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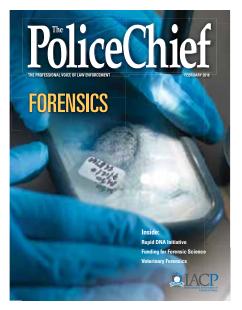
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Forensic science dates back well over 200 years, when Scotland Yard first connected a bullet to the murder weapon (1835) and the first fingerprint classification system was developed (1892). The field has advanced significantly since then, and, when used effectively, forensic science—in all its many forms—can provide valuable contributions to law enforcement's pursuits of justice and public safety.

PoliceChief February 2018 VOLUME LXXXV, NUMBER 2

The official publication of the International Association of Chiefs of Police, Inc.

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The Police Chief (ISSN 0032-2571) is published monthly by the International Association of Chiefs of Police, 44 Canal Center Plaza, Suite 200, Alexandria, VA 22314-2357, USA; 703-836-6767; fax: 703-836-4543. Periodicals postage paid at Alexandria, Virginia, and additional mailing offices. Subscription rate of \$30 to IACP members is included in annual membership dues; subscription rate to nonmembers is \$30 per year, domestic and foreign. Single copy, current issue, \$2.50; back issues, \$3, except APRIL Buyers' Guide issue, \$12.50.

POSTMASTER: Send address changes to the Police Chief, 44 Canal Center Plaza, Suite 200, Alexandria, VA 22314, USA.

Canada Post: Publications Mail Agreement #40612608 Canada returns to be sent to Bleuchip International, P.O. Box 25542 London, ON N6C 6B2

NOTE: New subscriptions and changes of address require six to eight weeks to process. Subscriptions begin with next available issue; for backdated subscriptions, place separate order for back issues desired. IACP will not be responsible for replacement of an issue if not notified of nondelivery by the 15th of the third month following the month of issue. Please check address label and promptly mail any necessary changes.

Articles are contributed by practitioners in law enforcement or related fields. Manuscripts must be original work, previously unpublished and not simultaneously submitted to another publisher. No word rate is paid or other remuneration given. Contributors' opinions and statements are not purported to define official IACP policy or imply IACP endorsement.

Printed in the USA.

BPA business publication membership granted September 1991

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Solving Crimes in the Lab: Understanding the Role of Forensic Science in Policing

Forensic science. The phrase often brings to mind the labs filled with futuristic technology featured on popular television shows like CSI, Bones, NCIS, and other crime dramas, where every fingerprint has a match, every DNA sample is in the database, every smartphone is crackable, and every piece of trace evidence is a perfect piece of the puzzle.

Naturally, real-life forensics isn't quite like that. However, law enforcement agencies, much like those fictional departments, do have hardworking forensics experts striving to use forensic science to solve crimes, bolster cases, and ensure the correct people are brought to justice.

These forensic scientists across the world cover an extremely wide realm of topics and evidence types—including biometric data such as fingerprints, DNA, and facial recognition; crime scene evidence such as tool marks, footwear impressions, and ballistic evidence; and emerging realms such as digital evidence. There are specialists in fields beyond these better-known areas as well, including forensic psychology, forensic anthropology, and veterinary forensics, to name a few.

Within this complex, multifaceted realm of science is the potential to increase case closure rates, improve victim services, decrease wrongful conviction rates, and foster public safety—goals we all share for our agencies and the communities we serve. However, to effectively deploy forensic science in the pursuit of justice and safety, police chiefs, detectives, and line officers need to know what tools and solutions are available, what forensic science capabilities exist, and what gaps are present, which is why this issue of *Police Chief* covers multiple aspects of this important topic.

The Automated Fingerprint Identification System (AFIS) has been pivotal to solving cases. Substantial delays that were once a normal part of the fingerprint identification process are now a thing of the past. AFIS provides automated fingerprint search capabilities, latent searching capability, electronic image storage, and the electronic exchange of fingerprints and responses. Once an agency submits fingerprints electronically, they will receive a response back quickly, which aids in solving crimes and preventing further criminal acts.

Rapid DNA can allow law enforcement to either include or exclude an arrestee as a potential

suspect within two hours. This not only aids in the timely prosecution of perpetrators, but also helps to exclude innocent individuals. DNA collection upon arrest is permitted in 31 U.S. states, the U.S. federal government, and Puerto Rico, with 16 states and the federal government permitting analysis at the time of collection, as well. As the Rapid DNA initiative is expanded into booking stations, the number of DNA samples in CODIS will grow exponentially, increasing law enforcement's ability to link serial offenders to other crimes they have committed.

Veterinary forensics can be key to identifying animal cruelty cases, which are now a separate category in NIBRS. Having access to experts who can differentiate between animal cruelty and nonviolent animal deaths is important for law enforcement, as individuals who commit animal cruelty often also commit interpersonal violence, including mass shootings, domestic violence, and serial killings.

Digital Evidence is becoming even more critically important to our investigations each day, with individuals using smartphones and other digital devices as their primary forms of communication and storage. Our agencies are



Louis M. Dekmar, Chief of Police, LaGrange, Georgia, Police Department

continually confronted by the need for exceptional access to encrypted data, advanced tools, and forensic capabilities, as well as resources to address the increased expense resulting from barriers to digital evidence access. The speed of change for technology and the use of encryption, the culture of digital technology use, pervasive privacy concerns, and the increasing importance of digital evidence to public safety must all be understood, balanced, and planned for, and the IACP, the National Institute of Justice, and the FBI are working to provide the necessary knowledge base and resources law enforcement needs.

Regardless of the type of forensic science being performed, for the techniques and technologies to work (and for the results to be used in court), evidence must be collected from crime scenes and victims in a precise manner that prevents contamination or erroneous documentation. Many agencies operate with a full staff of less than 50 individuals, meaning that those who collect crime scene evidence for processing are officers, not crime scene specialists. Therefore, it is critical that we train our officers in evidence collection, evidence control, and crime scene processing. Several resources exist for agencies seeking to better train their officers:

- IACP model policies and discussion papers on evidence control and other investigative procedures
- National Institute of Justice's Crime Scene Guides for law enforcement and first responders, covering topics such as death scenes, fire and arson scenes, bomb and explosion scenes, and electronic crime scenes
- Crime Scene Investigation: A Guide for Law Enforcement, a step-by-step guide for crime scene investigations developed by the National Forensic Science Technology Center and available for free online

Understanding what forensic science can contribute to law enforcement and how the two fields intersect allows us to increase our agencies' capabilities and improve our service to our communities.

Access this article online at www.police chiefmagazine.org for links to the resources mentioned here.







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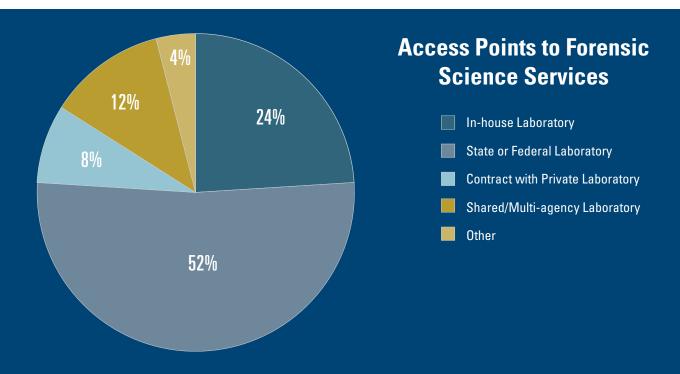


THE DISPATCH

Police Chief knows that many of the best ideas and insights come from IACP members who serve their communities every day. The Dispatch is an opportunity for members and other readers to share their wisdom, thoughts, and input on policing and the magazine.

MEMBERS SPEAK OUT

In December, *Police Chief* asked our readers how their agencies access forensic science services for their investigations. Here is what you told us:



IACP IS HOLDING A PHOTOGRAPHY CONTEST!

This year's topic is **COMMUNITY-POLICE ENGAGEMENT**, and the winning photograph will be featured on the cover of the August 2018 issue of *Police Chief*.

The contest runs from February 1–May 1, 2018. Photos must fit certain specifications to be considered for the grand prize. Visit www.policechiefmagazine.org/photo-contest to learn more or to submit a photo.



YOUR TURN 2



What is your agency's greatest need for increasing your capacity to serve crime victims?

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LEGISLATIVE ALERT

IACP Second Vice President Testifies on the Long-term Care Needs of First Responders Injured in the Line of Duty

By Sarah Guy, Senior Advisor, IACP

On January 17, 2018, IACP Second Vice President Steven Casstevens, chief of the Buffalo Grove, Illinois, Police Department, testified on the long-term care needs of first responders injured in the line of duty before the U.S. Senate Committee on the Judiciary, Subcommittee on Crime and Terrorism.

In his testimony, Chief Casstevens addressed the physical and mental well-being of first responders and the current gaps and needs in terms of care for injured first responders.

Chief Casstevens stressed that the care needed by first responders does not pertain only to physical injuries. Mental health and well-being are equally critical, but they often fail to receive the same level of attention and resources. Mental health issues and the threat of officer suicide are often topics no one wants to acknowledge. In a profession that prides itself on courage and heroism, mental health concerns can often be mistakenly seen as a weakness.

