a season already on overload due to extended daylight hours, warmer temperatures, children home on break from schools, street festivals, citizen marches, elections, and the usually high numbers of tourists.

Asking the questions

The dispatchers and calltakers, who work in the center under the Office of Unified Communications (OUC), expect the increase in call volume. Unfortunately, calls involving violence are probably impossible to escape for any individual at a center that receives over a million 9-1-1 calls each year. In fact, the chance of answering a call in response to a murder, rape, multiple-building fire, or robbery is every bit as anticipated as the demands made by the people who place the calls asking for immediate fire, police, or medical assistance.

"They don't want us to be asking a lot of questions," said Universal Call Taker (UCT) Erica Morris, who has been handling police, fire, and emergency medical
calls in Washington, D.C., for the past 16 years. “They can get really irritated with us when we do.”

Their experience with caller impatience, and the knowledge that it’s a reaction that will probably never change, is a major reason some dispatchers and calltakers in one of the nation’s busiest emergency call centers are resisting the addition of the Fire™ and Police Priority Dispatch Systems™ (FPDS, PPDS) to their long-time use of the Medical Priority Dispatch System® (MPDS).

“I can see the sense of asking the medical questions,” Morris said. “But in police, we already know what to ask. The questions are second nature and we don’t want the format [of structured protocol] slowing us down.”

But it is the structure of the protocol, a consistency in the information gathered, and the subsequent response that has prompted the decision to stretch beyond the MPDS, OUC Director Janice Quintana said.

“The structure takes the judgment out of the questions they need to ask,” she said. “It makes their job easier and we know we are responding appropriately and with the right information for our responders.”

This is not a matter of answering calls more quickly as they come in, Quintana explained, since, according to statistics, the center has already achieved a formidable goal of answering 95 percent of calls within five seconds at an average answering speed of one second.

“Now we need to focus on the quality and integrity of the information of the call,” Quintana said.

State-of-the-art center

The OUC was the office established in 2004 to provide state-of-the-art public safety services and first-class customer services to supporting agencies (see list that accompanies story). In addition to the estimated 1 million 9-1-1 calls answered on an annual basis, the center also receives on average another 2.5 million calls from the Mayors’ Citywide Call Center, also known as 3-1-1.

The 3-1-1 calls involve city services and informational calls along with police reports that can be taken over the phone. They do not require a response from the police.

Travis Dupree, special assistant to the director, said police and fire protocols are a welcome addition to OUC operations and are in line with the center’s cutting-edge call center technology built to replace an aging operations center that was housed in the basement of a building in downtown Washington, D.C.

“We can guarantee to the public that we will be asking the same questions for the same situation every single time,” said Dupree, who started his profession as a calltaker in the Mayor’s Call Center (Washington, D.C.). “You’ve followed protocol and handled the situation to the best of your ability.”

Just turned 2

The UCC facility, which opened in August 2006 on 12 acres in southeast Washington, D.C., is home to the OUC and the D.C. Homeland Security and Emergency Management Agency (HSEMA). The agencies coordinate the activities of several federal and city agencies and work together out of a bomb-resistant 127,000-square-foot, $116 million facility that took nearly eight years to complete, from blueprints to construction. In the event of a regional emergency, the building has its own power and food/water/air supplies to serve as the regional and control center supporting federal agencies, including the Homeland Security Department and municipalities in Virginia and Maryland.

Caltakers and dispatchers using a unified voice and data communications system in high-tech workstations are divided into sections, depending on whether they’re...
The structure takes the judgment out of the questions they need to ask. It makes their job easier and we know we are responding appropriately and with the right information for our responders.” Janice Quintana

on the back to the people on the phones and radios.

The video screens are a feature the dispatchers and calltakers particularly enjoy, said Janie Scruggs, a UCT calltaker for the past five years.

“We’re in the center for 10-hour shifts and it helps to know what’s going on outside of here and about the incidents we’re sending response to,” she said.

The messages broadcast overhead on the big screens offer the thanks they seldom hear for their jobs and help dispel any bad feelings that may surface from negative news coverage: “Thanks for saving lives. A five-alarm blaze, the biggest we’ve had in 30 years, and no one was hurt because everyone did a great job.”

To accommodate employee breaks in an area with far fewer features than the downtown location, the facility also has a food service area, a gymnasium, a visitor/media address center, an administrative area, quiet room, and an 11,000-square-foot childcare development center.

Effective response and quality assurance

The UCC has won several awards, including the prestigious Washington Build-

ing Congress (WBC) Craftsmanship Award for the construction of the Call Floor ceiling system and the Construction Management Association of America (CMAA), National Capitol Chapter, Project Achievement Award for 2006 in the category for projects with construction valued from $50 to $100 million.

