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Pursuit Driving

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Features

Departments

Emergency Driving and Pursuits
The Officer's Perspective

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Law enforcement officers put their lives on the line every day to protect citizens and to maintain the safety and security of this nation. They face dangers from suspects who resist their commands and from those who maliciously attack them. In addition, individuals who inadvertently become involved in automobile crashes with officers responding to an emergency also pose a risk. Therefore, any information that can assist police managers and trainers in saving the lives of officers and promoting their welfare is welcome and worth considering.

Officers know about the danger of physical attacks and are trained to protect themselves. But, how aware are they of the hazards associated with emergency driving? Most knowledge about emergency response driving comes from limited anecdotal information and crash data reported by law enforcement agencies. The vast majority of departments do not require their officers to complete a written report when they use emergency equipment or become involved in general emergency (code 3) responses. The only data available are maintained in computer-aided dispatch systems or on radio tapes that agencies rarely review unless a crash occurs and someone requests the information. Fortunately, more is known about pursuit driving because most departments mandate the completion of independent forms that their command staff then review.

Similarly, the Commission on Accreditation for Law Enforcement Agencies (CALEA) requires the collection and analysis of pursuit data for those agencies that seek accreditation or want to remain accredited. These combined official reports include important information about the officers involved, reason for the chase, and situational and outcome variables. Knowledge about pursuit driving comes from the analyses of these data conducted by agencies, outside researchers, and policy analysts.

To help the law enforcement community better understand the dangers associated with emergency driving, the authors present the results of surveys and interviews with officers during in-service training in Minnesota. They outline the issues of both emergency and pursuit driving and make policy suggestions for agencies to consider.

THE ISSUES

An emergency response begins when a law enforcement officer activates the lights and siren while driving toward a call that is a real or perceived crisis. The officer's goal is to arrive at a specific location as safely and quickly as possible.

Officer Reactions

Regardless of the nature of the call or warning devices employed, officers must drive carefully and remain mindful of other traffic, both vehicular and pedestrian. However, they generally perceive most calls as critical and feel that every second counts to save a life or protect the public. During emergency responses, some officers may understand the potential problems and drive quickly and safely without substantial risk to themselves or others. By contrast, some officers may undergo physiological changes from the fast driving and create risks. For example, they may experience an adrenalin "kick," causing them to focus almost solely on the need to get to a specific location quickly and may incur myopia and auditory lockout. In addition, being barraged by piercing sounds from the siren and blinding lights from the emergency equipment, especially at night, can cause them to experience a false sense of security. Such distractions can impact and often impair an officer's decision-making skills. Law enforcement organizations educate officers about these concerns and create policies

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and procedures that keep public safety firmly in mind. However, while some emergency driving regulations specifically require officers to stop or slow to a speed that allows them to stop when facing a red light or a stop sign should a civilian driver not see or hear them, others have rather vague wording that only instructs officers to be mindful of other traffic and to be careful.

Civilian Drivers

The problem is not normally the driving of the officers, who are trained professionals. Even when influenced by the need to assist a fellow officer or civilian in some real or perceived danger, a well-trained officer can handle the physical driving and does not often lose control of the vehicle. Unfortunately, the trained driver is not the only person on the roadway. Civilian drivers do not respond in a uniform manner, even though traffic laws often require them to pull to the right to allow an emergency vehicle to pass. When confronted with emergency vehicles, civilian drivers can prove unpredictable. Although they should know to yield, and many driver-training programs instruct them to do so, some drivers will stop and pull to the left and others to the right when an emergency vehicle is behind, in front, or approaching from the side. Emergency drivers are taught that their lights and

sirens are warning devices only and do not create an invincible shield around their vehicles. Law enforcement drivers also are instructed that other drivers on the roadway may not see their lights or hear their sirens and to drive accordingly and defensively. Years of experience or a tragedy may alert officers to the risks, but, until researchers can identify the factors that reduce crashes, drivers of emergency vehicles must maintain a controllable speed that allows them to react to unpredictable drivers.

> **What is not known is how many times emergency runs are truly worth the risks taken by officers....**

Risks Versus Benefits

What is not known is how many times emergency runs are truly worth the risks taken by officers and whether emergency runs provide an important difference to public safety that justifies the inherent risks. A subset of general emergency driving, or code 3 responses, pursuits also require fast driving but are different because at least one officer is chasing a suspect

in an attempt to apprehend that person. When a driver refuses to stop quickly, the ensuing pursuit becomes dangerous to the officer, the public, and the fleeing suspect. Added to the adrenalin rush and other influences of an emergency run is the officer's desire to apprehend the fleeing individual.

Pursuits create a problem for society in general and police specifically. As with emergency runs, no national data exists on the number of pursuits, crashes, or injuries that occur every year, nor is there any information on pursuit-related costs. While most agencies maintain these statistics, surveys of multiple departments are not common in the professional literature.[1]

THE STUDY

Research conducted on the attitudes and opinions of fleeing suspects has indicated that such individuals are likely to slow down when police terminate the pursuit and they are safe from the show of authority.[2] But, because research on the collective opinions of officers concerning emergency responses and pursuits appeared lacking, the authors decided to collect this type of information to see what kind of insight the officers could provide.

Methodology

For 2 years, the lead instructor of the Law Enforcement In-Service Training in Emergency

High-Risk Experiences

Number of officers	2,123	Code 3 runs	14,007,000
Combined years of service	25,936	Felony stops	5,833
Crashes on patrol	1,571	Faced a firearm	2,258

Vehicle Operations and Police Pursuits at the Minnesota Highway Safety and Research Center in St. Cloud surveyed all of the participants in the course.[3] He collected data from 136 classes for a total of 2,123 officers and had all of the information entered into a computer. The strength of this approach rested in the total of almost 26,000 years of law enforcement experience that the officers possessed. The weakness was that a great deal of the information came from memory. It is important to recognize that any self-reported data may reflect errors of memory and maturation. However, when requesting information that is neither sensitive nor consequential, it is likely that respondents will provide honest answers. The officers were allowed sufficient time and instructed to remember and report their information concerning pursuits, crashes, intentional contact, and other relative issues as accurately as possible. Information concerning emergency runs (code 3 responses) was estimated at 2 per day or 500 per year, which represented a reasonable average according to the participants. They were asked specifically about the criticality of the emergency runs and whether getting to the scene within 2 minutes of their actual arrival posed a serious tactical advantage in saving a life. They also were queried about their high-risk activities, such as how many times they had faced a firearm; the number of felony stops they had made; and information on pursuits, including crashes and other outcomes and the use of tire deflation devices and precision immobilization technique (PIT) maneuvers.

Findings

Tables 1 and 2 set forth the data collected from the 2,123 officers who had a combined total of 25,936 years of service, representing an average of 12 years. As a group, they had faced a situation involving the presence of a firearm 2,258 times, an average of 1.1 times per officer. They had made 5,833 felony stops, or an average of 2.7 per officer. When on patrol, the officers had a total of 1,571 crashes, or .74 crashes per officer. They were involved in an estimated 14 million code 3 calls, representing an average of 6,598 calls per officer. Out of the 14 million emergency calls, 476 (.003 percent) resulted in a crash. Similarly, 1,747 of the emergency calls (.01 percent) made a difference by resulting in tactical advantage to save a life.

Among the group, 26,737 pursuits occurred, representing an average of 12.6 pursuits per officer. In 2,058 of them (7.7 percent), an officer was involved in a crash, while in 8,866 (33.2 percent), others were. Therefore, in the chases involving these officers, almost 41 percent resulted in a crash. Out of the 2,080 pursuits where spike strips were used (7.8 percent), someone was almost hit in 239 of them (11.5 percent). Officers used the PIT maneuver in 662 of the total pursuits (2.5 percent), and they decided to terminate the chase 1,269 times (4.7 percent).

Discussion

These data clearly show the inherent dangers of police work and the enormous risks officers face during their careers. The serious threat created by individuals who attack officers with weapons causes law enforcement to rank as one of the most dangerous professions.[4] These inevitable risks must be managed and reduced, if at all possible. However, when physical force is used, officers are reacting to behavior displayed by subjects. Officers acting reasonably will use force necessary to control a suspect and no more. Similarly, officers will balance the type of offense committed and the risk to the public if the perpetrator is allowed to escape for the time being. This balancing act also is necessary in pursuit and emergency driving (code 3 responses).

The officers responding to the surveys were involved in more than 1,500 crashes during their careers. As with the dangers of physical attacks, the problems associated with vehicle crashes also threaten the well-being of law enforcement officers. Although the research did not cover the nature of the pursuits or the offenses for which the suspects were wanted, it did reveal that just over 40 percent resulted in a crash, with more than 2,000 involving an officer. These data support other research showing that 4 out of 10 pursuits result in a crash.[5]

The sheer number of pursuits that result in crashes has prompted the law enforcement profession to find ways of reducing them. During the past decade or so, the use of spike strips and the PIT maneuver have become accepted ways to end pursuits in many departments. The officers surveyed used spike strips in almost 8 percent of their pursuits but reported that someone was almost hit in more than 11 percent of those events. While

> **When confronted with emergency vehicles, civilian drivers can prove unpredictable.**

PIT maneuvers were not used as frequently (less than 3 percent of all pursuits), they also can be dangerous if the officer is not trained properly. Clearly, the PIT is safer at slower speeds, but a well-trained officer can perform the technique successfully at high speeds if the target vehicle does not over- or understeer to avoid the impact. In any case, the environment in which the maneuver is conducted will determine its safe parameters.

Moreover, agencies often employ helicopters to track fleeing vehicles, thereby eliminating the need for dangerous ground chases. Most recently, tagging and tracking devices have been developed that can identify and track vehicles. Although the technology is a hybrid of attaching a sending unit to a vehicle and tracking its location through cell phone and GPS equipment, its future appears promising.

Perhaps the most interesting finding of the study was that the officers made the decision to terminate (i.e., ending the effort to apprehend the fleeing suspect by turning off the emergency lights and sirens) only 1,269 times, or in 4.7 percent of the pursuits. This powerful statement signals to fleeing suspects that they are "safe" and no longer being chased. Although research has indicated that the majority of subjects are likely to slow down in a relatively short distance, others may not, and all will escape apprehension for the moment.[6] Clearly, the critical question is when to terminate a pursuit. While policies suggesting or requiring a termination vary among agencies in Minnesota and throughout the country, the authors feel that if more pursuits were terminated, the number of crashes would be reduced as well. However, unusual incidents have occurred where officers have terminated the pursuit and the fleeing

suspect continued, only to crash into an innocent bystander.

Is attempting to apprehend someone worth the known and suspected risks? While the authors make no attempt to answer this question, they do realize that the law enforcement profession must learn more about pursuit driving so that its members can analyze their options to continue or terminate such events.