Providing sufficient support for injured first responders should not fall solely to each law enforcement agency; support should also come from federal, state, and local governments. During the hearing, Chief Casstevens laid out several recommendations:

Early Warning and Prevention Protocols: Mental health issues are more easily resolved when addressed at their earliest stages. Only well-designed, strategic early warning and intervention programs can facilitate a prompt and timely response to a mental health problem. In law enforcement, due to a lack of resources, these early warning and intervention programs are often inconsistent or lacking entirely. Institutionalizing efforts to identify early warning signs and implement intervention protocols is crucial to improving the resiliency and overall mental health of first responders. Funding through the U.S. Department of Justice's National Institute of Justice (NIJ) to research early warning signs and to develop institutionalized efforts and protocols would be extremely beneficial to the safety and wellbeing of first responders.

Public Safety Officers' Disability Benefits (PSOB) Disability Benefits Program: Injured officers or families who are reeling in the aftermath of an injury need to be able to continue to easily submit and obtain their PSOB claims, which makes it essential to adequately fund and administer the program. Additionally, there must be adequate funding of the Public Safety Officers' Education Assistance (PSOEA) Program, which provides financial assistance for higher education to the spouses and eligible children of first responders who have been killed or permanently disabled in the line of duty.

Enhance Benefits for Injuries that Fall Outside of Permanently Disabled Category: Create a subset to PSOB that provides assistance for officers who experience injuries that do not qualify as "permanent disability." Although the PSOB program's extremely strict definition of an injury states "injuries must permanently prevent officers from performing any gainful work in the future," aid is also important for those who cannot return to the agency. Even a minor injury can become more serious over time and can cause psychological and emotional effects in addition to physical effects.

Therefore, a new category with appropriate funding for officers who were injured in the line of duty but are not permanently disabled should be created to provide necessary assistance for both their physical injuries and mental health assistance.

Financial assistance beyond what is given by the state or worker's compensation should be awarded to first responders who put their lives on the line each day to protect the public.

Injury Tracking Efforts: While assaults against and fatalities among law enforcement are well-documented through efforts such as the Federal Bureau of Investigation's (FBI) Law Enforcement Officers Killed and Assaulted (LEOKA) program, there is no clearinghouse of officer injury data at the state, local, or tribal levels. Injuries to law enforcement officers result in significant monetary and manpower cost to agencies, and, in a climate of declining budgets, such losses can impact operations of a department.

Through funding from the Department of Justice's COPS Office, the IACP is currently working with law enforcement agencies to pilot an enhanced, easy-to-use tracking tool for injury data collection to track officer injuries and collect injury data. This injury tracking tool will be piloted in the state of Delaware. The resulting data will highlight areas where injury rates are high and guide the creation of strategies to better ensure improved overall workplace safety; increase overall health and wellness of officers; and, ultimately, enhance effective policing.

Federal funding assistance is needed to track these data on a U.S.-wide level, which will assist in the development of innovative, injury prevention policies, practices, and training that can be adopted by other agencies.

To view the hearing and to read a full copy of Chief Casstevens' testimony, visit the U.S. Senate Committee on the Judiciary website at www.judiciary.senate.gov/meetings/the-long-term-care-needs-of-first-responders-injured-in-the-line-of-duty or the IACP website at www.thelACP.org/letterstestimony.

U.S. Department of Justice Rescinds the Cole Memo

On January 4, 2018, U.S. Attorney General Jeff Sessions issued a memorandum rescinding the Cole Memo, thus restoring discretion to U.S. Attorneys on how they prioritize the investigation and prosecution of violations of federal drug laws involving marijuana. The IACP strongly supports this policy change.

In 2013, the Cole Memo announced that the U.S. Department of Justice would alter its enforcement efforts regarding the federal law as it relates to marijuana legalization. At that time, the IACP announced our opposition to the Cole Memo because of our longstanding position against the legalization of marijuana and the public safety risks the drug poses to communities. The actions taken by the Department of Justice are consistent with IACP policy and would allow for legal action to preempt the state marijuana legalization laws that conflict with federal law and enable U.S. attorneys to enforce federal law concerning marijuana as the U.S. Congress intended when it enacted the Controlled Substances Act.



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OFFICER SAFETY CORNER

Equine-Assisted Learning Resiliency Classes to Reduce PTSD and Stress



By Donna Mayfield, Spirits Healing Souls, El Dorado, Kansas

It is no secret that many first responders, especially police officers experience post-traumatic stress disorder (PTSD) and high levels of stress. Despite the prevalence of these issues, training the mind prior to a critical incident is often overlooked. While training the body before a critical incident is completed via scenario training, classes or training on critical incident stress usually occurs after a critical event. Training the mind for a critical incident is not accomplished with scenario training because the conscious part of

the brain is not engaged in the threat, as evidenced by studies. For instance, "The Impact of a New Emotional Self-Management Program on Stress Emotions, Heart Rate Variability, DHEA and Cortisol," examines the body's chemical reaction when the brain perceives a threat and the fight-or-flight response takes over. The study revealed that the unconscious part of the brain is in control in these crisis situations and sends messages to survive; reasonable thoughts are not involved with the decisions to resolve through protocol. Even after the crisis is over, the body takes time to exit survival mode—in scenario training, it can sometimes take up to 20 hours for the body's hormone levels to become "normal" again. 1

Training the brain to keep the adrenaline levels in a zone where the higher functioning parts of the brain are engaged in the moment is a dilemma. A class where individuals are conscious of the threat, and working under that threat is the only way to duplicate a real critical incident. Even in very realistic scenario training, the individuals consciously know they are safe in the training environment, although the unconscious part of the brain will still go into survival mode to keep the person alive, according to police officer resiliency research.² To resolve this disconnect, resiliency and mindful awareness training target the conscious and unconscious parts of the brain to work together. Equine-assisted learning (EAL) is one such approach that can engage both the conscious and unconscious parts of the brain simultaneously.

Equine-Assisted Learning

In an EAL class, the participants complete a task with horses. The horses and people all work together to complete the task. If the task is not going well, people are called in to reflect on the horses' success. With the focus on the horses, the participants exhibit less resistance to learning about themselves.³ The group needs to problem solve in order for the horses to succeed at the task.

Working with horses on the ground can be stressful, particularly for people unfamiliar with horses, because of the horses' unpredictability and the realization that one could potentially get hurt if something went wrong. This real-life risk is an element missing in scenario training that comes up before, during, and after all calls for service. For instance, entering an arena with multiple horses can mirror the stress of responding to a call involving multiple individuals (e.g., domestic dispute, shots fired). It's impossible to know immediately the state of mind and potential behavior of each person (or, in this case, horse). Staying calm in these situations can be very difficult, but, with the right training, an individual can learn how to recognize, control, and manage his or her emotions for a better outcome.

However, in addition to the stress, learning with horses is also calming for many participants. More study is needed to understand why, but the class writing assignments and end-of-class surveys indicate that people become cognizant of their emotional states before, during, and after class. Horses support this observation because they will only willingly be with people who are emotionally calm. Horses become the diagnostic tool to the emotional levels of the people around them, and participants learn to recognize what calm and emotional control feels like to them.

Each horse has its own personality, strengths, and issues that the students must accommodate for the success of the horse and the task. Participants will ask if the horses bite or kick, but to maintain the realism and

risk level needed, the participants are reminded that they rarely receive full information on people involved in calls and will not have all the information in class, either.

While participating in EAL, everyone must be mindful of the horses and the people working with the horses. They must communicate and make quick decisions when the horses try to get out of doing the task. The class requires people to engage critical thinking skills, environmental awareness, self-regulation, teamwork, and leadership skills.

The same task is completed with all of the horses. Like people, not all horses act the same, so working with multiple horses requires the participants to read the body language of each horse. Just as officers must read the body language of the various people they encounter during calls. As the individuals bring down their energy, adrenaline, or emotional levels, the horses will cooperate more easily.

Understanding the appropriate use of force necessary to complete the task is key—the amount of force used to lead one horse to success will create fear in another. Whether the student is an experienced rider or has never been around a horse, working with horses on the ground often makes one feel defenseless and anxious. Seeing a 900- to 1,200-pound animal breathing, thinking, and trying to survive the situation leads the person next to the animal to consider his or her own survival, as well.