It’s a remarkably appealing facility.

But glamour and architectural awards aside, the primary purpose of a unified center remains: more effective answering, responding, and providing customer service to emergency and city service calls.

This is what Quintana has devoted her career to achieving. Prior to directing OUC, Quintana served as the operations manager for the Mayor’s Citywide Call Center that, during her tenure, handled more than four million calls. She developed a quality assurance (QA) program that she brought with her to the OUC.

Kenneth Mallory, operations manager for 9-1-1, called the UCC QA program “magnanimous.” Supervisors are required to monitor calls and the radio weekly to provide coaching and feedback and to make needs assessments for additional training, if required, based on their findings.

“That’s quite a task in an agency our size and with the workload expected of our supervisors,” said Mallory, who started his emergency communications career in 1984.

“But we get it done. For us, it means a better quality of calltaking and dispatching.”

Mallory finds protocol the responsible way to answer calls. He said the information gathered in the structured format means the responders will go to the scene better prepared to help and with a better sense of scene safety. He also believes protocol benefits the public calling in since it assures them of a more positive experience despite the critical nature of the call.

“People call in about a situation they haven’t encountered before,” he said. “We get one chance to do it right for the individual caller, and I believe we can better do that with protocol.”

The downside of introducing new protocols, he said, includes the training that will be required and the reluctance on the part of some of the calltakers and dispatchers to embrace the use of protocol in the busy urban center.

Time for training

Training is another complicated issue.

Since certification in each protocol requires three days in a classroom, independent of the workweek and overall job training, the OUC is faced with finding both the extra time to hold the classes and the money to pay for the hours outside of the regular workweek. A certification is valid for two years unless revoked or suspended and renewal depends upon accumulating a specific number of credits to meet continuing dispatch education (CDE) requirements.

“We face the same challenges in training that any 9-1-1 center does,” Quintana said. “How do you find the time in a 24-hour operation that handles emergencies? But it’s important, so we’ll get it done.”

Challenged to change

The reluctance of changing the way they answer calls, however, may be the biggest challenge. It’s like Quintana said. Some people don’t like a lot of change in their daily routines. The veterans in police and fire communications are used to a structured system although one that is distinct from the style of the PDS.

Edward Washington, an assistant watch commander, agrees. He said some worry the change and the challenges of asking questions could disrupt their service.

“It’s not that I don’t welcome a challenge but I’m looking at whether the police and fire protocols will help in a fast-paced environment of a big city center like ours,” he said. “I guess we’ll find out as the situation unfolds.”

UCC is working to make the full transition to fire and police protocols in fiscal year 2009. Stayed tuned to The Journal for a progress report.
Settling the Score. Quality improvement program is a tie that binds protocol consistency and accuracy

By Audrey Fraizer

The seven quality improvement (QI) coordinators working out of three provincial communications centers under the British Columbia Ambulance Service (BCAS) are QI fanatics. They are passionate about their jobs and guaranteeing the highest standards of call response for a combined call volume that reaches nearly 1 million calls each year.

The very drive they have for their jobs, however, drove them into a quandary. The scores from audits of similar calls reviewed by the specialists at the separate centers were inconsistent despite the use of the same set of scoring standards issued by the National Academies of Emergency Dispatch® (NAED). No one could put a finger on the reason.

“We didn’t know what was wrong,” said Jeff McNeill, Quality Improvement coordinator for the Lower Mainland Region Communication Centre in Vancouver. “There was one center functioning better than the others in the use of the MPDS® protocol based on their scores from the audits.”

New concept in review

It was 2006 when McNeill recognized that the centers were not uniformly applying the NAED scoring standards, so he subsequently brokered the concept of a “review the reviewers” teleconference.

The need for this monthly meeting is obvious from the daily discussions EM D-Qs now have at their centers, explained Kim Rigden, Quality Improvement manager in the Performance Management Division of BCAS. For example, the three EM D-Qs in Rigden’s office spend a good portion of their days in a shared office talking about the calls they reviewed among the 500,000 that come into the center annually. When a question comes up, they call the EM D-Q at the two other centers in the BCAS system.

“We all want to do this well but didn’t understand why we were having differences in the ways we scored the calls,” Rigden said.

Representing geographic range

The EM D-Qs from the geographically spread BCAS centers in Vancouver, Victoria, and Kamloops talked and decided to meet over the phone once a month to review and score one call, the same call, and post the scores for that call on a spreadsheet that would be distributed among the EM D-Qs. They could then compare the scores and discuss the differences in scoring at each level of the standards during a conference call scheduled for the same month. The call selection and the subsequent creation of a wave file would be rotated among the EM D-Qs and the calls selected would be at random.