As far as emergency driving, or code 3 responses, the study found that "only" 476 resulted in a crash. While obviously a small proportion, the almost 500 crashes were significant to those involved, if not to society in general. It is likely that there are more crashes per mile driven in emergency runs than in general driving. However, as code 3 responses represent a critical law enforcement function, it may be necessary to reconsider their number, justification, and speed levels. The study also indicated that only .01 percent of emergency calls made a critical difference. These data show that the dangers of emergency driving are not omnipresent and do not affect all officers or runs. Most code 3 responses are not at dangerous speeds, and only a small percentage of them result in crashes. However, it is surprising that the officers reported such a small number of them as having made a critical difference in the outcome of the emergency situation.

Recommendations

Policing is a dangerous profession. Aggressive and reckless suspects, who make their own decisions, increase the dangers for officers. Some tactics, such as emergency and pursuit driving, also raise the risks for officers. The latter category, however, involves behaviors that can be changed to protect officers from injury and death, thus saving their families, their agencies, and the public from needless tragedies. With some modifications to existing approaches, law enforcement organizations can promote officer welfare without increasing the cost to society.

Perhaps one method is to certify officers after they have successfully conducted a number of emergency responses with field training officers and completed specialized training in driving and decision making. Another interesting approach would have officers time their code 3 runs and then return to drive the route at normal speed to determine the time difference. Some urban emergency responses may not save much time; however, rural ones are likely to make a bigger difference. The pursuits and emergency responses that generate the most risk to officers should

Table 2 **Emergency Response and Pursuit Driving**	
Code 3 runs that made a difference	1,747
Code 3 crashes	476
Pursuits	26,737
Pursuit crashes	
Officer involved	2,058
Others involved	8,866
Pursuits terminated	1,269
Spike strips	
Placed	2,080
Someone almost hit	239
PIT employed	662

be eliminated except in the most extreme situations.

By way of another example, the number of pursuits, crashes, and deaths could be reduced if officers chased only violent felons. Of course, the primary problem with this approach is the threat that such action could pose to society. Also, in the case of emergency responses, officers should recognize that few are necessary to protect life and the ones that are should be undertaken at slower speeds and without endangering themselves or others at intersections and other high-risk areas. In addition, improved communication between officers and dispatchers can enable officers to make more informed decisions.

Finally, officers can follow some specific guidelines to help them survive one of the most vital functions of their profession. They should clear lanes at intersections one by one if any obstructions or sight-line problems occur. They should not use extreme speed. They must remember that the use of emergency equipment does not put them in a protective bubble and that citizen drivers are not predictable in how they respond to emergency vehicles. Although officers are responsible for the way they drive, citizens also must be educated and reminded to yield to emergency vehicles in a uniform manner.

CONCLUSION

Too many officers have died or been seriously injured while trying to apprehend suspects or responding to calls for help from the citizens they have sworn to protect. It is time for the law enforcement community to examine whether the hazards of pursuit and emergency driving are worth the risks to officers, citizens, and even those fleeing from justice.

> *These data clearly show the inherent dangers of police work and the enormous risks officers face during their careers.*

To help understand these dangers, the authors conducted research on officers' perceptions of emergency and pursuit driving. The officers who participated in the study provided their opinions based on many years of experience responding to emergency calls and pursuing fleeing suspects. Because emergency driving is a vital function of the law enforcement profession, such data can prove invaluable in helping save the lives of officers. Therefore, the authors are continuing their research in the hope of finding additional information to improve officer safety. After all, if officers never arrive at the scene of an emergency, they cannot help anyone, including a fellow officer who may be in dire need of assistance. ✦

Endnotes

[1] G. Alpert, D. Kenney, R. Dunham, and W. Smith, *Police Pursuits: What We Know* (Washington, DC: Police Executive Research Forum, 2000).

[2] R. Dunham, G. Alpert, D. Kenney, and P. Cromwell, "High Speed Pursuit: The Offender's Perspective," *Criminal Justice and Behavior* 20 (1998): 30-45.

[3] The lead instructor is David P. Schultz, one of the coauthors of this article.

[4] Steven Brandl and Meghan Stroshine, "Toward an Understanding of the Physical Hazards of Police Work," *Police Quarterly* 6 (2003):1-19. For in-depth analyses, see three FBI studies that comprise research on officer safety conducted over nearly a 20-year span. The researchers, Anthony J. Pinizzotto, Edward F. Davis, and Charles E. Miller III, interviewed surviving officers and the offenders who assaulted them, as well as those felons who killed officers, and presented their findings in *Killed in the Line of Duty: A Study of Selected Felonious Killings of Law Enforcement Officers* (1992); *In the Line of Fire: Violence Against Law Enforcement* (1997); and *Violent Encounters: A Study of Felonious Assaults on Our Nation's Law Enforcement Officers* (2006). All are available from the Uniform Crime Reporting Program Office at 888-827-6427.
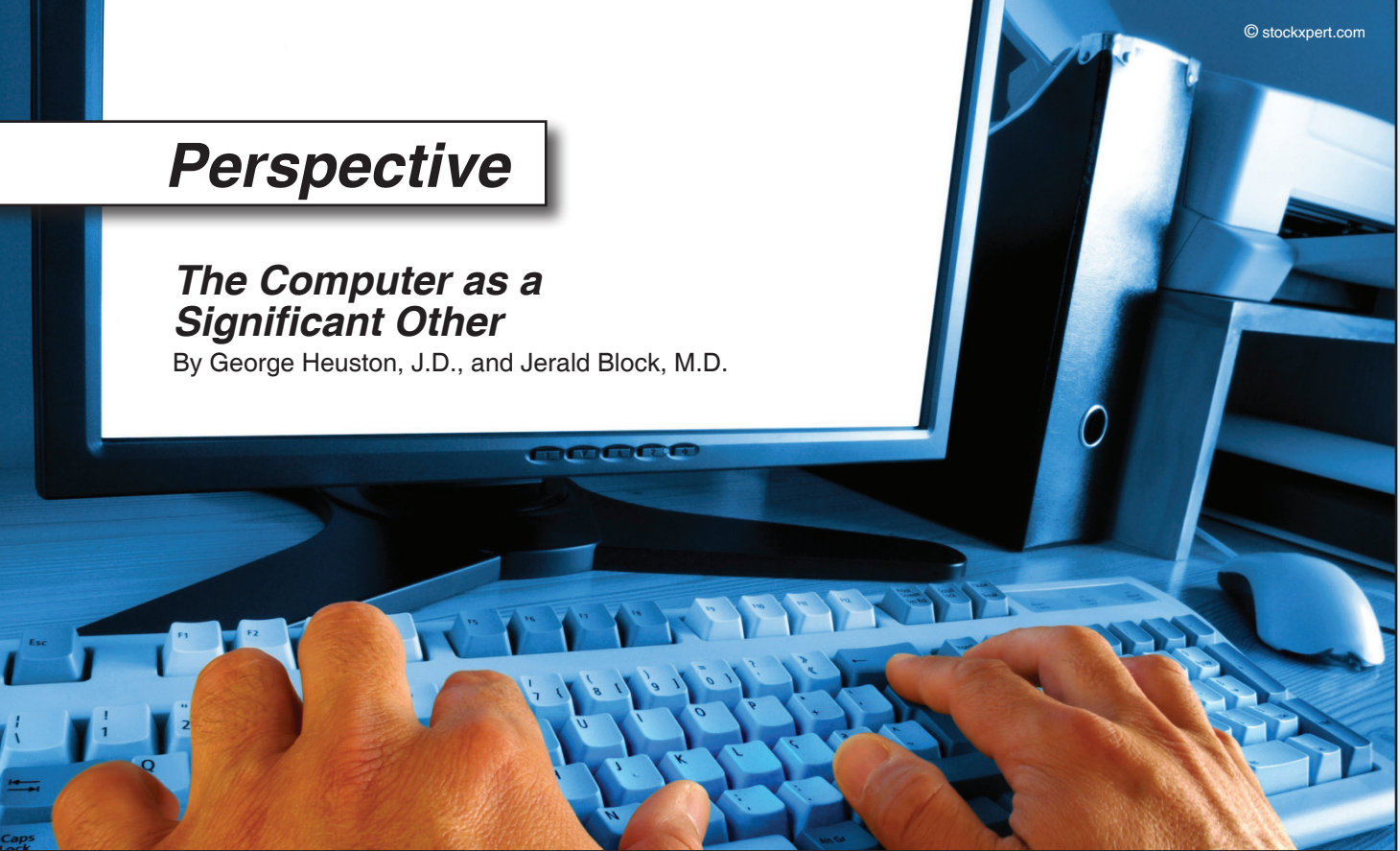
[5] Geoffrey Alpert and Roger Dunham, *Understanding Police Use of Force* (New York, NY: Cambridge University Press, 2004).

[6] Dunham et al.

Perspective

The Computer as a Significant Other

By George Heuston, J.D., and Jerald Block, M.D.

Along with the Internet, the computer has become ubiquitous in society. Not surprisingly, investigators often say that crucial information in a case originated from a suspect's computer. Today, every police department deals with digital evidence. From a "smart phone" plugged into the ear of a driver during a traffic stop to the computer tucked into the back room of a house undergoing a police search, the digital environment is there.[1]

This generates new challenges for law enforcement. As agencies begin to recognize the intimate link between people and their technical equipment, officers need to adjust. Many individuals, including criminals and witnesses, consider the digital world as important as the real one. Indeed, the computer and other forms of technology have become, essentially, significant others.[2] Understanding what this means has important ramifications for investigators, opening up new approaches to interviews or helping establish motives. Officers should strive to understand individuals' relations to technology and use that knowledge effectively when conducting investigations.

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TRADITIONAL PERSPECTIVE

Officers routinely view and treat the computer as a machine devoid of personality—a typewriter with memory. They come in, execute a warrant, seize the computer, toss it in the trunk of a cruiser, and haul it off to the dark recesses of the evidence room. From there, agency personnel process it, and images and communications related to the alleged crime become part of a report for the case officer and the prosecutor. The report and other evidence then combine to address the elements of the crime in question. After prosecution of the case, a conviction, hopefully, results. Then, the agency closes the case and disposes of the computer.

ALTERNATIVE VIEW

It sometimes proves important to consider what things mean to people, not just what they are. For instance, an old, rusted bicycle may hold sentimental value. To the owner, it brings back memories of adventure—painful falls and heroic rides. In the same way, the computer may represent far more to a suspect than merely a fancy gadget. Knowing the individual's perspective can help develop key evidence and solve cases. To be effective, officers must strive to view the world as the subject sees it. Thus, the investigator should try to understand how important the computer is to a suspect and why.