Training the brain to stay engaged during critical incidents is the ultimate goal in EAL classes. The horses get people to simultaneously tap into the conscious and unconscious parts of the brain to complete the task. Each member must think about how he or she impacts the situation and adjust emotionally when needed. This mind-set keeps people in the moment, both when they are safe and when they are not. Transitioning between the different horses mimics the transitions officers constantly make between calls, work, home, and family. When members of the class discuss events, changes, and different approaches, they are working together for a common goal. While writing the assignment, first responders process their own individual feelings, emotions, and successes. The physical experience of the task, the discussion, the writing assignment, and the successful outcome allow the brain to exercise positive pathways for mental control in the moment.⁵

Conclusion

Training the brain to be resilient takes more than a lecture or equipment monitoring a heart rate. In EAL, interacting with a horse can mimic interacting with people—horses, like people, can be frustrating when they are noncompliant, and one's approach can affect both people's and horses' behaviors. As the participants in EAL learn to watch the horses' behavior, they also learn how to reset emotionally to match the situation and the horse. Tunnel vision is not an option in the arena. Learning how to keep one's peripheral vision active is important to the safety of others and oneself and allows individuals to see other options to get the horse to comply. The personal satisfaction of the horse's compliance is felt by all in the group. Practicing emotional awareness and adjustments increases the person's ability to manage stress levels emotionally and physically. It is this experience with the horses that helps the brain recognize the emotional state and adjust the emotional response to survive and thrive. The resiliency of the horses is how first responders learn about stress and living in the moment. Horses don't care what happened five or ten minutes ago; it is what is happening now that allows them to comply with expectations of the task. What is happening at that moment reflects how people are handling the situation. This is not a computer simulation of a scenario; it is a real-life event with a very large living animal that just wants to survive and thrive. And, through focused work with these animals, first responders can do the same. ❖

Notes:

¹Rollin McCraty et al., "The Impact of a New Emotional Self-Management Program on Stress, Emotions, Heart Rate Variability, DHEA and Cortisol," *Integrative Physiological and Behavioral Science* 33, no. 2 (April–June 1998): 151–170.

²Rollin McCraty and Mike Atkinson, "Resilience Training Program Reduces Physiological and Psychological Stress in Police Officers," *Global Advances in Health Medicine* 1, no. 5 (November 2012): 42–64, http://journals.sagepub.com/doi/pdf/10.7453/gahmj.2012.1.5.013; McCraty et al., "The Impact of a New Emotional





Self-Management Program on Stress, Emotions, Heart Rate Variability, DHEA and Cortisol"; Bessel Van Der Kolk, *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma* (New York, NY: Penguin Books, 2015).

³Ray Williams, "How Brain Science Can Change Coaching," *Wired for Success* (blog), February 17, 2010, https://www.psychologytoday.com/blog/wired-success/201002/how-brain-science-can-change-coaching.

⁴McCraty and Atkinson, "Resilience Training Program Reduces Physiological and Psychological Stress in Police Officers."

⁵McCraty and Atkinson, "Resilience Training Program Reduces Physiological and Psychological Stress in Police Officers."

The IACP Center for Officer Safety and Wellness focuses on all aspects of an officer's safety, health, and wellness, both on and off the job. It is important to incorporate these topics at all stages of a career—from recruitment, through promotions, to retirement, and beyond. IACP wants to ensure that law enforcement professionals have the resources they need to remain healthy and safe.

RESEARCH IN BRIEF

The IACP Research Advisory Committee is proud to offer the monthly Research in Brief column. This column features evidence-based research summaries that highlight actionable recommendations for Police Chief magazine readers to consider within their own agencies. The goal of the column is to feature research that is innovative, credible, and relevant to a diverse law enforcement audience.

Identifying and Interacting with Victims of Sex Trafficking

By Teresa C. Kulig, MA, Doctoral Candidate, University of Cincinnati,

Ithough the exploitation of human beings Ais centuries old, the term "sex trafficking" has only recently received widespread attention. Scholars have probed the nature of these offenses in hopes of designing effective interventions. However, special attention needs to be paid to police officers because they are likely to be among the first to encounter trafficking victims. Accordingly, law enforcement can play a vital role in identifying victims and gaining their trust.



Overview of Sex Trafficking

Sex trafficking is defined by the U.S. federal government as the recruitment, harboring, transportation, provision, obtaining, patronizing, or soliciting of a person for the purpose of commercial sex in which a commercial sex act is induced by force, fraud, or coercion.1 The definition for juvenile sex trafficking is more complicated and can differ by jurisdiction. According to U.S. federal legislation, an individual under the age of 18 who engages in commercial sex acts is automatically considered a trafficking victim, regardless of whether force, fraud, or coercion was employed. However, because state and federal legislation may differ, some level of external manipulation may need to be proven at the local level for a case involving a youth to be considered trafficking.

While definitions for sex trafficking are important, a working knowledge about the risk factors is vital for law enforcement officers to help them recognize potential cases. Vulnerable populations include adults or minors with a history of trauma or abuse, family dysfunction, running away, homelessness, relationships with older individuals, and substance use.2 Individuals with these backgrounds are often ideal prey for traffickers because they lack positive social support systems and resources. Traffickers will often address the needs of vulnerable victims as a way to later manipulate, control, and exploit them.

Identifying Sex Trafficking

It is important for police officers to recognize that identifying victims of sex trafficking is challenging and requires awareness and expertise. The hidden nature of this crime makes it difficult for officers to recognize incidents as sex trafficking events even when they know which vulnerable populations are at the greatest risk for being trafficked. Still, law enforcement officials are an essential component in identifying trafficking victims because they are likely to encounter these victims through community tips or during the ongoing investigation of other crimes.3

To keep victims hidden, traffickers use a variety of techniques to physically, emotionally, psychologically, and financially control their victims.4 These manipulative tactics mean that trafficking victims may be reluctant to admit that they require help. For example, victims of sex trafficking might not view themselves as victims

or they might be too frightened to seek help. Victims might also believe that their traffickers are their partners and be unwilling to turn them in to authorities. In particular, victims could appear unemotional, uncooperative, or aggressive in their dealings with police officers. ⁵ These factors can make it extremely difficult for officers to differentiate an individual in need of services from an individual who is voluntarily engaging in prostitution. In this respect, it is especially important for law enforcement agents to be skilled interviewers to uncover the truth about potential trafficking situations.6 Otherwise, the victims' negative response and seeming lack of interest in receiving help could lead officers to arrest victims as prostitutes rather than offer them protection and services.

Interactions with Victims

Either before or after a victim of sex trafficking is identified, his or her interactions with police can have implications for later cooperation in investigations. Victims are key witnesses that are often required to successfully prosecute traffickers, but investigations are delayed when victims do not trust law enforcement officers or agencies.⁷ Therefore, police officers should be mindful of how they approach and interact with victims or potential victims in the field.

Although many positive interactions occur between victims and police officers, some victims report that officers blamed them for their own abuse rather than offering them services.8 Other victims have described overt abuse and neglect by law enforcement agents during their exploitation.9 These negative interactions with officers create conflict and do little to foster victims' confidence in the criminal justice system. During these exchanges, it is important for law enforcement officials to help facilitate trust with victims in the hope of increasing their willingness to work with investigators and to provide details that will incriminate their traffickers. While victims are not always helpful or cooperative with officers, damaging interactions will further deteriorate relationships with victims and impede successful responses to sex trafficking.

Action Items

Overall, the research-based information herein provides a foundation for improving victim identification and interactions between police officers and victims of sex trafficking. To strengthen efforts, law enforcement agencies can consider these five action items:

- Create officer training programs to establish the definition and warning signs of sex trafficking to increase the likelihood of identifying potential victims.
- Partner with community agencies to increase awareness and identification of sex trafficking victims who might not come to the attention of law enforcement.
- Create protocols based on existing best practices for interviewing potential victims of sex trafficking to increase trust and the likelihood of victims' cooperation.
- Develop specialized trafficking units dedicated to investigating these crimes so resources are not taken away from other units.
- Build a relationship with community providers to ensure victims of sex trafficking are offered needed services (e.g., housing, medical services, counseling) after they are identified.

Resources for Law Enforcement

For more information on human trafficking and sex trafficking, visit: www.thelACP.org/humantrafficking and www.thelACP.org/childtrafficking.

Notes

¹Victims of Trafficking and Violence Protection Act of 2000, Pub. L. No. 106-386, 114 Stat. 1464 (2000); Justice for Victims of Trafficking Act of 2015, Pub. L. No. 114-22, 129 Stat. 227 (2015).

²Jennifer Cole and Ginny Sprang, "Sex Trafficking of Minors in Metropolitan, Micropolitan, and Rural Communities," Child Abuse & Neglect 40 (February 2015): 113-123; Linda A. Smith, Samantha Healy Vardaman, and Melissa A. Snow, The National Report on Domestic Minor Sex Trafficking: America's Prostituted Children (Vancouver, WA: Shared Hope International, 2009), https://sharedhope.org/wp-content/uploads/ 2012/09/SHI_National_Report_on_DMST_2009.pdf; Linda M. Williams and Mary E. Frederick, Pathways Into and Out of Commercial Sexual Victimization of Children: Understanding and Responding to Sexually Exploited Teens (Lowell, MA: University of Massachusetts Lowell, 2009), http://faculty.uml.edu/lwilliams/Williams %20Pathways%20Final%20Report%202006-MU-FX -0060%2010-31-09L.pdf.