The provincial cross audit would not affect the dispatchers who had taken the calls and provided the emergency or non-emergency assistance. This was meant as an educational experience that would get the EM D-Qs on the same page in the application of the scoring standards and, in the long run, assist the EMDs in their call-taking process.

“Our goal was to apply the scoring standards as homogeneously as possible. We wanted to gain common ground in the application of scoring standards without diluting them.”

Jeff McNeill

Compliance to protocol

The first conference call, made about two years ago, took more than two hours. They listened to the selected call as a group and reviewed it for compliance to protocol from the beginning—Case Entry through Post-Dispatch Instructions. They looked at the spreadsheet, debated their scores, and gave reasons for applying the numbers. By the end of the conference, they hadn’t reached a consensus on all the points but decided to go ahead and schedule the same auditing process for the next month.

The next call didn’t go any more smoothly. They compared, reviewed, and debated, and still couldn’t agree on an interpretation of scoring applications that would bring their numbers any closer.

“We all had our opinions,” Rigden said.

Bring in the experts

Someone suggested they call in the experts and since May they’ve spoken with NAED call-processing luminaries including NAED Call Processing Board Chair Brian Dale, Call Processing Board Co-chair Michael Spath, and NAED Academics and Standards Associate Brett Patterson.

That made all the difference.

“They could cut through and find the nuggets,” Rigden said. “They could offer their advice from their own experience and from the perspective of the Academy.”

Patterson said it takes someone from outside of the EM D-Qs directly involved in the process to help evaluate what’s going right or wrong based on the scoring standards.
“We’re able to sit back and listen,” he said. “And since we work directly with the Academy, we can bring in the thinking behind each of the standards and help others understand the protocol’s rationale.”

Greater consensus

The monthly call audit results are now coming within a six-point spread. There is greater consensus in their interpretation of the details in the scoring standards and group members pat themselves on the back for being the “biggest QI nerds ever.”

“It’s been a success,” said Gord Conrad, Quality Improvement coordinator for BCAS in Vancouver. “This process is an auditing of the auditors and we all go away with a better understanding of the scoring standards.”

Conrad said the process challenges the assumptions of EMD-Qs, who can lose their objectivity when applying the scoring standards in isolation of their cross auditing discussions.

“It happens,” he said. “You develop a method, and that can preclude looking at the calls any differently.”

Conrad and McNeill said they look forward to the monthly conference call. Conrad said he’ll go in on his day off to make the meeting and McNeill has yet to miss one.

Not about numbers

McNeill said the audits are not about the numbers; in fact, he says it’s much more than comparing individual outcomes.

“I hate that,” he said. “This is all about protocol and decisions that can help improve patient care. The measurement provides for the creation of procedures and guidelines and the front-end delivery of education.”

The provincial EMD-Qs are so enthused about the process that they are extending an invitation to be in on a conference call and, perhaps, use their model for a similar program at communications centers outside British Columbia. For more information, you’re welcome to contact Jeff McNeill at jeff.mcneill@gov.bc.ca.

BCAS employs about 1,100 full-time paramedic and dispatch personnel, 2,200 part-time staff, and 100 management and support personnel. The provincial call volume is about 1 million calls annually, ranking the BCAS as one of the largest ambulance services in North America.
User-Driven Process. Proposal for Change shows who’s behind the evolution of M PDS

By Brett Patterson

Often, changes made to the police, fire, or medical protocols are fueled by user-submitted Proposals for Change (PFCs).

Take a look at the evolution of the Medical Priority Dispatch System (MPDS®). It goes through an interesting, but sometimes misunderstood, process that incorporates clinical field and dispatch research, expert consensus, and user input to create a medical dispatch standard of care that is recognized worldwide. While clinical research, interpreted by special Academy® councils that are made up of experts in fields such as resuscitation and obstetrics, drives most of the purely clinical standards, in terms of volume, suggestions from users provide the majority of functional MPDS changes. This article will illustrate this user-driven process by detailing a Proposal for Change request received by the Academy from an MPDS user.

Multiple case examples

PFC 1026 was received in January 2007 from Andy Heward of the London Ambulance Service (LAS). The sheer volume of EMS calls received by the LAS (about 3 million calls per year) provides multiple case examples even with regard to relatively rare occurrences in emergency dispatch that serve as an excellent study population for the Academy. Additionally, the LAS, in cooperation with the National Health Services (NHS) of the UK, devotes a full-time staff to studying clinical outcomes from a dispatch perspective in an effort to improve the efficiency and effectiveness of its service. The call volume and effort is valuable to the Academy not only because the LAS is able and willing to provide study data, but also because PFCs received from LAS are almost always accompanied by supporting data.