Individuals relate to their technology much as they do to other people. They play *with* the computer. They attribute human characteristics to it, noting when the system "acts up" or "misbehaves." Most of the time, they are unaware of feeling anything toward the object. However, moments arise when they abruptly realize that the technology intensely affects them. For instance, people often feel betrayed, anxious, and angry when the computer freezes up or the hard drive fails. Logically, computer enthusiasts who use their system 40 hours or more each week may feel strongly when separated or disconnected from the machine.

In July 2007, in Lansdowne, Pennsylvania, two brothers, ages 16 and 13, played a video sports game. When the older sibling refused to hand over the controller, his younger brother grew angry. A fight ensued, and the older boy died of a stab wound to the heart.[3] When people hear of such a senseless death, they search for some explanation. They discuss a longstanding rivalry or some such thing. Yet, interestingly, the children fought over a computer—a gaming console and the access it provided to the computer-human relationship—not a skateboard or other object.

People need to understand that the more intensely someone integrates with technology, the more "alive" the machine becomes. Not surprisingly, individuals without money and jobs still manage to keep their gaming consoles or maintain an Internet connection to play online games. Some users become closely linked to their technology, and investigators who realize this have an advantage. They can leverage what now is reality—that the computer has become the subject's significant other.

IMPORTANT RELATIONSHIP

Although the term *significant other* was intended to include only people, not inanimate objects, investigators should consider that often these suspects use their computers all day and night; time holds no sway. These individuals allow the machine to hold their full attention and concentration. People may use it almost exclusively

> **"As agencies begin to recognize the intimate link between people and their technical equipment, officers need to adjust."**

to interact with others. Their computer serves as a companion, recording their thoughts, motives, and emotions. They engage with it in a comfortable, intimate, walled-off environment, perhaps, even to access pornography and for sexual gratification.

By merely observing the amount of time, energy, and money suspects spend in the cyber environment, investigators can recognize the importance of this alternate, virtual life. The computer serves, at once, as a social conduit, source of power, defense against loneliness and despair, companion in play, and portal to other worlds. Perhaps, this is the most important relationship in a subject's life, and any threat to it creates a crisis. Regardless of whether individuals have a spouse and children and work out at the local health club, this machine is the prime focal point of their lives. It is their significant other.

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The 2007 Nevada case of Michael and Iana Straw, parents of a 22-month-old boy and an 11-month-old girl, serves as an example.[4] Authorities found the children severely malnourished and in poor health, victims of neglect. The 10-pound-girl's hair was soaked with cat urine. Were the parents addicted to drugs, tending to their habit and not their kids? No. According to the prosecutor, they were too engaged by online video games to care for their children. "They had food; they just chose not to give it to their kids because they were too busy playing video games." Indeed, their fiscal priorities also seemed devoted to their virtual relationships. The couple spent their $50,000 inheritance on new computer equipment and a large plasma television.

This gives investigators important insight. When questioning or thinking about a suspect, they should consider the computer as another person and use that relationship to inform their investigative strategies.

DIGITAL WORLD

In addition to the relationship suspects form with their technology, agencies have other important considerations. If subjects have spent much of their lives dabbling in the virtual, investigators should understand the conventions that govern such worlds. Heavy computer users may apply some of these same rules to reality.

• You are powerful and can do anything that others can.

• Enough time or effort will make you as successful as anyone else.

• If you fail, you did not act correctly; success always is possible.

• If a challenge exists, there must be a way to overcome it.

• Ethics are unclear, and misbehaving often is without repercussions.

• Few actions are permanent; you usually can start over.

• Although, perhaps, useful, other characters (people) are disposable.

Thus, in online games, monsters exist only to be destroyed, and tasks always prove possible. If you fail, you made an error, or your character has not gained enough skills. But, failure is a minor nuisance and without consequence; you just need to correct the problem and try again. To succeed at some goals, you may have to join with other

people. These individuals are a means to a goal, to be used for however long they produce. Then, they become expendable. And, finally, cheating the system to finish some tasks is quite acceptable, as long as you are not caught.

People who emerge from the virtual with similar concepts of how things work in the real world face a problem. They will encounter insurmountable limits in reality. For example, they may feel unappreciated at work. Initially, they try to talk about it, but, being isolated, awkward, and socially naive, the situation just gets worse. They become angry, grandiose, and uncompromising, alienating those around them and making them uncomfortable.

Those accustomed to life's imperfections simply would reduce their expectations and, perhaps, secretly vent about the boss to coworkers or friends. They would seek validation elsewhere and, if things worsened, move on to another job. Those wedded to virtual worlds, however, would try for accolades repeatedly, but with no success. Then, one of two things likely would occur. They might become depressed, upset with themselves for lacking the necessary skills to get what they want. Or, they would turn enraged, angry at the rigged "game" with no discernable solution. In both cases, however, they assumed the possibility of a good outcome. When this did not occur, either they were incompetent or the world was toying with them.

Essentially, cybercentric individuals still believe the childhood fantasy that anyone can fulfill even their wildest dreams. They just need to try hard enough and play their hand right. In the virtual, fate never deals people bad cards; if thwarted, someone always is at fault.

> " ...the investigator should try to understand how important the computer is to a suspect and why. "

VIRTUAL TIMELINE

When forensically evaluating a computer, investigators catalog the files and images that reside on the system's hard drive. As they characterize the data, they look for the criminal content. However, because computer files include date stamps that suggest their history, investigators should try to recover such details as when they were made or edited and where they reside. This information can serve as the electronic equivalent of a footprint. Of course, investigators will examine what files a suspect looks at or works on. But, by also studying the sequence of files modified on the computer, officers can generate theories as to the suspect's thoughts and, perhaps, identify a motive.

An all-too-common situation can serve as an example: an adolescent modifies a computer game so that it now takes place in a highly realistic virtual mockup of the student's high school. This "first-person shooter" program simulates a firefight in the school.[5] Does the adolescent present a danger to other students? Perhaps. One important determinant might be the pattern of computer use discovered in the forensic examination. If investigators chart the teen's recent activity, the individual's intent may become clear. An increasing number of cached Web pages on topics, like school shootings or weapons manufacturing, might arouse concern. Or, uncovering a pattern of increasingly disorganized or violent essays written as schoolwork might lead someone to surmise that the adolescent was struggling under the burden of a mental illness or dark secret. Of course, a teen may visit some Web pages (e.g., pornography, gaming, or hacker sites) out of curiosity, rather than criminal intent.

To discern threatening behavior, investigators should examine the sequence of when the subject opened or modified the files.

CASE STUDIES

A Cyber Significant Other

For over a year, the FBI investigated a subject who operated out of his home, enticing victims in financial straits to use his bankruptcy service. In exchange for several thousand dollars, the subject promised to file papers for the victims and help them keep their major assets. Instead, however, the subject took the money and did nothing. This effective scam, perpetrated on the Internet, generated millions of dollars.

Eventually, the day to execute the search warrant at the subject's residence arrived. The case agent had no intelligence on the number or types of computers or how they were networked and expected that because the subject ran the operation out of a residence, it should be straightforward. On entry, investigators discovered over 20 computers, all networked and running multiple operating systems. The situation became worse when they also discovered a legitimate real estate business housed there. The agents grew uncomfortable; courts have tended to look askance when police seize and shut down a legitimate business and, in some such cases, awarded civil damages.

With the primary subject not there, the agents located and questioned the system administrator. He seemed to know nothing of the fraud and was unhelpful. He sat silently at a desk and watched the agents as they cataloged the equipment. Fortunately, the FBI search team included a young computer-literate agent who also was a digital

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forensics examiner. The agent immediately recognized that the administrator lived and breathed networks and computers. The network in the house was diverse and delicate. It was the individual's life, the focus of all his energies, his significant other.

The agent decided to focus on two aspects of the human-computer relationship: the administrator's fear that 1) the system would become harmed and 2) the computer would reveal embarrassing secrets. He wagered that these fears would motivate the administrator to become more cooperative. The agent sat down next to the system administrator to hold a brief conversation.

Agent: Now, you know we need to get all the data related to the bankruptcy assistance business?

Administrator: Yeah, you have to do what you have to do.

Agent: And, from what we see, there also is a separate real estate database housed here, right?

Administrator: Yes. Look, I just run things here. I make sure the disks are backed up and that sort of thing.

Agent: Yeah, that's what I was concerned about. You have done an amazing job building this network. Well, I'm sorry, I wanted to avoid doing this, but I guess we will just have to pull the plugs and yank these computers out of here. I wish we could shut them down in a more orderly fashion, but we can't without knowing more.

Administrator: Oh, no! It would destroy the whole network, and I have months of work in it.

Agent: That's what I was afraid of. Well, I'll try to do what I can. Hey, there's another thing you should know. You don't store porn or anything like that here, do you? I just wanted to alert you—if we have to search everything, we will have to inventory it, and that gets shared with your boss.

Administrator: No, I don't do anything like that. But, maybe I can get what you need. If I can do that, you won't have to unplug the machines you don't need or any of that?

Agent: We can't guarantee we won't unplug or take some machines. Some of them may be questionable, and we'll have to take them. But, I promise you that we will not pull anything without consulting you first and getting your input on how best to do it.

Administrator: OK, that's fair.

Agent: Great. OK then, you can't touch any machines, but you can walk with me and help me retrieve what we're after. If you do that and are up front with me, I believe there is a chance we can leave some, maybe even most, of your network intact.

The system administrator immediately became compliant. The search proved instrumental to obtaining a conviction.

The Prisoner's Dilemma

Investigators arrested a young man for breaking into a hospital database and stealing information on several thousand patients. The home search resulted in the location of four computers. A technician informed the investigating officer that all of them appeared well encrypted and that little could be learned from them unless the suspect

> **"** Perhaps, this is the most important relationship in a subject's life.... **"**

cooperated. As the case was somewhat shaky, the individual's cooperation proved essential.

The investigator asked the police technologist to assist him with a simple strategy. The technologist set up one of the subject's computers on a lab bench. However, he connected the monitor to a lab computer, not the suspect's. On the lab computer, the technologist ran a program that appeared to be cataloging the contents of the suspect's computer. Of course, it was not. The subject's computer was powered off, still encrypted and unreadable.

The investigator then led the suspect to an appropriate area for questioning. Along the way, he stopped at the technologist's lab. With the suspect in tow, he asked the technologist, "How is it going?" His colleague answered that he was working on it. From the doorway, the monitor seemed to show output, suggesting that investigators disabled the password.