³Amy Farrell and Rebecca Pfeffer, "Policing Human Trafficking: Cultural Blinders and Organizational Barriers," *The ANNALS of the American Academy of Political and Social Science* 653, no. 1 (2014): 46–64; T. K. Logan, Robert Walker, and Gretchen Hunt, "Understanding Human Trafficking in the United States," *Trauma, Violence & Abuse* 10, no 1 (2009): 3–30.

⁴Heather J. Clawson and Nicole Dutch, *Identifying Victims of Human Trafficking: Inherent Challenges and Promising Strategies From the Field* (Washington, DC: U.S. Department of Health and Human Services,

2008), https://aspe.hhs.gov/system/files/pdf/75321/ib.pdf.

⁵Joan A. Reid, "Doors Wide Shut: Barriers to the Successful Delivery of Victim Services for Domestically Trafficked Minors in a Southern U.S. Metropolitan Area," Women & Criminal Justice 20, no. 1-2 (2010): 147–166

⁶Graeme R. Newman, *The Exploitation of Trafficked Women*, Problem-Oriented Guides for Police Problem-Specific Guides Series, no. 38 (Washington, DC: Office of Community Oriented Policing, 2006), http://www.popcenter.org/problems/pdfs/exploittrafficked women.pdf.

⁷Heather J. Clawson, Nicole Dutch, and Megan Cummings, Law Enforcement Response to Human Trafficking and the Implications for Victims: Current Practices and Lessons Learned (Fairfax, VA: Caliber, 2006), https://www.ncjrs.gov/pdffiles1/nij/grants/216547.pdf.

⁸Linda M. Williams, "Police and Domestic Sex Trafficking of Youth: What Teens Tell Us That Can Aid Prevention and Interdiction," *Journal of Crime and Justice* 38, no. 3 (2015): 297–314.

⁹Laurie Schaffner et al., Experiences of Youth in the Sex Trade in Chicago: Issues in Youth Poverty and Homelessness (New York, NY: Center for Court Innovation, 2016), http://www.courtinnovation.org/sites/default/files/documents/Chicago_0.pdf.

¹¹Office on Trafficking in Persons, "Rescue & Restore Campaign Tool Kits" (July 2012), https://www .acf.hhs.gov/otip/resource/rescue-restore-campaign -tool-kits.



CHIEF'S COUNSEL

Denial of Medical Attention

By John M. (Jack) Collins, Attorney, Police Legal Advisor, Martha's Vineyard, Massachusetts



A frequent federal civil rights claim made against police officers is for deliberate indifference to the serious medical needs of someone in custody. Usually, the person involved in these claims has a significant illness or injury or has died in custody. The claim is under the Fourteenth Amendment, but the liability standard is derived from the Eighth Amendment.

In *Canton v. Harris*, the U.S. Supreme Court held that a person's civil rights claim was cognizable only if the municipality's failure to train its police force reflected a deliberate indifference to the constitutional rights of its inhabitants, vacated the judgment of the court of appeals, and remanded the case for further proceedings to determine whether respondent should have had an opportunity to prove her case under the "deliberate indifference" rule.¹

The Eighth Amendment places a duty on government officials to care for the medical needs of convicted persons in custody. If an individual is denied necessary medical treatment due to acts or omissions so harmful as to evidence "deliberate indifference" to his or her serious medical needs, then such conduct violates the Eighth Amendment and is actionable under Section 1983.² However, as stated, the Eighth Amendment prohibition against cruel and unusual punishment applies only to convicted prisoners. Deliberate indifference is the sole standard adopted by the Supreme Court for judging any claim that prison conditions have violated the Eighth Amendment, and it is a subjective standard.³ On the other hand, the Fourteenth Amendment requirement of due process applies to persons in jail awaiting trial, as well as to persons both in jail or prison being treated as involuntary psychiatric patients.⁴

The U.S. Supreme Court addressed the responsibility of the government for providing medical care under the Fourteenth Amendment in *City of Revere v. Massachusetts General Hospital.*⁵ In *City of Revere*, police shot a criminal suspect as he attempted to flee from the crime scene and then transported the suspect to the Massachusetts General Hospital for treatment. The hospital subsequently sued the city to recover the cost of the suspect's medical treatment. The Supreme Judicial Court ruled for the hospital on the grounds that the Eighth Amendment to the U.S. Constitution, which prohibits cruel and unusual punishment, required the police to provide medical care and included a duty to pay for such medical care. The U.S. Supreme Court

reversed the decision, holding that the duty to pay for medical expenses was not addressed by the Constitution and should be governed by state law. In its opinion, the U.S. Supreme Court reaffirmed its ruling in *Estelle v. Gamble* that the Eighth Amendment prohibition of cruel and unusual punishment is violated by deliberate indifference to the serious medical needs of prisoners. However, since the suspect had not been convicted of a crime, the Eighth Amendment did not apply. That did not absolve the city of a duty to provide medical care, however, because the due process clause of the Fourteenth Amendment also created a duty on the part of the government to provide medical care to persons who become injured during their apprehension by police. The court found that the city had fulfilled that duty and that the Constitution had been satisfied.

Therefore, police officers have a constitutional duty, once they are aware of a serious medical need, to obtain medical care for those persons in their custody. The standard is subjective, but that does not mean that the officer must be aware of the specific medical problem of the person in custody, only that the person is in medical distress.⁷ There is no duty to treat every scrape, bruise, or bump. Even though the injury may be obvious in the sense that bruises and abrasions are visible, the need for treatment must be so obvious as to make lay persons remiss for failing to arrange for immediate medical attention. In other words, a medical need is serious if it is one that has been diagnosed by a doctor as requiring treatment, such as diabetes or epilepsy, or one that is so obvious that a lay person would easily recognize the necessity for a doctor's attention. The seriousness of a person's medical needs may also hinge on the effect of any delay in obtaining treatment. If there is no exacerbation of the injury by the delay in obtaining treatment, meaning there was no urgency in the treatment rendered by medical personnel and the person's condition was not worsened by the delay, then the need probably was not serious.

The subjective nature of the deliberate indifference standard makes the liability determinations in each case somewhat fact-specific. For example, the following claims were sufficient:

- Confiscation and denial of access to prescription drugs.⁸
- Failure to provide drugs to a person suffering from insulin shock.⁹
- Public drunk who was incapable of caring for his own safety died after being placed in a holding cell to sober up.¹⁰

Conversely, there was no liability in the following cases:

- Failure to provide first aid to pedestrian injured in hit-and-run accident (no constitutional duty involved).¹¹
- Officer shot suspect who held out a hand containing a gun in response to the officer's demand that he show his hand. There was no clearly established duty to provide medical aid to a shot suspect prior to the arrival of the EMTs.¹²
- Inebriated driver was taken to the police station after an accident, vomited and died.¹³
- Death of a pretrial detainee, who had swallowed methamphetamine during a roadside stop of a vehicle in which he was riding; the county's policy instructed jailors to implement a written emergency health care plan when an inmate showed signs of unconsciousness or serious breathing difficulties, and no other inmate had ever died of a drug overdose while in the jail.¹⁴
- County sheriff and county jail nurse, in their official capacities, could not be held liable under § 1983 for alleged due process violations in acting with deliberate indifference toward pretrial detainee's medical complaint of a foot rash, absent custom or practice that resulted in detainee being provided with ineffective medical care.¹⁵

- Guardian of incapacitated individual, a former county jail detainee, failed to allege any facts supporting the claim that an unidentified county or public health trust representative's allegedly reckless acts and omissions with respect to a detainee's care, whereby it was determined that the detainee should be transferred back to his cell rather than a hospital, constituted customs, policies, or practices of the county and county public health trust, as required to state § 1983 claim against the county for a detainee's recovery of damages resulting from grand mal seizures that led to a brain hemorrhage and left the detainee in a permanent vegetative state.¹⁶
- County was not liable to the estate of an inmate under § 1983 for deliberate indifference to the inmate's serious medical needs in violation of Eighth Amendment, since county policy did not directly cause county personnel to fail to seek physician approval to reinitiate inmate's prescription medication, although the jail had a written policy of abruptly discontinuing any narcotic medications when inmates were initially processed for booking, regardless of whether the inmate had a valid prescription for the narcotic, the jail also had a policy allowing the narcotic medications to be reinstated with the permission of a doctor.¹⁷
- County sheriff could not be held personally liable in his official capacity under § 1983 to a detainee who was allegedly denied medications and medical treatment while he was incarcerated at the county jail, absent evidence that there was an unconstitutional county custom or policy to deprive inmates of medical treatment, or that the sheriff, as the final policy maker, instituted such a policy or acted with deliberate indifference to the detainee's medical needs.¹⁸
- Jail official's alleged conduct of handcuffing detainee to floor-grate toilet in uncomfortable manner for approximately three hours, if proven, did not shock the conscience and thus did not violate detainee's substantive due process rights, inasmuch as the official took such action after the detainee, who had been diagnosed with manic bipolar depression, had threatened to pull out her own peripherally inserted central catheter (PICC) so that she would bleed to death, and after detainee had shown that having her hands handcuffed behind her back was alone not adequate form of restraint.¹⁹
- Pre-trial detainee did not have objectively serious medical need on intake that required immediate medical attention from the perspective of the jailer, as a layperson, for purpose of qualified immunity analysis of deliberate indifference civil rights claim of detainee's estate under Fourteenth Amendment, even if the jailer had been aware that the detainee had taken methamphetamine before the arrest, since the detainee followed directions, answered questions posed, and remained quiet and seated on a bench inside the jail.²⁰
- Neither Arkansas Department of Human Services (DHS) nor the county sheriff were deliberately indifferent to the serious medical needs of a pre-trial detainee with mental illness who died in county jail from peritonitis, nor was there a policy or custom to deprive detainees with mental illness of treatment, and, thus, sheriff and DHS were not liable, for the purpose of the § 1983 claim asserted by the administrator of the detainee's estate. The detainee died from a condition that neither defendant knew of or suspected, and the sheriff and other jail officers attempted to get the detainee into a mental health treatment facility, but no facility would accept custody of him.²¹
- Pretrial detainee, who simply alleged that jail officials did not act in accordance with municipal procedures, failed to show that the defendant municipalities' training practices were so deliberately indifferent to the rights of detainees as to warrant § 1983 liability under Monell for failure to provide adequate medical care to the detainee.²²