Supporting research and documentation

This PFC concerned the positioning of an unconscious, pregnant patient. In his introduction, Heward explained that during pregnancy, the growing fetus displaces abdominal organs and can place abnormal pressure on the heart’s major vessels, namely the inferior vena cava. This added pressure could slow blood return to the
Suggestions from users provide the majority of functional MPDS changes.

that this sort of spontaneous hypotension occurs in about 10 percent of pregnancies. He also pointed out that pregnant patients who collapse for other reasons might be encountered lying on their backs, which exacerbates this potentially serious medical condition.

Heard went on to explain that the MPDS treats all unconscious patients in the supine (lying down, face up) position. He provided supportive documentation to suggest pregnant patients in their third trimester would be better off on their left side and that a tilt of even 15 degrees may be sufficient to relieve pressure on the vena cava.

Logged into Academy database
As are all PFCs, once received by the Academy, this one was logged into a database and copies were sent out to the Rules Group of the Council of Standards. The Medical Council of Standards is an international, volunteer body of people with wide ranges of clinical and communications center expertise responsible for the evolution of the MPDS. The Rules Group places an initial rating on incoming PFCs that helps guide them to the most effective action. In this case, the Rules Group recommended, and the Readers of the Council of Standards agreed, that the Academy’s Special Obstetrics Council should consider this request.

Consideration by special councils
The Academy utilizes special councils when protocol evolution needs to consider specific clinical standards. This practice is particularly important when dealing with the advanced EM D pre-arrival practices of resuscitation and obstetrics. These councils are made up of subject experts that work with protocol experts to construct DLS-specific, Pre-Arrival Instructions. These special councils are called together when new science emerges that needs protocol consideration or when a significant number of related PFCs are received that need special consideration. This PFC from LAS was forwarded to the Special Obstetrics Council, along with several other childbirth/delivery PFCs, for review in February of this year.

A very important Rule of the MPDS states: “The airway of an unconscious patient must be constantly maintained.” This is vital for several reasons, most notably because patients are unable to reject foreign matter in the airway, namely vomitus, while unconscious. The head-tilt method, which is performed with the patient in the supine position, is the preferred dispatch method of airway control because it is easily described in the non-visual environment and it literally forces the bystander to monitor the patient’s airway and breathing status. These important considerations had to be weighed from a risk-benefit standpoint; the circulatory risks and airway benefits associated with placing an unconscious, third-trimester patient on her back, versus the circulatory benefits and airway risks associated with turning her on her side.

The difficult task of considering this dilemma was made easier because Heard included specific references to related research with his PFC. The research suggested that airways maneuvers, as well as CPR, could be effectively performed with the pregnant patient tilted slightly to one side. The research also suggested that such maneuvers could be enhanced if the patient had a stabilizing object placed behind her to help maintain her position.

Protocol experts decide
Armed with this information, and with guidance from the obstetric expertise on the Council, the protocol experts of the Council made two specific changes for version 12 of the MPDS. First, changes were made to the airway panel of the adult CPR sequence by adding the qualified instruction: “(3rd TRIMESTER) Lay her on her left side and wedge a pillow behind her lower back.” From this point on, the pregnant patient is managed in essentially the same manner as other patients enabling complete, hands-on airway control, but in a slightly tilted position. To reinforce this new instruction, a Rule was created for Protocol 24 that states: “A unconscious, pregnant patient in her 3rd TRIMESTER should be placed on her left side with a pillow or like object wedged behind her lower back. Airway and CPR instructions should then be completed in this position.”

Protocol evolution is essential to maintaining the clinical and operational standards of DLS. This process is made possible by the volunteers of the Academy Councils and by the hundreds of Priority Dispatch Systems’ users that take the time and effort to submit PFCs that benefit not only their own agencies, but thousands of other PDS users and millions of patients worldwide. The Academy would like to specifically thank Andy, the LAS, and the NHS for their dedication to improving dispatch services in the UK and abroad.
Control Bleeding. What should we do when rules collide?

To the NAED:

We recently had a call with a compound fracture with severe bleeding. As I was doing my quality assurance on the call, I noticed the calltaker did not go through the Pre-Arrival Instructions (PAIs) for control bleeding. I have inquired why and was told that under one of the tabs dealing with bleeding control, there is a Direct Pressure Rule and a Bleeding Control Rule. According to the Direct Pressure Rule, “Direct pressure on the wound should be avoided in the presence of visible fractured bone or foreign objects.” The Bleeding Control Rule states, “Adequate control of almost all bleeding is simple if enough pressure is applied to the right place.”