Upon questioning, the suspect faced the classic prisoner's dilemma: "Work with us now, and there's a good chance the prosecutor may go easier on you. If you don't and we have to get it from the computer instead, the gloves are coming off."[6] Believing the computer would "crack," the subject confessed to the crime and supplied all passwords necessary for data recovery.

CONCLUSION

Many people find the computer essential to their lives and place increasing importance on it. The machine offers a ready source of companionship, entertainment, diversion, education, distraction, and empowerment. Heavy computer users may find it so safe and secure that they begin to emotionally trust it, confiding in it more than, perhaps, even their closest friends.

Thus, subjects who commit crimes or plan terrorism consider the security of their computers essential. Modern law enforcement officers know this lesson and recognize the importance of data on computers to breaking cases or saving lives. Investigators still can fail, however, by underestimating the degree of attachment that occurs between people and their technology. Officers can use an understanding of that emotional connection to explore motive or gain the subject's cooperation. If they consider that relationship cogently, investigators can turn difficult cases into convictions.✦

Endnotes

[1] George Heuston, "Investigating the Information Super Highway," *Journal of Criminal Justice Education* 6 (Fall 1995): 311-321.

[2] The term *significant other* dates back to the 1953 book *The Interpersonal Theory of Psychiatry* by Henry Stack Sullivan. Rather than focusing on the conflicts and angst *within* a person, Sullivan focused on what happens *between* people. In other words, knowledge of someone's important relationships—those with significant others (e.g., spouses, lovers, children, or close friends)—provides understanding of the individual.

[3] Denise James, "Brother Kills Brother in Video Game Dispute"; retrieved from *http://abclocal.go.com/wpvi/story?section=news/local&id=5480557*.

[4] "Parents Neglect Starved Babies to Feed Video Game Addiction"; retrieved from *http://www.foxnews.com/story/0,2933,289331,00.html*.

[5] Bob Dunn, "Computer Game Violence Level, Confiscated Swords Led to Student's Removal"; retrieved from *http://www.fortbendnow.com/pages/full_story?page_label=results_content&id=11745-Computer-Game-Violence-Level--Confiscated-Swords-Led-To-Student-s-Removal&article-Computer-Game-Violence-Level--Confiscated-Swords-Led-To-Student-s-Removal%20=&widget=push&open=&*.

[6] William Poundstone, *Prisoner's Dilemma* (New York, NY: Doubleday, 1992).

## *System Theory: Another Perspective on Leadership Communication*
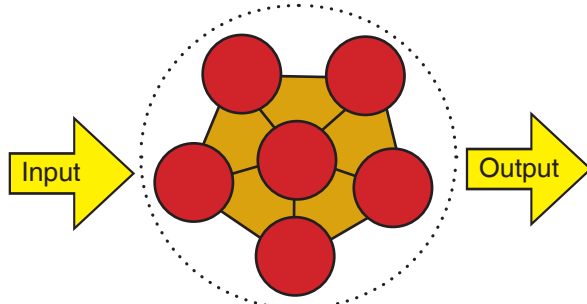
Basic System Theory

System theory is a cornerstone in social construction, which basically suggests that everything is a construction of social relations and interactions with each other. System theory consists of a number of elements all connected to each other inside a relatively defined system. Changing one of the elements—even just a little bit—will cause a reaction on all of the other elements within that system. This phenomenon is difficult to control.

For example, in leadership communication, A sends a message to B who gives feedback to A. This is a dialogue, but communication only occurs when A has truly made an effort to make sure that B really *understands* the message. This creates the demand for some kind of control mechanism, which assertive law enforcement managers and leaders do every time they try to make sure that their message is understood. That message may be a vision, mission, strategy, or something of a more operational character.

Looking at leadership communication through the perspective of system theory will offer an effective explanation of why most law enforcement managers, leaders, and organizations all around the world often experience failures when they try to communicate. When leaders communicate a vision to the organization, they quickly realize that it is impossible to control whether everyone has fully understood the message. Based on the ideas in system theory, law enforcement leaders (or anyone else) cannot control communication—they can only try to influence the process by creating the best possible circumstances. One way of doing so involves leading through an organizational network.

Personal Communication   **Organization**
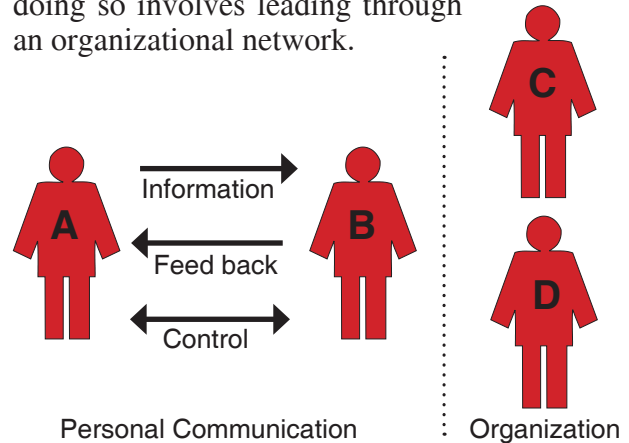
The above model indicates how personal communication from leader A to employee B can occur because of the possibility to control the process. But, it also shows that communication from the leader to the rest of the organization (e.g., C and D) is incomplete because it is not possible to have a control mechanism on all of the elements within the system. Thus, an effective leader in today's law enforcement community should realize this complexity and build an organizational network to use when the communication or change strategy is first discussed. ✦

Danish National Police Superintendent Erik Vand, a Leadership Program Fellow at the FBI Academy and an adjunct faculty member of the Leadership Development Institute, prepared this Leadership Spotlight.
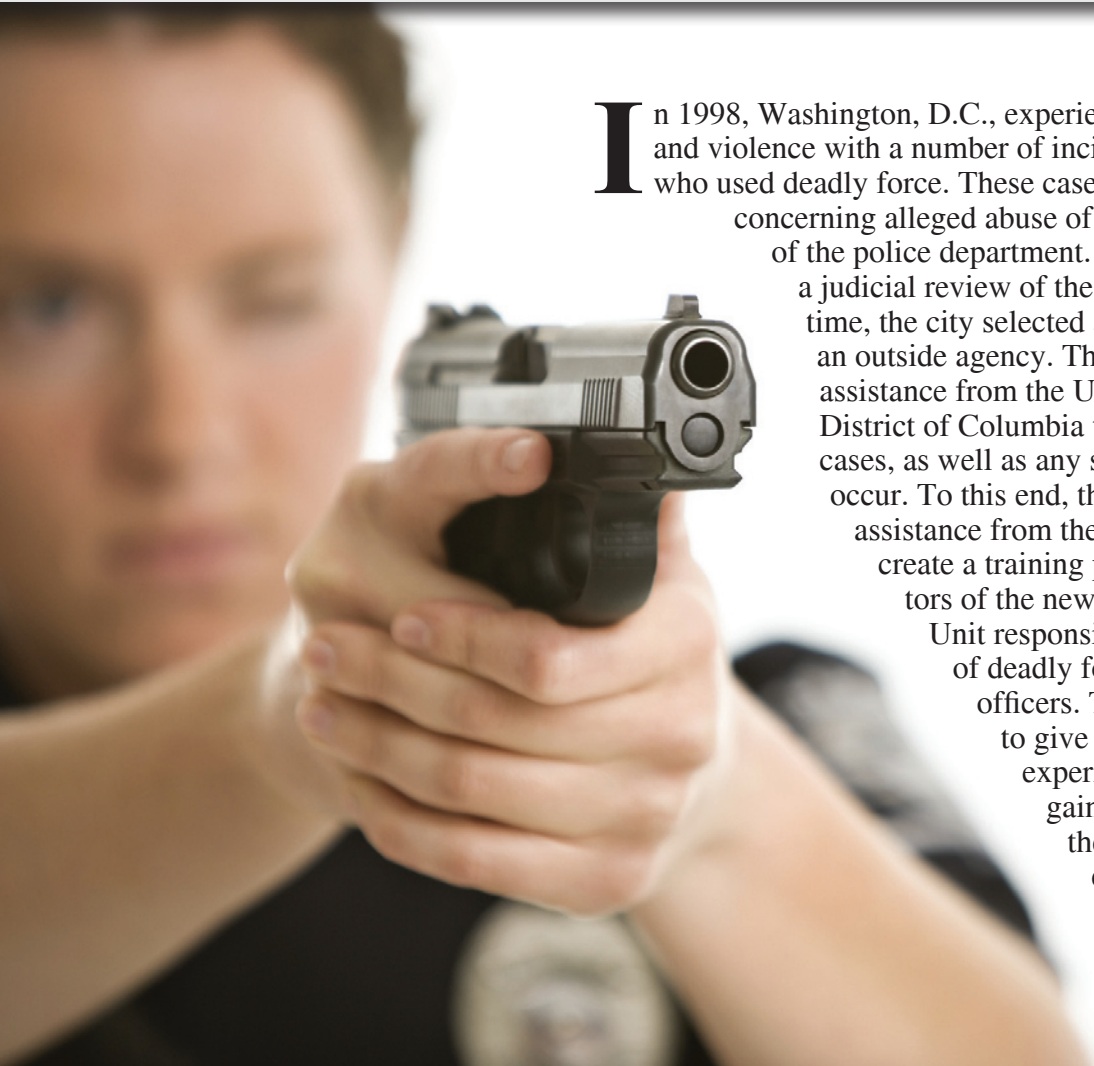
Law Enforcement Perspective on the Use of Force
Hands-On, Experiential Training for Prosecuting Attorneys

By ANTHONY J. PINIZZOTTO, Ph.D., EDWARD F. DAVIS, M.A., SHANNON BOHRER, M.B.A., and ROBERT CHENEY

In 1998, Washington, D.C., experienced a period of high crime and violence with a number of incidents involving officers who used deadly force. These cases generated media attention concerning alleged abuse of deadly force by members of the police department. Citizens began demanding a judicial review of these shootings. At the same time, the city selected a new police chief from an outside agency. The new chief requested assistance from the U.S. Attorney's Office of the District of Columbia to review these use-of-force cases, as well as any subsequent ones that might occur. To this end, the U.S. attorney requested assistance from the director of the FBI to create a training program for senior prosecutors of the newly established Civil Rights Unit responsible for investigating the use of deadly force by law enforcement officers. The goal of the training was to give these attorneys a realistic experience that would help them gain a better understanding of the use of force from a law enforcement perspective.[1]

The authors developed an initiative that included collaborative efforts by both firearms training and behavioral

science personnel at the FBI Academy. The main intention of the project centered on placing prosecuting attorneys in the shoes of officers on the street who may become involved in deadly force incidents.