Consider this illustration of the principle. Officers were not liable under a Fourteenth Amendment claim for denial of medical attention when a person was injured while in protective custody because of apparent intoxication.²³ The person, who was suffering from an overdose of prescription pills, appeared intoxicated and was held for 24 hours (although under Massachusetts law, an incapacitated person may not be held in protective

custody for more than 12 hours) because he refused several offers to let him leave. During the time he was in custody, he received neither food nor water, and there were no regular checks on him during the last 12 hours. However, a jury found that the officers did not act with such recklessness as to constitute deliberate indifference to his medical needs.

Practice Pointers

In order to avoid liability, one leading commentator recommends the following:

- Serious medical complaints, especially of a continuing nature, should not be ignored (even if suspicious).
- Medical judgments should be made by medically trained personnel, even if not doctors.
- Even without specific complaints, serious chronic symptoms require attention
- In general, a blind eye to serious medical needs cannot excuse inattention where, with any diligence, jail or prison custodians could have known about them.²⁴

Rather than waiting until a medical emergency occurs, departments should confirm arrangements with ambulance services and hospitals. The requirements for payment should be discussed and the municipality's responsibility clarified.

Notes:

¹City of Canton, Ohio v. Harris, 489 U.S. 378.

²See Estelle v. Gamble, 429 U.S. 97 (1976).

³Wilson v. Seiter, 501 U.S. 294, 111 S. Ct. 2321, 115 L.Ed.2d 271 (1991).

⁴Riggins v. Nevada, 504 U.S. 127, 112 S. Ct. 1810, 118 L.Ed.2d 479 (1992); Washington v. Harper, 494 U.S. 210, 110 S. Ct. 1028, 108 L.Ed.2d 178 (1990).

 $^5 \text{City}$ of Revere v. Massachusetts General Hospital, 463 U.S. 239, 103 S. Ct. 2979 (1983).

6Estelle, 429 U.S. 97.

⁷Farmer v. Brennan, 511 U.S. 825 (1994); Mahan v. Plymouth County House of Corrections, 64 F.3d 14, 18 (1st Cir. 1995).

⁸Mitchell v. Aluisi, 872 F.2d 577 (4th Cir. 1989); Wood v. Worachek, 618 F.2d 1225 (7th Cir. 1980)

⁹Thompson v. City of Portland, 620 F. Supp. 482 (D. Me. 1985).

¹⁰Pantoja v. City of Gonzales, 538 F. Supp. 335 (N.D. Cal. 1982).

¹¹Mueller v. County of Westchester, 943 F. Supp. 357 (S DNY 1996).

¹²Wilson v. Meeks, 52 F.3d 1547 (10th Cir. 1995).

¹³Salazar v. City of Chicago, 940 F.2d 233 (7th Cir. 1991).

¹⁴*Hall v. County of Nemaha*, Neb., D. Neb., 509 F. Supp. 2d 821 (2007).

¹⁵Cox v. Hartshorn, C.D. Ill., 503 F. Supp. 2d 1078 (2007).

¹⁶Rosario v. Miami-Dade County, S.D. Fla., 490 F. Supp. 2d 1213 (2007).

¹⁷Wakat v. Montgomery County, S.D. Tex., 471 F. Supp. 2d 759 (2007), affirmed 246 Fed. Appx. 265, 2007 WL 2461793.

¹⁸Tatum v. Simpson, D.Colo., 399 F. Supp. 2d 1159 (2005), affirmed in part, reversed in part and remanded, 202 Fed. Appx. 301, 2006 WL 2831159, on remand 2007 WL 2914453.

¹⁹Norris v. Engles, C.A.8 (Ark.), 494 F.3d 634 (2007).

²⁰Grayson v. Ross, C.A.8 (Ark.), 454 F.3d 802 (2006), certified question accepted, 367 Ark. 230, certified question answered, 2007 WL 766333.

²¹Winters v. Arkansas Dept. of Health and Human Services, C.A.8 (Ark.) 2007, 2007 WI 1855802

²²Hollenbaugh v. Maurer, N.D. Ohio, 397 F. Supp. 2d 894 (2005), affirmed, 2007 WI 843802

²³Ringuette v. City of Fall River, 146 F.3d 1 (1st Cir. 1998).

 24 lsidore Silver *Police Civil Liability*, vol. 1 (Miamisburg, OH: LexisNexis Matthew Bender, 1994).



Securing a Seat at the Table: **How States Support Forensic Science Initiatives**

By Chris Asplen, Executive Director, National Criminal Justice Association

cross the United States, state and local Alaw enforcement agencies face increasing demands to prevent victimization and respond to crimes in their communities. Crime data on specific incidents, as collected through the National Incident-Based Reporting System (NIBRS) and Uniform Crime Reporting (UCR), can be useful to determine where the most pressing needs are and can clearly illustrate the challenges facing local law enforcement as the complexity of cases increases. Officers and agencies are expected to respond with CSI-like technology while facing limited resources or budget cuts. Fortunately, a variety of sources provide funding for forensic science-related equipment and projects, including one potential untapped resource for law enforcement agencies: the State Administering Agencies (SAAs).

In FY 2014, SAAs in at least 21 U.S. states provided over \$9 million to support forensic science activities and equipment. These funds were used for a variety of projects such as DNA backlog reduction efforts, equipment purchases, records management software upgrades, and forensic investigator positions. Much of this funding came through the state portion of the Edward Byrne Memorial Justice Assistance Grant (Byrne JAG) program. As one of the two major U.S. federal grant programs that support state and local forensic science projects (the other is the Paul Coverdell Forensic Science Improvement Grants Program), state Byrne JAG spending on forensic science initiatives averages \$4–6 million per year.¹

State grant investments in forensic science initiatives and projects are expected to continue to grow. For example, with the recent passage of the Rapid DNA Act of 2017, law enforcement agencies can use Byrne JAG funds to purchase equipment and to train officers on how to use the new technology.² Rapid DNA instrumentation allows police to take saliva samples from consenting suspects and arrestees in certain states while in the police station or similar

booking station context and can return a DNA profile in approximately 90 minutes.

SAAs and Byrne JAG Funding

To better understand how to tap into the resources of the SAAs, local law enforcement agencies must understand the role and the responsibilities of the SAAs. The SAAs are the state agencies responsible for comprehensive criminal justice planning, policy, and program development. Collectively, SAAs manage over \$2 billion in federal formula grant funds, including the Byrne JAG, Victims of Crime Act, STOP Violence Against Women Formula Grants, Residential Substance Abuse Treatment for State Prisoners Program, and Office of Juvenile Justice and Delinquency Prevention Title II programs. States also administer the National Criminal History Improvement (NCHIP), National Instant Criminal Background Check System (NICS), and the National Act Record Improvement programs, as well as funding authorized by the DNA Analysis Backlog Elimination Act. While each SAA's grant funding portfolio is different, all SAAs administer the Byrne JAG program for their state.

In addition to grants administration, SAAs are charged with conducting statewide strategic planning, overseeing research, partnering with local governments, and convening and coordinating with a wide range of state and local stakeholders. The vast majority of the money awarded by SAAs is through sub-grants to local agencies and communitybased programs to support crime prevention and intervention, victim services, technology, diversion and reentry programs, behavioral health initiatives for justice-involved individuals, and crime data initiatives. Some of the grant funding is awarded by formula, while other dollars are released through a competitive application process.