When talking with her, she said it looks like a catch-22 situation. My question: Where should we go with this? Someone help!

This e-mail has also been courtesy copied to my EMS Director, EMS Training Officer, and EMS Medical Director.

Someone help!
Thanks again.
Ronnie D. Barefoot, EMD-Q
Training Officer
Pasquotank—Camden—Elizabeth City
Central Communications Center
Elizabeth City, N.C.

Brett A. Patterson
NAED Academics & Standards

Ronnie:

Your EMD is right in that such a situation poses somewhat of a dilemma.

The DLS Rule concerning direct pressure when visible bone or a foreign object is present was added after repeated concerns from users about EMDs providing such instruction, most often when bleeding was actually minor, which, potentially, may cause additional nerve, tissue, or vascular damage, not to mention excessive pain.

Generally speaking, open fractures don’t bleed excessively, and the risk of further injury through pressure outweighs the benefit of direct pressure. In reality, such injuries are treated with different bleeding control methods in the field or hospital and such methods are simply not appropriate or practical in the DLS environment.

Unfortunately, because of the clinical risks and practical limitations of DLS, not every patient condition can be effectively treated in the non-visual environment. Because of this, and other reasons, the MPDS® protocols must be developed to handle the majority of cases safely and may not address some rare, complex situations that are best handled by on-scene personnel. I am forwarding your question to Dr. Clawson to see if he has anything else to add.

Brett A. Patterson
NAED Academics & Standards

Anne:

The Academy’s Council of Standards is made up of physicians from around the world as well as nurses, paramedics, and communications experts. When additional clinical expertise is needed, as was the case with the aspirin protocol, other opinions are sought. We had very strong agreement between the physicians on the council, external cardiologists, and hematologists, with regard to ASA administration for patients over the age of 16 with symptoms of MI. The only contraindications were age under 16 (risk of Reye’s syndrome versus unlikely cardiac event), known aspirin allergy, or active bleeding.

The hematologists advised us that aspirin “thins” the blood differently than blood thinners such as Warfarin. In short, blood thinners work by suppressing chemical clotting factors and aspirin inhibits platelets. We have been advised that the benefits of taking a single dose of aspirin far outweigh any risk associated with taking aspirin with blood thinners. Additionally, patients who take aspirin on a regular basis develop a tolerance and will not be harmed by taking an additional dose.

With regard to sensitivity in asthma patients, this only occurs in three to five percent of asthma patients, and known sensitivity is only discovered after a severe reaction to aspirin, such as an asthma attack. Patients with a known sensitivity to aspirin should not take aspirin, as is advised in the protocol. If the asthma patient is not aware of any allergy, the single adult dose should be given, as the benefits associated with aspirin administration in the presence of MI outweigh the risk of severe, adverse reaction in these patients.

Please contact me with any additional EMD protocol questions or comments.

Brett A. Patterson
NAED Academics & Standards
The goal to become what he is today started when 22-year-old Zachary Cannady was in the second grade.

Randy Amos, the Albertville, Ala., Police Department chief, took an afternoon in 1993 to discuss police work and maybe a few things about the local CrimeStoppers program to a young audience at a good age to influence in the right direction.

Although not at the usual age to make tough decisions beyond what to trade from his lunchbox at noon, Cannady was inspired by the words of the then police chief. He knew his future means of a livelihood lay in the public service sector.

"I liked what he said about what police did," Cannady said. "Something clicked."

As the years went on, Cannady and Amos became friends and Cannady later befriended current Police Chief Benny Womack. His zeal for public service prompted regular trips to various public safety agencies with the encouragement of his parents and grandparents, who would drive him to the departments after school, over weekends, and during summer breaks.

Fifteen years later, Cannady is living his childhood dream. The fact that Cannady cannot walk and uses a wheelchair because of the paralyzing effects of spina bifida, a neural tube disorder, hasn’t made a speck of difference in his plans.

Cannady is a dispatcher for the Albertville Police Department, working the morning shift five days a week under the direction of his long-time friend and mentor Scott Lacks, the department’s communications supervisor. He says Cannady’s a model employee.

"We're lucky," Lacks said. "You certainly can't complain any time you find someone who's so dedicated to what he does."

Not only does Cannady have a passion for the work he does while on the job but he also tunes in to what’s going on after hours with a police scanner he turns off only when he’s ready to call it a day.

"The scanner keeps me in the flow of things," Cannady said. "It gives me an edge on the public."

The hand-held model he takes wherever he goes is a fixture dating back to high school. He’s always used it to track the goings on of police, fire, and EMS workers, which gave him more to talk about when he made his frequent visits to their respective city departments.