The authors based the program on a variety of factors, such as law enforcement experience and training, the interrelated aspects of research, and case consultation. Together, they had a combined amount of law enforcement service equaling more than 100 years that included actually employing deadly force, investigating such actions, and extensive training in the use of firearms. Their research focused not only on the use of deadly force against law enforcement but also by officers themselves. It involved numerous in-depth interviews with officers who had survived critical incidents where subjects had used force against them, as well as with offenders convicted of murdering law enforcement officers or feloniously assaulting them. The resulting publications detailed the varying perspectives of these officers and offenders.[2] The authors also consulted with members of local, state, and federal law enforcement on the aspects of perception, memory, and recall during a critical incident; wound ballistics; action-reaction models; sensory distortion; and facing edged and other weapons, including hands and feet.[3]

THE PROGRAM

To give attorneys the perspective of an officer, the authors employed an interactive video simulator that played scenarios requiring the participants to decide whether to engage the use of deadly force. Some of these allowed such

> **The main intention of the project centered on placing prosecuting attorneys in the shoes of officers...who may become involved in deadly force incidents.**

action and others presented a no-shoot situation. The different scenarios enabled the attorneys to describe and justify their actions in a particular set of circumstances and generated discussion from other attorneys in the classroom who witnessed the events.

These discussions, held prior to replaying the particular scenario, had the attorneys who acted as officers describe in detail as much as they could recall concerning the circumstances of the incident, including descriptions and actions of the alleged offenders; activity of any partners present; number of shots fired, if any; who fired the shots; and justification for the use of force, if used. The attorneys who played the role of witnesses then had to describe what they saw at the scene. After these exchanges, the authors replayed the specific scenario. The results and highlights of the discussions that emanated from this hands-on training follow.

Justification of Action

After each scenario, the attorneys had to explain their actions as officers. In a large segment of the cases, most of the attorneys fired their weapons *only* after being shot at. They based their justification for shooting on the fact that their lives were in clear and present danger. They identified this threat not only as the presence of a weapon but because the suspect had fired at them first.

Ballistic Issues

While many attorneys did shoot and could justify their actions, most fired only one or two rounds and, in many cases, did not incapacitate their assailants. When questioned, the attorneys stated that they believed only one or two shots would disable someone. Additionally, they assumed that their

shots actually hit the subjects. In some instances, however, this proved incorrect as some of their shots clearly missed their intended targets.

Subsequent instruction to the attorneys included dispelling the "one shot drop" myth. The authors explained that a person, upon being shot, generally does not become immediately powerless, unlike many portrayals in television shows and movies.[4] Experts agree that the only true instant incapacitation is caused either by the disruption of the central nervous system or from significant blood loss wherein individuals lose 20 percent of the volume of their blood, which can take 8 to 10 seconds to accomplish.[5] In situations where officers must fire their handguns, considered as defensive weapons, these rarely result in the instantaneous debilitation of their assailants. This is why officers are taught to continue to shoot until the threat ceases or is eliminated.

Perception, Memory, and Recall

During initial discussions of the scenarios, the attorneys acting as officers and those cast as witnesses disagreed on several important issues: what occurred on the scene, how many shots were fired, and who shot first. Only after the class reviewed each scenario did the participants reach an agreement as to what had happened and the number and origin of shots fired.

The attorneys also achieved a better understanding as to why witnesses often contradict each other. They came to realize that witnesses can differ slightly or even profoundly about what took place, and their recollections may change over time. Memory, in most situations, is

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constructive; it does not operate as a videotape recorder. Under critical or traumatic circumstances, perception, memory, and retrieval have a greater likelihood of being affected by the intensity and duration of the event.[6]

Action Versus Reaction

The two-phase model of action versus reaction demonstrates why, in some instances, officers are killed or debilitated without returning fire with their service weapons. In the action phase of one scenario, the attorneys saw the offender draw a handgun and point it at the officer who is taken by surprise. Then, in the reaction phase, they witnessed the officer attempt to draw and fire *quicker* than the offender who can simply pull the trigger. Because this is not possible in most situations, officers are killed or wounded before they can react to the threat.

This model also explains why officers sometimes have shot someone in the back while both consciously and truthfully believing that they shot the person in the chest. In these cases, the individuals turned and ran as the officers drew their weapons. Because of the time lag between the officer's decision to draw and fire the weapon and the physical completion of the act, the person had the opportunity to change position. Action versus reaction is linear and compatibility dependant; that is, action does not always beat reaction.[7]

Myths and Misconceptions

As the attorneys participated in the interactive video scenarios, some made comments and statements that often appeared founded in myths from television shows and movies. As one attorney noted, "The major benefit is educating us

about the realities of a shoot. I had no idea that things really went down as they did. I bought into the Hollywood mythology entirely."

Edged Weapons

Collectively, the attorneys reported that they did not view edged weapons to be as great a threat to their safety as firearms. However, edged weapons are the second leading cause of homicides in the United States behind handguns.[8] Assailants continue to kill more people with edged weapons than with rifles and shotguns combined. As such, law enforcement officers follow the safety rule of 21 feet: if a subject armed with an edged weapon comes within 21 feet before an officer can draw and fire a weapon, the officer could be seriously injured or even killed.[9]

Other Weapons

The attorneys thought that a person without any visible weapon was not a threat. But, in fact, if officers are incapacitated by a punch or a kick, their own service weapons can be taken and used against them.

Decision Making

Another myth held by the attorneys involved the decision-making process. When an officer in a movie decides to shoot someone, it often is portrayed in slow motion, appearing to give

the officer more than enough time. In fact, officers have only a split second to decide whether to shoot. Moreover, they often must form this crucial decision based on limited information.

Subjects Killed

Many of the attorneys believed that law enforcement officers kill a much greater number of subjects than can be substantiated by facts. In reality, officers often refrain from

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> ***During initial discussions of the scenarios, the attorneys acting as officers and those cast as witnesses disagreed on several important issues....***
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> **"**

the use of deadly force. Several studies have demonstrated that the majority of officers had many more opportunities to use justifiable deadly force than actually did. "After all, in more simplistic terms, it often is not the officer's *decision* to use deadly force but the suspect's *actions* that require it."[10]

THE FINDINGS

This first training effort was well received by the attorneys

who attended. They offered positive feedback, expressed an appreciation of the insights and materials presented, and recommended expanding the training to other attorneys within the U.S. Department of Justice. Comments from the attorneys included—

- "Very helpful, informative, eye-opening, at times even moving."
- "Thanks for giving the course. It sure has made me rethink deadly force cases."
- "I have a newfound respect for law enforcement training and decision-making processes."
- "I learned a lot about action/reaction and how most deadly force scenarios happen much faster than one would think."

The authors eventually expanded the course in both time and content. Most important, they added a live-fire exercise so the attorneys could experience actually using a firearm. Attendees at these subsequent classes included attorneys for state and local governments, trial attorneys from the U.S. Department of Justice, Civil Rights Division, as well as general counsel for large police departments. Commanders of units within these law enforcement agencies charged with the responsibility of investigating

deadly force incidents also attended these additional classes.

The training proved a learning experience for both the attorneys and the instructors. The attorneys willingly participated and raised many issues. The authors instructed them to question everything they encountered in the training, and they did. From their inquiries and comments, several important issues arose. One student approached two of the authors and expressed the need for expanded training on perception, memory, and recall. She told them that prior to this training, she thought all officers involved in a deadly force incident should report exactly the same story. But, after attending the training, she realized that individuals can view similar circumstances in different ways, and those specific memories, in fact, may change over time.

As for the authors, they fully recognized that the attorneys never could experience certain realities firsthand. These obviously would include the actual consequences of using deadly force, such as post-traumatic stress disorder, media scrutiny, excessive legal review prior to the return to duty, stress placed on family members, and peer pressure. Losing a gunfight in a simulator never can compare with losing one on the street. But, giving prosecuting attorneys the experience of making a decision in the use of deadly

force—with limited information and in a fraction of a second—can have far-reaching effects long after they complete the training.

THE RECOMMENDATIONS

The authors recommend that local and state law enforcement agencies consider developing training programs for attorneys charged with reviewing the use of deadly force by their officers. These departments should take into account several issues when developing this type

> **Losing a gunfight in a simulator never can compare with losing one on the street.**

of training. Using scenarios that are simple, slow moving, and with obvious choices will cause participants to believe that the decision-making process is easy. They may not fully understand and appreciate the complexities and difficulties of the issues being taught. Conversely, fast-paced, high-speed, and complicated scenarios tend to overwhelm attendees. They may believe that the instructors are trying to make them fail. After all, this training should

be difficult and challenging but obtainable.

Law enforcement agencies also may want to offer a similar course for those outside the criminal justice system, such as members of the media, civic organizations, seated grand juries, and human-interest groups. Many departments conduct citizen academies and could include this training in the existing curriculum.[11]

CONCLUSION

The goal of this hands-on, experiential training was to place U.S. attorneys in the shoes of objective, reasonable law enforcement officers who must use deadly force. The attorneys experienced anxiety in reporting the decisions they made during these high-stress but nonthreatening scenarios. It gave them some insight into what officers may experience when their lives and those of the citizens they have sworn to protect are in jeopardy. While remaining objective and emotionally distant in each investigation, these attorneys now have additional information to make clear, equitable reviews. They also have gained a significant understanding of the effects of these agonizing events on those law enforcement officers compelled to use deadly force. ✦

Endnotes
[1] For additional information on legal issues surrounding the use of force by

law enforcement officers, see Thomas D. Petrowski, "Use-of-Force Policies and Training (Parts One and Two)," *FBI Law Enforcement Bulletin*, October and November 2002; and "When Is Force Excessive? Insightful Guidance from the U.S. Supreme Court," *FBI Law Enforcement Bulletin*, September 2005, 27-32.

[2] Three FBI studies comprise research on officer safety conducted over nearly a 20-year span. The researchers, Anthony J. Pinizzotto, Edward F. Davis, and Charles E. Miller III, interviewed surviving officers and the offenders who assaulted them, as well as those felons who killed officers. They presented their findings in *Killed in the Line of Duty: A Study of Selected Felonious Killings of Law Enforcement Officers* (1992); *In the Line of Fire: Violence Against Law Enforcement* (1997); and *Violent Encounters: A Study of Felonious Assaults on Our Nation's Law Enforcement Officers* (2006). All are available from the Uniform Crime Reporting Program Office at 888-827-6427.

[3] These consultations came about from a variety of sources, including students the authors taught at the FBI's National Academy. The FBI hosts four 10-week sessions each year during which national and international law enforcement executives, along with officers from street level to supervisory positions, come together to attend classes in various criminal justice subjects.

[4] For additional information, see Anthony J. Pinizzotto, Harry A. Kern, and Edward F. Davis, "One-Shot Drops: Surviving the Myth," *FBI Law Enforcement Bulletin*, October 2004, 14-21.