The Byrne JAG program is considered the cornerstone federal crime-fighting funding program, enabling states and local communities to target resources to what they consider

their most pressing crime-related needs. As the largest pot of flexible U.S. federal grant dollars available, funding in FY 2017 at \$403 million (\$335 million for the formula portion after congressional carve-outs), it allows communities to design programs; fill gaps; leverage other resources; and work across city, county, and state lines.3 Every state and territory receives Byrne JAG funds using a formula that takes into account population and UCR statistics. Awarded by the U.S. Department of Justice, Bureau of Justice Assistance (BJA), 60 percent of overall Byrne JAG funding goes to SAAs for pass-through, while the remaining 40 percent is awarded directly by BJA to local agency recipients, including law enforcement agencies.4

States may use Byrne JAG to fund many aspects of the juvenile and criminal justice system, guided by eight purpose areas defined in federal law. These areas include drug treatment and enforcement programs; mental health programs and services; law enforcement programs; corrections, community corrections, and reentry programs; prosecution and court programs, including indigent defense; prevention and education programs; planning, evaluation, and technology improvement programs; and crime victim and witness programs (other than compensation).5

While each SAA allocates its state award according to its priorities, overall, about 50 percent of state Byrne JAG funding is invested in law enforcement, including personnel, operations, equipment, and technology. Although exact numbers are not available, when direct award funding is added in, over two-thirds of overall Byrne JAG spending is invested in law enforcement programs.6 With current appropriations at \$335 million, this constitutes an annual law enforcement investment of at least \$225 million, almost double the annual appropriation to the COPS Hiring Program. This Byrne JAG funding reaches police departments large and small, urban and rural, across the

United States. Figure 1 shows FY 14 Byrne JAG spending by purpose area.

State Byrne JAG Investments in Forensic Science

As part of the National Criminal Justice Association's (NCJA) most recent data collection effort, states were asked how they invested Byrne JAG dollars. As previously noted, at least 21 states reported they support law enforcement forensic science projects.

These Byrne JAG-funded projects span the full spectrum of local needs, with spending influenced by each individual state's priorities. For example, Indiana is using Byrne JAG funding to support DNA backlog reduction efforts within the Indiana State Police Laboratory Division and the Marion County Forensic Services Agency.7 In Montana, Byrne JAG funds were used to purchase a mass spectrometer, a gas chromatograph, and other testing materials through the Montana Department of Justice Forensic Science Division, and Hawaii used Byrne JAG funding to purchase additional DNA reagent kits and supplies at a police crime laboratory.8

Other states identified different priorities. New York is using a portion of its Byrne JAG funding to expand capabilities at the state's crime analysis centers, through the funding of nine crime analyst positions. The state relies on these centers to help law enforcement prevent, detect, and deter crime across the state. In addition, New York has used Byrne JAG funding to support verification efforts for the statewide DNA databank, accreditation of local forensic labs, and statewide forensic science trainings through the Office of Forensic Services in the Division of Criminal Justice Services.9

Expanding education, technical expertise, and investigative services in the field of applied forensics to rural Northeast Alabama is the focus for the State of Alabama, which uses Byrne JAG funding to support the Jacksonville State University Center for Applied Forensics.¹⁰ The center provides continuing education to law enforcement agencies, particularly those in rural underserved areas, in proper evidence documentation and collection as well as emerging trends in forensic

In FY14, some states reported using Byrne JAG monies to support efforts to decrease laboratory testing backlogs. Arizona used Byrne JAG funds to support six full-time positions at the Department of Public Safety, Scientific Analysis Bureau and the Tucson Police Department Crime Laboratory. The staff in these positions test drug samples to support the state's drug and southern border enforcement efforts and reduced processing times from an estimated 30 days to 9.25 days. Maryland used part of its Byrne JAG funds to support forensic investigator positions at the State Police and Baltimore City, Montgomery County, and Prince George's County police departments. As DNA analysis sub-recipients, these law enforcement agencies focus on DNA backlog reduction for various types of cases ranging from homicide to sexual assault. In New York, Byrne JAG funds supported firearm and ballistic testing backlog reduction efforts across the state, and, in Tennessee, Byrne JAG funds supported Rape Kit DNA backlog reduction efforts within the City of Memphis.¹¹

In other states, prioritized funding went to ballistics testing and programs. Delaware used a portion of its FY14 Byrne JAG funding to support a ballistics examiner and a computer forensic investigator in its State Police Forensic Firearm Services Unit, as well as to fund needed equipment purchases. In addition, the Delaware SAA made funds available to municipalities for forensic investigator overtime, which helped to reduce evidence analysis backlogs on cases varying from murder-for-hire to child pornography. Similarly, Rhode Island used part of its Byrne JAG funds to support a National Integrated Ballistic Information Network (NIBIN) database technician in the Rhode Island State Crime Laboratory. The lab examines and evaluates physical evidence submitted by state and local law enforcement agencies. This position specifically enters test fire casings and evidence casings into the NIBIN system.¹²

Many other states including Nevada, North Carolina, and South Carolina chose to use FY14 Byrne JAG funds for equipment purchases. In Nevada, Byrne JAG funding was used to purchase forensic science equipment and technology for the Las Vegas Metro Police Department's Forensic Laboratory to conduct forensic examinations and analyses of electronic storage devices used in criminal cases including computers, iPads, cellphones, and tablets. Nevada also used a portion of its Byrne JAG funds to purchase a gas chromatographyinfrared (GC/IR) spectrometer and a gas chromatography–mass spectrometry (GC/ MS) instrument for the Forensic Science Division of the Washoe County Sheriff's Office. This equipment is used to analyze samples suspected to contain controlled substances, including bath salts, spice, and other designer drugs. In North Carolina, Byrne JAG funds were used to purchase an ultraviolet light imaging system and forensics workstation with filtration system for the Boone Police Department. And in South Carolina, Byrne JAG funds were used to purchase equipment for regional drug analysis labs to rapidly analyze evidence and return accurate results to requesting agencies, leading to a substantial reduction in the drug analysis backlog.¹³

Getting a Seat at the Table

How can local law enforcement agencies access these resources? When allocating grant dollars, SAAs engage in a strategic planning process intended to bring together state and local stakeholders and practitioners to identify needs and priorities. Nearly 50 years ago, SAAs were first created to serve as designated criminal justice planning agencies, a role that continues today. In reauthorizing the Justice for All Act in 2016, the U.S. Congress strengthened this strategic planning requirement, mandating a comprehensive process that includes input from a multitude of diverse stakeholders and perspectives. 14 The resulting plan must be used to inform Byrne JAG investments across the state and across the eight purpose areas and be supported with data and expected outcomes. The amended strategic planning process requires SAAs to convene diverse stakeholders representing the entire justice continuum including law enforcement, prosecution, indigent defense, courts, corrections, juvenile justice, victim services, prevention, and behavioral health, among others. Further, the new requirements direct the SAAs to identify data elements used in resource allocation or to identify barriers to capturing the necessary data. An evidenceinformed approach to planning, resource

Figure 1: 2014 Byrne JAG State Spending

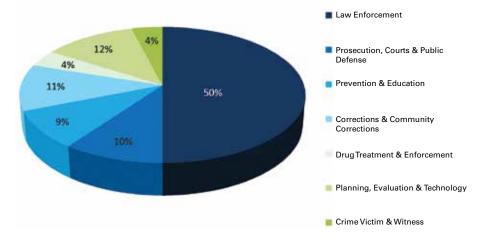
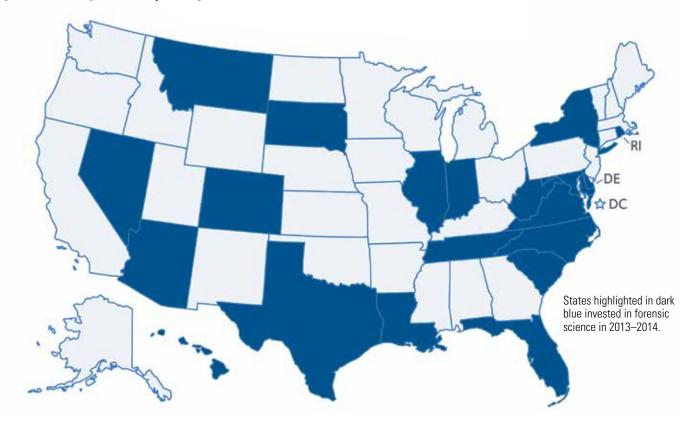


Figure 2: State Byrne JAG Spending: Forensic Science



allocation, program implementation, and evaluation is expected. There has never been a better time for law enforcement agencies to acquire funding to support forensic science.

Through a grant from BJA, NCJA provides training and technical assistance (TTA) to states in developing and updating their strategic plans to meet these new stringent requirements. A multi-phased approach to TTA that includes three tiers of technical assistance, regional training events, online resources, survey dissemination, web-based learning, tips, tools, and more allows NCJA to support states as they conduct planning efforts. The use of data is stressed throughout the new criteria, and SAAs will be delving deeper into NIBRS and UCR data to support funding decisions. Law enforcement incident-based crime data have been used for many years in calculating the states' formula grant awards, but they now will be studied even more carefully, reinforcing the need for accurate and timely reporting.

Law enforcement agencies in most states are already engaged in this planning process. However, ensuring forensic science priorities are recognized and included in the planning from the outset is important. In previous planning efforts, laboratory staff, investigators, and other law enforcement personnel who work in the forensic science field might not have been included in the initial planning stages. Proactively including forensic science needs into comprehensive strategic plans to

address emerging crime trends will ensure that law enforcement agencies are able to access grant dollars for their programs and utilize the latest technology to improve public safety and save lives. ❖

To learn more about the National Criminal Justice Association, the role of the State Administering Agencies, or the Byrne JAG program, please visit the NCJA website at http://ncja.org.