Lacks said Cannady would come in to observe what they did and—without getting into privacy issues, of course—talk about what was happening in a city that has experienced tremendous population growth over the past several years.

Before the city got so large, Cannady would go on community patrols with his friend Richard Rutledge, a police captain who died from cancer several years ago, soon after his retirement from the police department. The police badge Rutledge gave Cannady is one of the dispatcher’s most prized possessions.

That badge, along with the one he received from a former firefighter who worked for a city in Tennessee, is mounted in shadow boxes hanging at the Cannady home. The badges on display are the highlight of his public service collectibles that also include 679 patches from fire, law enforcement, and EMS agencies from places as far away as Egypt and Queen Island in western Australia. Cannady catalogs and files the patches in specially marked boxes as they arrive in the mail.

Cannady finds it fortunate that he found his professional calling at such an early age.

Lacks, who has been in emergency communications for 16 years, is grateful everything has worked out so well for everyone involved. Modifying the height of the file cabinets in the communications center was the only accommodation Cannady required.

"I've never met anyone quite like Zac," he said. "For years he's told me this is what he wanted to do. I am glad we were able to make it happen. He's someone who's living the dream."
Change in Venue. Move to communications center from hospital doesn’t diminish ability to help people in an emergency

A longing to make a change in her life without giving up the ability to help people convinced Janet Jones that switching to a job in dispatch would be a good thing.

After all, the 43-year-old former paramedic/tech had spent 20 years working in the Sarasota Memorial Hospital (Florida) emergency room and didn’t want to lose the direct patient care she enjoyed, though she did feel a change in venue was in order.

“It was time,” said Jones, who moved her public service career to the Sarasota County 9-1-1 Communications Center two years ago. “I knew dispatch would give me the type of contact I was used to, not hands-on, but direct and immediate all the same.”

Jones has no regrets about the decision, and the job is in many ways similar to what she left behind at the hospital. She still helps patients experiencing cardiac and respiratory failure, among other medical crises, and she also gets her share of trauma common to larger cities and particular to the water sports that attract tourists to the city off the southwest coast of Florida.

“You never know what’s going to come over the other end of the phone,” she said. “That anticipation fuels her enthusiasm for dispatch, and the ability to help a father in the birthing of a baby boy in May satisfies her need to help.

“This was the last thing he probably expected,” Jones said about the call she answered during the early morning hours on May 27. “His wife had told him that she was ready to go to the hospital but knew that they weren’t going to make it. She told him why and that’s when he called 9-1-1.”

According to a local newspaper’s coverage of the event, Andrew Layne’s wife Dina was having contractions early that morning, two weeks before her due date. She woke her husband shortly before 4 a.m. and told him the time had arrived, although, as it soon became apparent, it was coming too quickly for a drive to the hospital.

Layne told Jones, “My wife is pregnant and says she can’t make it to the hospital and she wants me to call the ambulance.”

Jones told him she was dispatching an ambulance and, in the meantime, she would be asking him some questions. She made it through Case Entry and when Andrew made it obvious the baby was on its way, she was ready to give the childbirth Pre-Arrival Instructions (PAIs).

Jones walked the couple through the delivery process during the 10 minutes before emergency crews arrived, all the way through the part where Andrew used his shoelace to tie around the umbilical cord. The Laynes’ newborn son Trevor was wrapped in a blanket and ready along with mom and dad to greet paramedics at the door.

“Dad did a great job,” Jones said.

Layne said he didn’t remember the exact instructions Jones gave him; after all, he was busy delivering the baby and not taking mental notes for later reference.

“Janet gave me the knowledge about what to do and I followed through,” he said. “It was not so much the process that worried me but hearing the baby cry once he was delivered. That’s the part I remember.”

The Laynes and Jones received plenty of publicity once their story went live on the air. Things quieted down after a few days and now life is back to normal, except for having a new baby in the home. As Layne said, they had their 15 minutes worth of fame and he’s just glad Jones had the instructions to help him through what needed to be done.

Jones credits the use of the protocol for keeping the situation in order.

“I can deliver a baby in person, but over the phone it’s different,” she said. “The protocols were priceless. I was able to see what he was going through, from what he said over the phone, and keep him going step by step.”

The best part, she admits, was hearing baby Trevor cry, his way of announcing entry into the world.

“To me, that meant the baby was safe,” she said. “That’s when I started crying. I was so happy for the family. It was a very joyous moment.”