[5] "Physiologically, a determined adversary can be stopped reliably and immediately only by a shot that disrupts the brain or upper spinal cord. Failing a hit to the central nervous system, massive bleeding from holes in the heart, or major blood vessels of the torso causing circulatory collapse is the only way to force incapacitation upon an adversary, and this takes time. For example, there is sufficient oxygen within the brain to support full, voluntary action for 10 to 15 seconds after the heart has been destroyed." See U.S. Department of Justice, Federal Bureau of Investigation, Firearms Training Unit, FBI Academy, *Handgun Wounding Factors and Effectiveness* (Quantico, VA, July 14, 1989), 8.

[6] For additional information, see Alexis Artwohl, "Perceptual and Memory Distortion During Officer-Involved Shootings," *FBI Law Enforcement Bulletin*, October 2002, 18-24; Anthony J. Pinizzotto, Edward F. Davis, and Charles E. Miller III, "Officers' Perceptual Shorthand: What Messages Are Offenders Sending to Law Enforcement Officers?" *FBI Law Enforcement Bulletin*, July 2000, 1-6; and Anthony J. Pinizzotto and Edward F. Davis, "Offenders' Perceptual Shorthand: What Messages Are Law Enforcement Officers Sending to Offenders?" *FBI Law Enforcement Bulletin*, June 1999, 1-4.

[7] For additional information, see Richard A. Schmidt, *Motor Learning and Performance* (Champaign, IL: Human Kinetics, 1991), 19-26.

[8] U.S. Department of Justice, Federal Bureau of Investigation, *Crime in the United States, 2006*; accessible at *http://www.fbi.gov/ucr/cius2006/index.html*.

[9] For additional information on edged weapons, see Frank Thompson and Charlie Mesloh, "Edged Weapons: Traditional and Emerging Threats to Law Enforcement," *FBI Law Enforcement Bulletin*, March 2006, 14-19.

[10] Shannon Bohrer, Harry A. Kern, and Edward F. Davis, "The Deadly Dilemma: Shoot or Don't Shoot?" *FBI Law Enforcement Bulletin*, March 2008, 7-12.

[11] For additional information about citizen academies, see Giant Abutalebi Aryani, Terry D. Garrett, and Carl L. Alsabrook, "The Citizen Police Academy: Success Through Community Partnerships," *FBI Law Enforcement Bulletin*, May 2000, 16-21; and Elizabeth M. Bonello and Joseph A. Schafer, "Citizen Police Academies: Do They Do More Than Entertain?" *FBI Law Enforcement Bulletin*, November 2002, 19-23.

Dr. Pinizzotto, a retired FBI senior scientist, is a clinical forensic psychologist who privately consults for law enforcement and other criminal justice agencies.

Mr. Davis, a retired police lieutenant and FBI Academy instructor, currently owns a private consulting company in Virginia.

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Mr. Cheney, a retired homicide detective, staff assistant to the deputy attorney general, and chief of the Criminal Investigations Unit, U.S. Attorney's Office in Washington, D.C., currently owns a security consulting firm in Virginia.

Crime Data

Preliminary Semiannual Crime Statistics for 2008

For the second year, the FBI's Preliminary Semiannual Uniform Crime Report shows that violent crimes, property crimes, and arsons declined during the first 6 months of 2008. Nationwide, violent crime fell 3.5 percent and property crime 2.5 percent. Each of the specific crimes measured by the Uniform Crime Reporting (UCR) Program—murder and nonnegligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson— decreased during the first half of 2008 as compared with the same time frame in 2007. The complete report, based on information from 11,515 law enforcement agencies that contributed 3 to 6 common months of data to the FBI from January through June of both 2007 and 2008, is available exclusively at *http://www.fbi.gov/ucr/ucr.htm*.

Violent Crime

Each of the four violent crimes (murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault) experienced a decrease nationwide. Murder declined 4.4 percent, aggravated assault dropped 4.1 percent, forcible rape went down 3.3 percent, and robbery fell 2.2 percent.

All population groups reported decreases in violent crime for January to June 2008 when compared with data from the same months in 2007. For cities, those with 250,000 to 499,999 inhabitants saw the greatest decline in violent crime (5.2 percent). In nonmetropolitan counties, violent crime fell 7.5 percent, and in metropolitan counties, it dropped 4.1 percent. Cities with populations of 500,000 to 999,999 inhabitants posted the largest decrease (11.3 percent) in reported murders. However, those with less than 10,000 inhabitants recorded the highest increase (9.8 percent) in the number of murders. While the number of forcible rapes declined in most city population groupings, cities with 1,000,000 or more inhabitants reported a 3.4 percent increase. The number of rapes reported in metropolitan counties increased 1.0 percent, whereas the number of rapes in nonmetropolitan counties dropped 12.7 percent.

In all four regions of the nation, the number of violent crimes decreased. Law enforcement agencies reported declines of 6.0 percent in the Midwest, 5.0 percent in the West, 2.9 percent in the Northeast, and 1.5 percent in the South. For forcible rape, only law enforcement agencies in the Northeast posted an increase (0.6 percent) in the number of offenses reported. In the South, forcible rape declined 4.7 percent; in the Midwest, 4.2 percent; and in the West, 2.9 percent.

Property Crime

When comparing the first 6 months of 2008 with data from the first 6 months of 2007, each property crime offense (burglary, larceny-theft, and motor vehicle theft) showed a decrease. Specifically, the number of motor vehicle thefts declined 12.6 percent; larceny-thefts, 1.2 percent; and burglaries, 0.8 percent. Property crimes dropped in all population groupings, but the largest decline (4.3 percent) occurred in cities with 250,000 to 499,999 inhabitants.

Only one region, the Northeast, experienced an increase (1.7 percent) in the number of property crimes. These crimes declined 6.1 percent in the West, 4.7 percent in the Midwest, and 0.4 percent in the South. By offense, the number of burglaries increased 2.7 percent in the Northeast and 0.6 percent in the South. However, the number of burglaries declined 4.4 percent in the West and 1.0 percent in the Midwest. Larceny-thefts rose 2.9 percent in the Northeast and 0.5 percent in the South. In the Midwest, they declined 4.6 percent and fell 3.7 percent in the West.

Arson

Nationwide, arson offenses, tracked separately from other property crimes, declined 5.6 percent during the first half of 2008 when compared with data from the same time frame in 2007. Law enforcement agencies in cities with populations of 250,000 to 499,999 were the only population grouping overall to report an increase, 2.0 percent. While decreases occurred in all regions of the country, the West had the largest decline in arsons at 8.7 percent.✦

Unusual Weapon

Quick Knife

This quick knife poses a serious threat to law enforcement officers. Offenders may attempt to use this unusual weapon that has a plastic housing with a metal blade.

Protecting Children from Victimization

By Margaret Bullens

Protecting children from those who specifically target them with plans to cause harm proves everyone's responsibility. In today's world, many opportunities exist for children to be subjected to individuals wishing to take advantage of a young person's innocence. The increasing use of the Internet by sexual predators serves as just one reason why communities must take the appropriate steps to ensure that children stay safe. The promotion of grassroots collaborations with public safety agencies, schools, and child services is essential to maximize child safety goals. To that end, the SAFE**NOW**PROJECT, launched in 2005, offers law enforcement agencies and the communities they serve a viable resource for safeguarding children.

A NONPROFIT ORGANIZATION

The SAFE**NOW**PROJECT serves as a community-action organization that educates children and others about skills and strategies to prevent sexual violence by creating programs, curricula, and protocols for schools, churches, and businesses.[1] It also mobilizes communities to take action on a societal problem that impacts thousands of people and has annual health-care expenses and other costs in the billions of dollars. This nonprofit organization has numerous initiatives to support the vision that guides the staff, sponsors, advisors, and volunteers. Its mission is to create, promote, and advocate community-based strategies and resources that eliminate child sexual abuse.

Principles and Goals

The organization has four core principles: 1) children are the future of communities, 2) children are the heart of civilization, 3) communities have an obligation to protect their children, and 4) awareness increases monitoring and tracking of known sex offenders. These focus on the delivery

of positive, nonthreatening prevention education that promotes safety through innovative and popular methods of delivery, including music, athletics, and entertainment. Additionally, the project has several program outcome goals that strive to free children from sexual assault and violence through primary sexual assault prevention activities that use a public health approach; are practical, easily implemented, and supported by others; and focus on individual, relationship, community, and societal factors. These also include community collaborations and capacity building, sustainable sexual assault prevention programs, and cultural relevancy.

The organization focuses on priority target areas. It seeks to—

• mobilize and empower Neighborhood Watch programs, engage the law enforcement community in primary prevention, and involve faith-based and civic organizations;

> • increase knowledge, attitudes, and skills of protective factors for children, parents, and other adults;

> • promote positive behaviors as habits and norms and facilitate respect and healthy relationships;

> • foster increased innovative prevention activities through nontraditional settings and methods (e.g., music, games, television, sports, and entertainment); and

> • cultivate mentoring and leadership programs for youths and facilitate a community infrastructure to prevent child sexual assault.

> **" The promotion of grassroots collaborations with public safety agencies, schools, and child services is essential to maximize child safety goals. "**

New Initiatives

The SAFE**NOW**PROJECT is developing a comprehensive set of programs to reach all age groups. The first, TAKE FIVE **SAFER** STEPS TO BE SAFE NOW, provides youngsters with the necessary tools to reduce their vulnerability for victimization. It focuses on daily habits for children that parents and other adults can easily implement. An upcoming module of the Neighborhood Watch tool kit distributed by the National Sheriff's Association will include this program, making it available to all interested communities. Under the acronym SAFER, the Take Five curriculum promotes five main guidelines that can protect young people.

Stop and think about your safety: Do not let people rush or push you into things if you have doubts. Stay in thinking mode, and trust your instincts. If someone tries to make you do something that does not feel right, say no, get away from the person immediately, and seek help.

Act to protect yourself: Be aware of which actions might lead you into danger and which will protect you. Always let others know where you are going, and avoid having risky secrets. Alcohol and other drugs will prohibit you from thinking clearly and possibly lead to dangerous situations.

Fight for your right to safety: If you find yourself in a dangerous fight, yell and scream to attract attention. Let others know immediately in the loudest and most visible ways that you are in danger. Learn simple ways to defend yourself, but remember that avoiding situations that put you at risk always is better than having to fight your way out.

Encourage others to stay safe: If your friends act safely, they will create a safe environment. Protect each other by looking out for your friends and have them look out for you. If you are going alone into a new situation, tell someone where you will be; do not keep dangerous secrets. Form a pact with someone you trust to look out for each other.