¹NCJA Center for Justice Planning (NCJP), "Support for Forensic Science," http://www .ncjp.org/sites/default/files/Content_Images/ Forensic%20Science%20One%20Pager.pdf.

²Rapid DNA Act of 2017, Pub. L. No. 115-50

³Nathan James, FY2018 Appropriations for Department of Justice Grant Programs (Washington, DC: Congressional Research Service, 2017), 4, https://fas.org/sgp/crs/misc/ R44893.pdf.

⁴National Criminal Justice Association (NCJA), "The Byrne JAG Grant Program," https://www.ncja.org/ncja/policy/about -byrne-jag.

⁵National Criminal Justice Association, "The Byrne JAG Grant Program."

⁶NCJP, Cornerstone for Justice (Washington, DC: NCJA), https://www.bja.gov/Publications/ NCJA_JAGReport.pdf.

⁷NCJA, "Cornerstone for Justice: Byrne JAG

Improves Public Safety and Prevents Crime in Indiana," 2017, https://www.in.gov/cji/files/ JAG_NCJA_Indiana_2017.pdf.

⁸NJCP, "Support for Forensic Science"; FY2016 Capacity Enhancement and Backlog Reduction Program - Honolulu Police Department Scientific Investigation Section, https://external.ojp.usdoj.gov/selector/ awardDetail?awardNumber=2016-DN -BX-0016&fiscalYear=2016&application Number=2016-90439-HI-DN&programOffice =NIJ&po=NIJ.

9NJCP, "Support for Forensic Science." ¹⁰Alabama Department of Economic and Community Affairs, "Gov. Bentley Awards Grant to Provide Forensic Training," press release, February 27, 2017, http://www.media .alabama.gov/AgencyTemplates/adeca/adeca pr4.aspx?id=12134.

¹¹NJCP, "Support for Forensic Science." ¹²NJCP, "Support for Forensic Science." ¹³NJCP, "Support for Forensic Science." ¹⁴Justice for All Reauthorization Act of 2016, Pub. L. No. 114-324 (2016).

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U.S. Opioid and Fentanyl Case Occurrence in Crime Labs: A Survey

By Bruce Houlihan, Director, Orange County Crime Lab, California, and Chair, Opioid Task Force, American Society of **Crime Laboratory Directors**

n August and September 2017, the American Society of Crime Laboratory Directors (ASCLD) requested information from crime laboratories across the United States regarding opioids in controlled substance (seized drugs) casework. Approximately 40 laboratories representing 19 different states responded with information from 2013 through 2017.

According to the survey results, most laboratories see a steady increase in the total number of cases containing an opioid each year. More significantly, the number of cases containing fentanyl (or an analog) rose dramatically in the last few years, from doubling in some laboratories, to increasing by over 15 times in others. Across the board, the laboratories also reported a significant increase in the number of opioid cases containing fentanyl, with three laboratories reporting that more than 40 percent of their opioid cases now contain fentanyl.

The significant increase in fentanyl occurrence, coupled with the possible lethality of fentanyl and its analogs, is of grave concern

to the ASCLD. U.S. crime laboratories, law enforcement, first responders, and the public are directly impacted by this crisis.

Background

The term opiate refers to chemicals and drugs derived from the natural opium poppy. Morphine, codeine, and the illicitly synthesized heroin are the most common examples. Opioids refers to the general class of chemicals and compounds with similar symptomology and effects as opiates (binding to opioid receptors), but that have a different origin or structures. Opioids can be prescribed for pain relief, can have high abuse potential, can be produced synthetically, and are linked to increases in fatalities.1 In addition to the well-known morphine, codeine, and heroin, opioids include drugs such as Oxycontin (oxycodone), Dilaudid (hydromorphone), Demerol (meperidine), and the group of compounds known as fentanyls. Fentanyl can be prescribed for severe pain management and as a general anesthetic, but the more lethal analogs such

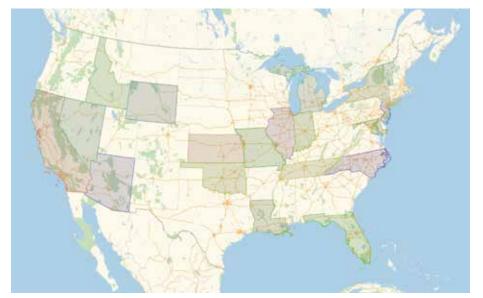
as carfentanil (or carfentanyl) are (legally) used only as veterinary tranquilizers. Additionally, the concentrations of opioids used in medical applications are significantly lower than other opioids given the lethality of these compounds. The number of different synthetic analogs is also increasing.2 While not discussed here, the illicit use of prescription opioids is also a growing concern in driving under the influence, as well as other substance abuse-related issues.3

The synthetic fentanyl and its derivatives are currently of greatest concern.4 The lethality of this class of compounds over traditional opiates and the increased occurrence in crime laboratory samples (both in seized drugs and toxicology) are sobering. First responders to crime scenes may encounter lethal quantities of the chemical, or laboratory analysts may receive fentanyl samples masquerading as less dangerous opiates or prescription medications. For the public, the general overdose danger from illicit samples containing fentanyl (when a traditional opiate was expected) is significant.

ASCLD member laboratories and leadership regularly cooperate, discussing national trends in forensic science. Seized drug submissions and the abuse of drugs are part of an ongoing conversation relating to the association's mission and service to the public. Through this cooperative relationship, it has been noted that, in the last couple of years, the incidence of fentanyl increased dramatically and unexpectedly. Moreover, the increase is serious on two fronts: in seized drug samples (powders and packages) and in medical examination toxicological analyses. The impact of fentanyl in overdoses is well documented, and many laboratories are collaborating with coroners, medical examiners, and other toxicological laboratories to study trends regarding not just fentanyl, but other opioids as contributors to causes of death.5

Seized drug submissions to crime laboratories are an indicator of future public health impacts. During discussions, laboratories realized there was an unprecedented

Figure 1: States with Participating Laboratories



increase in fentanyl cases, in addition to increases in these alarming details:

- the quantity or weight of the powders and samples in each submission
- samples masquerading as heroin or prescription pills, often with lethal doses
- the number of analogs or synthetic versions of fentanyl, including more lethal analogs of fentanyl, such as carfentanil
- submissions with manufacturing precursors for fentanyl

In 2017, ASCLD created the Opioid Task Force (OTF) committee to study and respond to these issues from a forensic service provider perspective. The OTF currently serves the following objectives:

- study and collate information from crime laboratories relating to the opioid crisis
- partner federal, state, and local agencies with private laboratories, coroners, medical examiners and other forensic groups on the opioid crisis
- recommend legislative actions
- recommend safety best practices for crime laboratories and first responders
- provide public safety information

To quantify recent trends across U.S. crime laboratories, ASCLD asked member laboratories to respond with seized drug information from the last four to five years. The survey was conducted in the late summer of 2017 with 37 laboratories responding. Most laboratories responded with information from years 2013 through 2017 (as of August 2017). Approximately 60 percent of the responding laboratories were local facilities, the remaining 40 percent of the respondents were state laboratories.

The survey defined "opioids" as any substance containing one or more of the following: fentanyl or an analog, heroin, morphine, codeine, oxycodone, hydromorphone, oxymorphone, and hydrocodone.

In the survey responses, "item" was defined as evidence or a portion of evidence that generated a reported result. The following questions were asked of the laboratories:

ASCLD Survey: Participating Laboratories

The responding laboratories included both local and state systems.

- Acadiana Crime Lab
- Arizona Department of Public Safety
- Baltimore County Police Department
- California Department of Justice Bureau of Forensic Services
- Contra Costa County Office of the Sheriff– Forensic Services Division
- DuPage County Forensic Science Center
- Idaho State Police Forensic Services
- Indiana State Police Laboratory
- Indianapolis-Marion County Forensic Services Agency
- Long Beach Police Department
- Los Angeles Police Department Forensic Science Division
- Louisiana State Police Crime Laboratory
- Madison State Crime Lab
- Miami Valley Regional Crime Laboratory
- Michigan State Police Forensic Science Division
- Missouri State Highway Patrol Crime Laboratory
- Missouri State Highway Patrol St. Joseph Crime Lab
- Monroe County Crime Laboratory
- New Orleans Police Crime Laboratory

- New York State Police Crime Laboratory System
- Northeastern Bioscience Associates, LLC
- Oakland County Sheriff's Office
- Oakland Police Department Crime Lab
- Oklahoma State Bureau of Investigation
- Omaha Police Forensic Investigations Section
- Onondaga County Center for Forensic Sciences
- Orange County Crime Laboratory
- Phoenix Police Department Laboratory Services Bureau
- Sarasota Sheriff's Office
- Sedgwick County Regional Forensic Science Center
- Tennessee Bureau of Investigation
- Union County Prosecutor's Office Forensic Laboratory
- Vermont Forensic Laboratory
- Washoe County Sheriff's Office—Forensic Science Division
- Wilmington Police Crime Laboratory
- Wyoming State Crime Laboratory
- Yonkers Police Department Forensic Science Laboratory
- 1. How many controlled substance items are submitted to your laboratory per year?
- 2. How many controlled substance items are analyzed by your laboratory per year?
- 3. How many controlled substance items are analyzed by your laboratory per year more than 30 days after submission (i.e., backlogged)?
- 4. How many controlled substance items analyzed contain an opioid?
- 5. How many controlled substance items analyzed contain fentanyl?