OB/GYN calls to the Sarasota County 9-1-1 Communications Center are not all that common. Of the 20,000 calls to 9-1-1 during the first six months of 2008, only 166 calls involved assistance for childbirth and related medical issues.
Rob Robinson didn’t want to take any attention away from the firefighters responding to an incident that cost two lives, but he wanted to make sure his telecommunicators were noticed for their outstanding work. “Even though we lost people, and it was very hard on them, my team did an outstanding job,” said Robinson, Rowan County (N.C.) emergency dispatch telecommunications director. “They did exactly what they are trained to do.”

The fire, which by the day’s end would kill two firefighters and destroy the family-owned business, was called into the Rowan County emergency dispatch center on the early morning of Friday, March 7, 2008. The first call, at 6:57 a.m., was from a passerby reporting smoke coming from the Salisbury Millwork building; the next, a few minutes later, was from workers arriving to their jobs. There was a fire inside the building and, from what telecommunicators knew about the business, it could develop into a bad situation. The wood and lacquer used at the plant in making laminate cabinets, molding and other products would be fueling the fire in a building that has stood in the same location for more than a century.

Rowan County dispatched City of Salisbury firefighters and once they arrived, it was soon evident the fire would take multiple jurisdictions. Two hours later, shortly after 9 a.m., flames burst through the roof. A mayday was called and a count following the evacuation of firefighters from inside the building showed not all were present.

The anticipated bad situation happened. The fire had spread from the offices. Two City of Salisbury firefighters died, trapped inside the building while trying to protect the warehouse.

“It was devastating for everyone,” Robinson said. “Telecommunicators from other centers called in to ask if they could help. My team said no. They started the call and they wanted to finish it.”

The mayday call signaled it was time to send the Rowan Incident Command Unit (RICU) to the scene of the blaze. The RICU has four fully functional console positions to relieve the call load in the communications center during large-scale incidents. It also has five laptop computers; an 800 MHz-radio system, with interoperability capabilities on UHF, VHF, and low band; and personal conveniences for extended stays, such as a microwave, coffee maker, and refrigerator. On the road since 2005, it’s the pride of the communications center, which operates and maintains the vehicle.

“The telecommunicators at the scene can handle everything about the situation,” Robinson said. “That takes the pressure off the main center.”

More than 100 firefighters, coordinated by four telecommunicators operating out of the RICU, worked through the day and night before the fire was extinguished. The building was destroyed, reduced to charred debris. The investigation into the deaths of the two firefighters and cause of the five-alarm fire lasted for weeks.

The City of Salisbury mourned the death of two of its firefighters, Victor Isler, 40, and Justin Moore, 19. Robinson said the outpouring was tremendous. So Salisbury colleagues could grieve, fire crews from neighboring jurisdictions manned the Salisbury Fire Department the week following the fire and during a memorial service held for the two men. City police volunteers escorted the out-of-town firefighters to the incidents as they occurred.

The telecommunicators remained involved throughout the fire and its aftermath. For their work, the entire Rowan County Telecommunications Department was honored with the annual 911/Telecommunicator of the Year Award at the Rowan County Fire and Rescue Association’s annual awards banquet in June. Robinson, who accepted the award on behalf of his 24 full-time and 10 part-time telecommunicators the center employs, said the honor acknowledges a team he calls incredible. “Their sheer teamwork and dedication were amazing,” he said. “We always wish we could do more to prevent something like this from happening, but you lose people sometimes. It happens in this business. They did an incredible job at communications, continuing their work and making sure everyone else got out okay.”

The fire was Robinson’s second and third line of duty deaths in a communications career spanning 24 years. With five years to go until retirement, Robinson hopes the past two deaths will be his last from a call made to the communications center.

“Nothing hits home as strongly as a radio transmission from a police officer or firefighter or paramedic in trouble,” he said. “It’s hard losing one of your own, someone who you may have been talking to on the same day or day before.”
Grace Le’Rain Purvis was the center of attention at a recent gathering in the Bon Air Regional Library on Del Rio Place in Louisville, Ky.

The little girl, barely one month old, wasn’t there for the books and she couldn’t possibly have known what all the hoopla was about. Her parents, Domonique Hockman and Charles Purvis, however, will be telling the story about why she was there for years to come.

Grace Le’Rain was born before anyone expected, at home under the guidance of EMD Marty Wagner, who relayed the childbirth and delivery instructions to Purvis over the telephone. Dad was so grateful for Wagner’s help that he asked to meet the dispatcher that night.

The request was plain impractical. “They were on the way to the hospital,” said Sherrie Whitford, quality improvement supervisor of Louisville MetroSafe, an emergency communications center that coordinates police, fire, and EMD services in Louisville and surrounding communities. “The paramedics were obviously more concerned about getting mom and baby to the hospital safely.”

Purvis’ persistence eventually resulted in the event at the library shared by the family and the emergency communications staff.