Remember: There always is someone to help. You never are alone. If someone or something makes you afraid, tell a trusted adult. If you still have fears, tell more adults until actions can be taken that make you feel safer.

CONCLUSION

Safeguarding America's children proves an important obligation for all citizens. Although, unfortunately, those who wish to harm youngsters have many opportunities to do so, the SAFE**NOW**PROJECT seeks to establish community-based strategies and resources to eradicate child sexual abuse. All law enforcement agencies should join in this effort to protect such innocent individuals because, after all, these young people represent the future of every community.✦

Endnotes

[1] Please visit *www.SAFENOWPROJECT.com* for more information about education and awareness initiatives, including volunteer and donation opportunities. Newsletters have the latest updates, important legislative actions, and options for agencies to partner with the organization.

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*Ms. Bullens, a certified forensic law enforcement examiner, is the founder and executive director of the SAFE**NOW**PROJECT in Kansas City, Missouri.*

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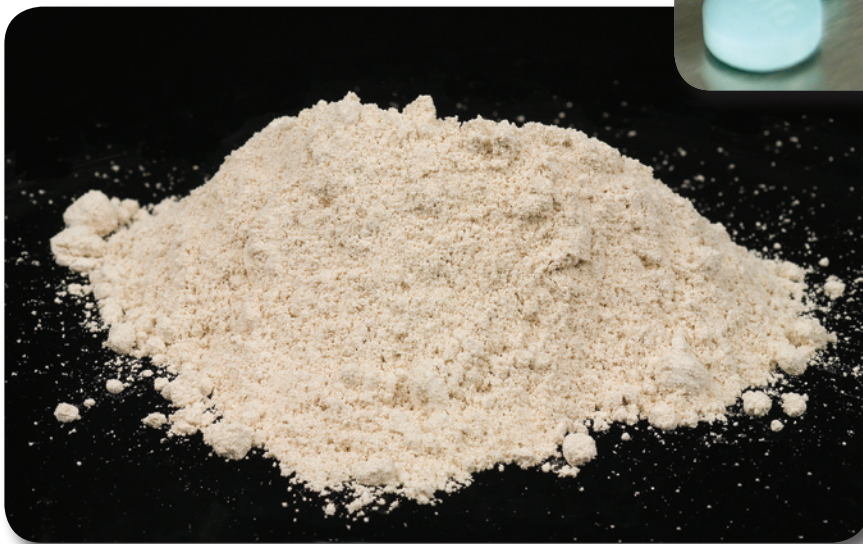
Investigating Opiate-Overdose Deaths

By TODD F. PROUGH, M.A.

Drug trafficking continues to have a deleterious effect on America's communities. Its negative impact is felt in the myriad other crimes committed in the course of obtaining drugs or in those offenses perpetrated by persons under the influence of drugs. An often imperceptible consequence, however, is the societal impact of a drug overdose, which, whether fatal or not, can rob families or friends of a loved one or negatively affect productivity by incapacitating employees. In addition, overdoses draw on an already over-burdened health-care system.

Drugs are classified into different groups based upon their origins and effects on the human body. The opiate class of narcotics, which includes morphine, heroin, and oxycodone, are commonly referred to as downers because of their sedative-like effects. With the exception of alcohol, opiates account for the largest portion of drug-related hospital admissions—in the 10-year period from 1996 through 2005, they averaged approximately 300,000 per year.[1]

Police agencies often identify fatal drug overdoses as accidental deaths. Being aware of and alert to the indicators of a drug overdose prior to entering a crime scene enables investigators to more effectively conduct their investigation.

Victims

Victims of an opiate overdose often exhibit specific characteristics. For example, victims may have a "foam cone," tinged orange or red with blood, around their nostrils and mouth, the most common characteristic of such an overdose. Opiates act as a central nervous system depressant, causing a decrease in heart rate and breathing. This slowing causes fluids to gather

in the lungs, inhibiting the life-sustaining exchange of oxygen and carbon dioxide. Essentially, victims drown in their own pulmonary fluids. As the fluids gather, victims may expel some mixed with gas bubbles, which then forms the foam cone. Autopsies of opiate overdose victims often reveal that death resulted from pulmonary edema, a swelling of the lungs with a pooling of fluids inside them.[2]

Because of this lack of oxygen, extremities, as well as the lips and tongue, frequently turn blue. Pupils may be constricted to a pinpoint. Many heroin users inject the drug into their body with a needle, a practice known as mainstreaming. Consequently, they also may have needle or track marks, generally found on their arms. Chronic users often damage the blood vessels in their arms to such a degree that they resort to injecting the

heroin into their legs, eyelids, or between their toes. Others also attempt to mask the needle marks by injecting into a tattoo.[3] Although only an autopsy can determine the exact cause of death, investigators and first responders can use these characteristics to initially determine that death resulted from an opiate overdose.

Crime Scenes

At this point, officers should secure the crime scene as if it were the site of a homicide.[4] They should direct nonessential personnel, such as emergency medical workers, and family members away from the area and document everyone who enters it. Homicide and drug investigators, as well as crime scene technicians, should be called to the site. Before anything is disturbed, the entire scene should be photographed,

including the victim. Only then should the victim be turned over to the medical examiner for an autopsy. Finally, investigators should perform an organized search to gather physical evidence.[5]

Drug crimes usually yield two valuable pieces of evidence not always present in other crimes. First, investigators should pay particular attention to any items of paraphernalia that could be used to package and store drugs, as well as to mechanisms that someone could use to ingest a drug. Heroin typically is packaged in small glassine or wax bags about the size of a quarter and then is ingested by either snorting it through the nose or injecting it into the body. During the search, investigators should look for cut drinking straws or rolled paper, such as dollar bills, used to snort heroin. To inject heroin, users must liquefy it, typically accomplished by heating the heroin and some water on a spoon with a candle or cigarette lighter. Therefore, investigators also should search for spoons, heat sources, and hypodermic needles used to inject heroin. Because prescription drugs can be crushed and snorted, investigators should look for pill bottles and devices capable of crushing hard pills into a powder.

Items of drug paraphernalia prove especially important

> **Victims of an opiate overdose often exhibit specific characteristics.**

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because they may contain samples of the drug. Officers should carefully package objects suspected of containing drugs or drug residue in separate containers and transfer them to a laboratory for analysis to determine the specific drug, its purity level, and any adulterants or other substances combined with it. Advances in technology have enabled some laboratories to conduct a signature analysis of the drugs that provides its specific chemical composition, or signature,[6] which then can be compared with that of another sample of drugs to help determine if both originated from the same batch. This test can prove crucial in linking the drugs found on an overdose victim back to the original dealer. In addition to chemical testing, investigators should request that the submitted evidence be examined for latent fingerprints.

Users contact a dealer and order drugs using landline or cellular telephones, personal digital assistants (PDAs), or the Internet, constituting the second piece of valuable evidence. During the crime scene search, investigators should seize all such communication devices, which create a paper trail that can aid in an investigation. Using a subpoena or court order, investigators generally can obtain usage records of these devices from the service provider (e.g., the phone company

or Internet-service provider) and analyze them. The analysis often provides investigators with a clear time line on the activities of the victim, including dates, times, and duration of contacts between the victim and drug dealer. These business records frequently furnish additional corroboration to physical evidence discovered at the crime scene.

> **“ …once introduced into the human body, heroin quickly metabolizes back to its pure form, morphine. ”**

Autopsies

Although a preliminary determination of death may be made at the crime scene, only an autopsy can definitively establish the cause of death. Prior to the autopsy, the victim should be thoroughly photographed. Pictures should capture the general condition of the victim, as well as any signs specific to an opiate overdose, including froth or needle marks. In addition to normal autopsy protocols, such bodily fluids as blood, urine, and eye vitreous should be

collected and preserved specifically for toxicological tests.[7]

Investigators and pathologists should be aware that once introduced into the human body, heroin quickly metabolizes back to its pure form, morphine. As a result, if the victim ingested heroin, toxicology reports will show a presence for morphine, not heroin.[8] Having this knowledge often will alleviate any confusion regarding what drugs the victim may have used. As always, investigators should discuss the autopsy procedures and findings with the pathologist and prosecutor if additional testing needs to be conducted.
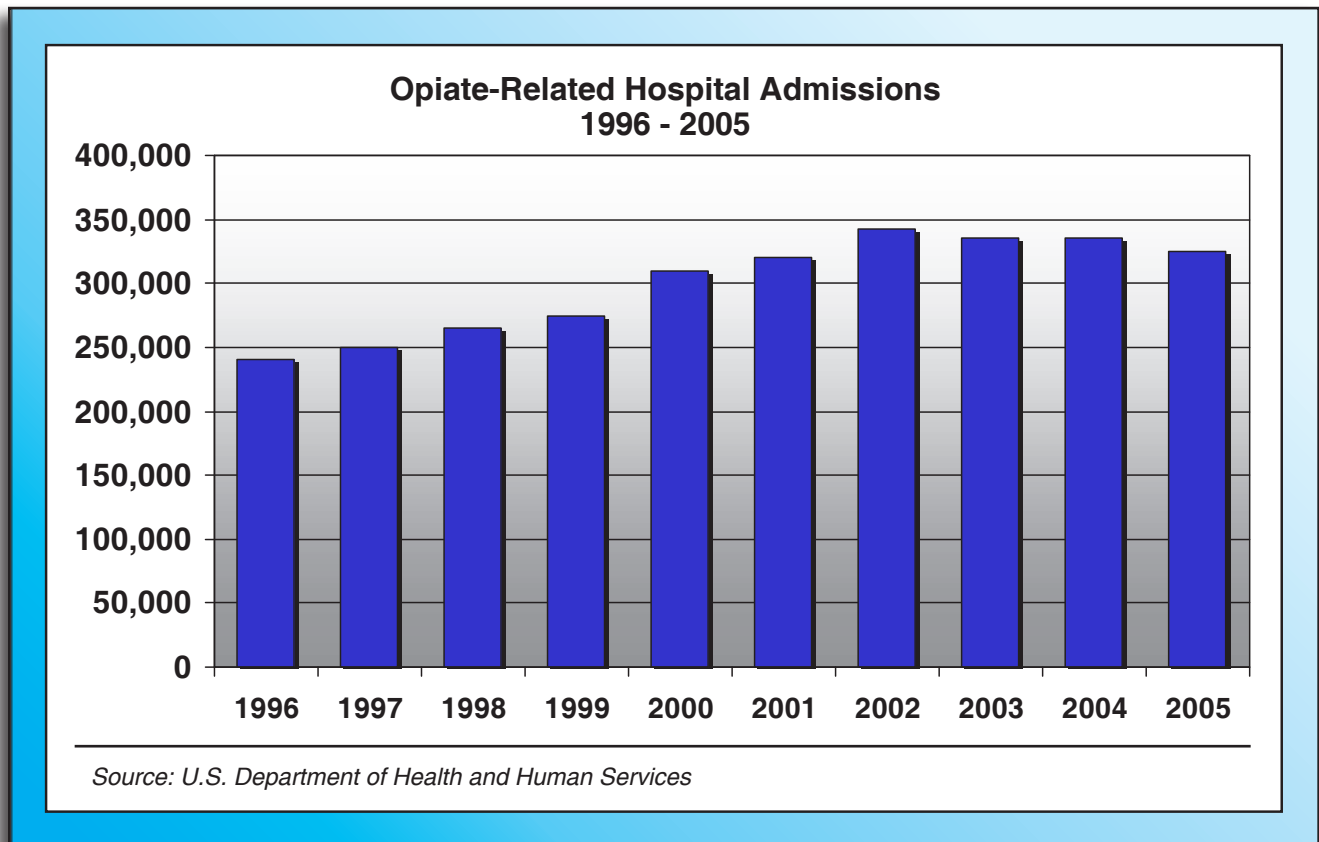
Legal Tools

A drug overdose that drew national media attention inspired the creation of a law that now allows investigators to target drug trafficking organizations responsible for overdose deaths. In June 1986, the Boston Celtics' first-round draft pick, Len Bias, was found dead in his college dormitory from a drug overdose. That same year, in response to Bias' death, as well as to the proliferation of crack cocaine, Congress enacted new federal drug laws. One of the provisions, commonly referred to as the Len Bias Law, provides for a mandatory minimum term of incarceration for 20 years and a maximum life sentence for a dealer who distributes drugs that cause

death or serious bodily injury.[9] Therefore, drug dealers face a penalty of no less than 20 years in federal prison if it can be determined that the drugs they sold caused the overdose, regardless of the quantity. In federal, as well as most state, prosecutions, sentences for drug crimes are determined by the quantity of drugs sold. In cases involving an overdose, however, the quantity of drug sold is secondary, possibly even irrelevant, in determining a defendant's sentence. It is not necessary that the victim die from a drug overdose for this law to apply. The Len Bias Law provides for the same punishment if death or serious bodily injury occurs as a result of the drugs.[10] Federal law defines serious bodily injury as that which involves, "a substantial risk of death; protracted and obvious disfigurement; or protracted loss or impairment of the function of a bodily member, organ, or mental faculty."[11] If the victim suffers a drug overdose but does not die, investigators should consult with their prosecutor to determine if the overdose falls within the definition of serious bodily injury.[12]

Case Development

All law enforcement agencies should join in this effort to investigate these crimes. The benefit of investigating drug overdoses derives from the enhanced sentencing provision of the law. Faced with lengthy jail terms, as well as the desire not to be associated with a death, suspects and potential defendants may be more apt to cooperate with law enforcement than in other investigations. Cooperation may allow defendants to escape the mandatory minimum sentence of 20 years. To this end, investigators may

Opiate-Related Hospital Admissions
1996 - 2005

Source: U.S. Department of Health and Human Services

be able to quickly garner the assistance of suspects, thereby rapidly identifying and targeting other persons working up the chain of supply. Rather than targeting a single dealer, investigations should aim to identify all individuals involved in the chain of distribution of the drugs to the victim, thus dismantling an entire organization.

To be successful, investigators must fulfill two prongs of the law. First, they must prove that the victim died or suffered serious bodily injury as a result of an overdose. Evidence gathered from the crime scene and autopsy can help achieve this. Second, investigators must prove that the drugs that caused the overdose came from a specific dealer, which, oftentimes, is the most difficult component to prove. They should examine the business records of service providers to show communication between the victim and drug dealer. Investigators also should question witnesses regarding their knowledge of drug dealing between the victim and dealer. In addition to these reactive measures, investigators should consider proactive ones as well. They could send a cooperating witness to meet with the dealer to obtain statements or other evidence linking the dealer to the victim. In rare instances where the dealer is unaware that the victim has died, investigators or cooperating

witnesses may pose as the victim and order additional drugs or acquire other incriminating evidence, such as statements. These measures, used in conjunction with the physical evidence, can assist investigators in identifying and prosecuting all persons responsible for the overdose.

> " *…investigators should consult with their prosecutor to determine if the overdose falls within the definition of serious bodily injury.* "

Conclusion

Unfortunately, opiate overdoses have a tremendous impact on society. However, such incidents can assist law enforcement agencies in effectively targeting and dismantling an entire drug trafficking organization. Often, overdoses are not considered crimes. To change that, officers, investigators, and first responders should know the signs of a drug overdose. Further, they need to be aware of the law in their jurisdiction, as well as federal law, as it relates to overdoses. Administrators should

develop sound policy and procedures dictating that overdoses be handled as homicides, thereby giving these investigations priority and integrity. A successful overdose investigation has the potential to curtail drug use, drug crimes, and drug dealing in a particular area, gaining positive outcomes from an otherwise tragic event. ✦

Endnotes

[1] U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration; *http://wwwdasis.samhsa.gov/webt/information.htm*.

[2] Werner U. Spitz, ed., *Medicolegal Investigation of Death* (Springfield, MA: Charles C. Thomas, 1993).

[3] Ibid.

[4] For more information, see John B. Edwards, "Homicide Investigative Strategies," *FBI Law Enforcement Bulletin*, January 2005, 11-13; and Gary Rothwell, "Notes for the Occasional Major Case Manager," *FBI Law Enforcement Bulletin*, January 2006, 20-24.

[5] Charles R. Swanson, Neil C. Chamelin, and Leonard Territo, *Criminal Investigation* (New York, NY: McGraw-Hill, 1996).

[6] Lee Siegal, "Chemical Cop," *The Salt Lake Tribune*, January 27, 2000; *http://www.science.utah.edu/ehleringer2.html*.

[7] Bernard Knight, *Simpson's Forensic Medicine* (London, England: A Hodder Arnold Publication, 1997).

[8] Spitz.

[9] 21 U.S.C. § 841(b)(1)(A)-(c).

[10] 21 U.S.C. § 841(b).

[11] 18 U.S.C. § 802(25).

[12] In addition to the federal government, many states have enacted laws with provisions for drug overdoses.

Bulletin Report

Conducted Energy Devices

An increasing number of law enforcement agencies use conducted energy devices (CED), popularly known as stun guns. At the same time, deaths associated with these apparatuses have risen. To help understand whether the technology can contribute to or cause death and, if so, in what ways, the National Institute of Justice (NIJ) has commissioned a study, one of several NIJ-funded research projects on CEDs. This study, *Deaths Following Electro-Muscular Disruption*, began in May 2006, with full findings expected in 2009.

Approach Overview

Chaired by both the NIJ deputy director for science and technology and a medical examiner appointed by the National Association of Medical Examiners, the study's steering group also includes representatives from the Centers for Disease Control and Prevention and the College of American Pathologists. The steering group selected members of the mortality review panel—a distinguished group of physicians that include a cardiologist, an emergency medicine doctor, five medical examiners, and a toxicologist—who conduct reviews of deaths associated with CEDs. The panel can draw upon consulting specialists, such as an anesthesiologist, clinical pathologist, epidemiologist, electrical engineer, neurologist, and psychiatrist as needed. The review combines findings from autopsy and toxicology analyses with those from scene investigations, postexposure symptoms, and postevent medical care and assesses any diseases subjects may have had to determine whether these may have contributed to or caused the death.

In addition, NIJ is collaborating with the International Association of Chiefs of Police (IACP) to conduct field research to support these reviews of deaths related to CEDs. The IACP will bring together experienced investigators to collect data that can help the reviewers determine the cause of death and the possible role of CEDs in them.

Preliminary Findings

In an interim report, the panel said that law enforcement agencies need not stop using CEDs but, rather, cautioned that they should employ the technology reasonably and only after proper training. Departments that use CEDs report reduced injuries to officers and suspects alike. However, deaths and serious injuries of suspects also occur.

The panel also advised that the purported safety margins of CED deployment on normal, healthy adults may not apply to small children, pregnant women, people with diseased hearts, senior citizens, and other at-risk individuals. Law enforcement organizations should avoid using CEDs against these populations (when recognized) unless the situation excludes other reasonable options. Additionally, underlying medical conditions may cause behavior that requires subdual by law enforcement, including the use of CEDs. Abnormal mental status in combative or resistive subjects may be associated with a risk for sudden death and should be treated as medical emergencies.

Preliminary review of deaths indicates that many are associated with continuous or repeated discharge of the CED. Circumstances may occur in which repeated or continuous exposure is required, but law enforcement officers should be aware that the associated risks are unknown. Therefore, caution is urged in using multiple activations of CEDs as a means to accomplish subdual. To learn more about this study and to download a copy of the interim report, please visit the NIJ Web site at *http://www.ojp.usdoj. gov/nij/topics/technology/less-lethal/incustody-deaths.htm*.◆

The Bulletin Notes

Law enforcement officers are challenged daily in the performance of their duties; they face each challenge freely and unselfishly while answering the call to duty. In certain instances, their actions warrant special attention from their respective departments. The *Bulletin* also wants to recognize those situations that transcend the normal rigors of the law enforcement profession.

Trooper Adkisson

While on patrol, Trooper J. Todd Adkisson of the Illinois State Police responded to a traffic crash approximately 7 miles from his location. Upon his arrival, he observed smoke pouring out of a car that was upside down against a guardrail and fully engulfed in flames. Two occupants had escaped, but another passenger remained trapped in the back seat. After Trooper Adkisson made repeated efforts, resulting in burns to both hands, he pulled the victim to safety. Although the individual sustained considerable burns, he ultimately survived.

Deputy Bieling

Officer Cerankowski

Trooper Lumpkin

One morning, Deputy Daniel Bieling of the Onondaga County, New York, Sheriff's Office, Officer James Cerankowski of the Baldwinsville, New York, Police Department, and Trooper George Lumpkin, Jr., of the New York State Police responded to confront a fire that was rapidly spreading throughout several buildings. With the fire department still en route, the three officers bravely entered the burning structures to alert and assist residents, ensuring that everyone was evacuated.

Patch Call

The patch of the Byron, Illinois, Police Department features the Soldier's Monument, dedicated in 1866 and the state's first to be erected to honor the memory of the men who died in the Civil War. Surrounding the monument is the seven-point badge worn by Byron's police officers.

The Merced, California, Police Department's patch has a collection of various sights of Yosemite National Park, including Yosemite Falls, Half Dome, and Yosemite Meadows. The major highway leading to the park goes through the city, thus earning it the distinction of the Gateway to Yosemite.