“Everyone had a great opportunity to see the great things that can happen when someone calls 9-1-1,” said Debbie Fox, deputy director of Louisville MetroSafe. “It was a very rewarding experience.”

Grace Le’Rain met her admirers at the library looking delightful dressed in a new blue jumper and a pink hair bow. Fox called the occasion “really cool” since it’s not often dispatchers get to meet the people they try to assist via phone and radio contact.

“I’ve been in this business for 28 years and it’s a first for me to attend something like this,” Fox said. “Most of the time we don’t even know the outcome of our calls. We’re very fortunate that Dad wanted to meet us.”

Fox said the event drew attention to the life-saving— and in this case life-giving—aspect of emergency communications. Few people are aware of the good things that can happen when calling 9-1-1 in an emergency and most don’t know about the Medical Priority Dispatch System® (MPDS) protocol they use in response to the police, fire, and medical calls that come into the center.

The birth of baby Grace Le’Rain was MetroSafe’s chance to show-off its work.

According to a story in the Courier-Journal (June 29, 2008, by Joseph Gerth), a newspaper published in Louisville, Grace Le’Rain decided to make her debut before her parents had the chance to make a second trip to the hospital. The first trip, two hours earlier that morning on June 7, had Hockman and Purvis returning home in anticipation of another six- to seven-hour wait until delivery.

Things obviously didn’t work out that way. Hockman’s water broke at home in the bathroom. She shouted a sleeping Purvis awake. He grabbed some towels, rushed in to help, and wound up calling 9-1-1 when he found Hockman on the floor of the bathroom. He could see the top of the baby’s head.

Wagner told the Courier-Journal that Purvis handled the situation like a charm. He was great, said Wagner, who came to MetroSafe two years ago from a job in retail sales. “I get people who scream bloody murder because they broke a toenail or something. He was calm and he listened to instructions.”

Purvis credited Wagner for guiding him along and said he was the reason calm prevailed at their home that night.

Wagner took Purvis through the Pre-Arrival Instructions (PAIs) for Childbirth-Delivery (PAI F), and in less than four minutes Hockman was holding her new daughter. Grace Le’Rain was there to greet EMS crews, wrapped in the soft towels her father had collected once alerted to her imminent arrival.
A birth over the phone is certainly an event to remember, and this is the second such call Wagner has taken since beginning his job in dispatch.

Fox and Whittford complimented Wagner on the call.

“I’ve been doing this a long time and can recognize a good call when it happens,” Fox said. “Marty kept his cool. Dad said he was the one who should get the credit.”

The PAIs were developed for that exact reason: to maintain calm while giving and practicing life-saving medical instructions. Although there are literally thousands of cases involving effective telephone-directed formal care, the number of times the PAIs have been used successfully is up to anyone’s guess.

“Globally that’s hard to determine,” said Greg Scott, a Priority Dispatch Corp.™ (PDC) consultant. “We don’t have a way to gather that type of data and we often only hear of their effectiveness when something really good happens, like in the case of the Purvis baby birth.”

The PAIs, similar to the protocol in general, have gone through many revisions over the years.

In the case of childbirth and delivery (PAI F), the 1990 revision of the MPDS gave dispatchers specific instructions to follow when faced with a breech presentation or when the baby arrives with one or more loops of the umbilical cord wrapped around the neck (nuchal cord). The v11.2 revision represented a major change to PAI F with the addition of instructions for high-risk childbirth complications, including frank breech delivery, footling breech, arm or hand presentation, shoulder dystocia, ruptured umbilical cord, and amniotic sac deliveries. The number of PAI F panels doubled, from 18 to 36.

Brett Patterson, academics and standards associate for the National Academies of Emergency Dispatch® (NAED), said the instructions derived from the knowledge base of emergency and non-emergency physicians and nurses help in the high-risk situations that jeopardize the outcome.

“A though [the instructions] may seem rather invasive, there are times that if something isn’t done very quickly, the mother or baby could die,” he said. “We had to do something. Without them, there wasn’t much more the dispatcher could do but reassure the mother until help arrived at the door.”

Other general principles surrounding childbirth are also found in the PAIs. For example, if the baby has been delivered, the caller must dry the baby and keep it warm (Purvis had towels ready for Grace La’Rain). If ambulance time is lengthy, the EMD can also warn people at the scene to expect delivery of the placenta within about 20 minutes of the baby’s birth.

PAIs were developed for good reason. Just ask baby Grace (but give her a few years). With the MPDS initially developed 30 years ago, through the third edition in 1981 with 29 cards, to version 10 with 32 cards, and on to the current version 12.0 with 33 cards (there are 34 protocols in ProQA®), it can be seen as a system that keeps on giving.
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