The responses were averaged across respondents and are summarized in Table 1. As these are averages and laboratories vary in jurisdictional size and caseload, the information should be used as general information only.

Opioid submissions in laboratories are increasing overall; however, it is the increases of fentanyl items that have become particularly alarming. For submissions containing opioids in general, many laboratories have seen significant increases, as shown in Figure 2, which shows the combined totals for each state, represented as percentages relative to each state.

Table 1: Average Items per Year

Question	2013	2014	2015	2016	2017 To Date	2017 Predicted
1	12,894	12,233	11,956	12,202	7,993	11,989
2	11,263	11,199	10,922	10,475	7,121	10,681
3	5,538	5,429	6,665	6,372	5,608	8,412
4	1,823	1,866	2,106	2,049	1,375	2,062
5	13	49	110	412	444	665

Figure 2: Percentage of Items Containing an Opioid

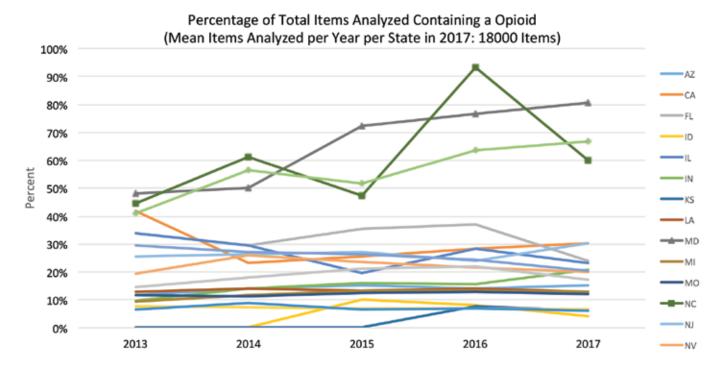
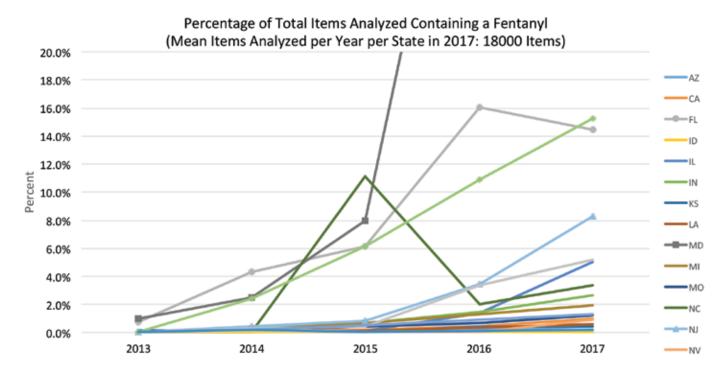


Figure 3: Percentage of Items Containing a Fentanyl



Most significant is the dramatic increase in fentanyl-related submissions in the last few years as seen in the response to the survey's fifth question. As shown in Figure 3, laboratories reported dramatic increases in the percent of submissions containing fentanyl. The percentage increase of fentanyl, shown in Figure 4, is extraordinary.

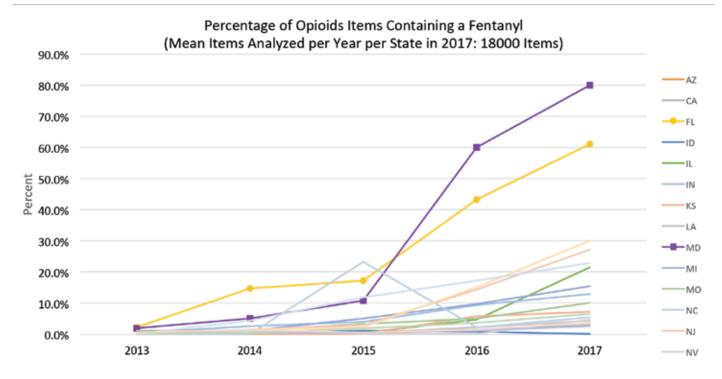
Conclusion

The ASCLD Opioid Task Force is working on concurrent projects to recommend actions and best practices relating to this crisis. The availability and use of naloxone by all personnel (first responders, laboratory personnel, and evidence personnel) is important; high-protection packaging and

sampling equipment are needed; an examination of field-testing procedures by first responders is warranted; and legislative actions, such as federal scheduling, would be appropriate.

Fentanyl represents a growing and serious threat to the public's safety in the United States. Given the extreme lethality of fentanyl

Figure 4: Percentage of Opioids Containing a Fentanyl



as possibly 50+ times greater than morphine and the increased presence of analogs such as carfentanil (suspected to be 100 times more lethal than fentanyl), the concern expressed by ASCLD through its laboratories is critical. Fentanyl is being packaged as pills, "tar" heroin, white powder, and other substances that present dangers to those who do not understand the compound's lethality. Moreover, the safety concerns for first responders, including law enforcement and laboratory staff, are also paramount. As forensic science service providers, the accurate delivery of controlled substance information to stakeholders is vitally important for crime laboratories, as is providing the results in a responsive and timely manner to address the needs of law enforcement investigators and the criminal justice system. �

Notes:

¹U.S. Drug Enforcement Administration, "FAQ's—Fentanyl and Fentanyl-Related Substances," https://www.dea.gov/druginfo/ fentanyl-faq.shtml; Margaret Warner, Holly Hedegaard, and Li-Hui Chen, Trends in Drugpoisoning Deaths Involving Opioid Analgesics and Heroin: United States, 1999–2012, Health E-Stat (Centers for Disease Control and Prevention, December 2014), https://www.cdc.gov/nchs/data/hestat/drug_poisoning/drug_poisoning_deaths_1999-2012.pdf.

²United Nations Office on Drugs and Crime, Fentanyl and Its Analogues – 50 Years On, Global Smart Update 17 (March 2017), https://www.unodc.org/documents/scientific/Global_SMART_Update_17_web.pdf.

³National Institute on Drug Abuse, "Drugged Driving," revised June 2016, https://www.drugabuse.gov/publications/drugfacts/drugged-driving; National Highway Traffic Safety Administration, "Drugged Driving," https://www.nhtsa.gov/risky-driving/drugged-driving.

⁴Mark Fischetti, "Deaths from Opioid Overdoses Soar," *Scientific American*, October 1, 2017, https://www.scientificamerican.com/ article/deaths-from-opioid-overdoses-soar.

⁵Centers for Disease Control and Prevention, "Fentanyl Involved in Over Half of Opioid Overdose Deaths in 10 States," news release, October 27, 2017, https://www.cdc.gov/media/ releases/2017/s1027-fentanyl-deaths.html; "Fentanyl Driving Rapid Rise in Opioid Overdose Deaths," CBS News, October 27, 2017, https://www.cbsnews.com/news/fentanylopioid-overdose-deaths-rapid-increase; Mary Beth Quirk, "More Than Half Of Opioid Overdose Deaths Now Involve Synthetic Drugs Like Fentanyl," Consumerist, October 27, 2017, https://consumerist.com/2017/10/27/more -than-half-of-opioid-overdose-deaths-now -involve-synthetic-drugs-like-fentanyl; Josh Katz, "Short Answers to Hard Questions About the Opioid Crisis," New York Times, August 10, 2017, https://www.nytimes.com/interactive/2017/08/03/upshot/opioid-drug -overdose-epidemic.html.

Interested in reading more about opioid-related issues or other drugs?

Watch for our March 2018 Police Chief, which focuses on current and emerging drug issues.

This paper is a work product of the American Society of Crime Laboratory Directors and associated OpioidTask Force, with **Bruce Houlihan** as the principal author. Mr. Houlihan is the chair of the ASCLD OpioidTask Force committee, and serves as director of the Orange County Crime Laboratory in Orange County, California. The OpioidTask Force is a consortium of U.S. crime laboratory directors, with representatives from forensic organizations such as the American Academy of Forensic Sciences, U.S. federal agencies, private toxicological laboratories, and academic institutions.

The Role of Veterinary Forensics in Animal Cruelty Investigations



By Martha Smith-Blackmore, DVM, President, Forensic Veterinary Investigations, LLC

eterinary forensics is a developing field that can assist with animal cruelty investigations. Animal abuse investigations are vital because animal maltreatment is a co-occurring and central aspect of interpersonal violence. Animal care professionals, such as veterinarians, animal control officers, and humane law enforcement all have roles to play in the prevention, identification, and treatment of interpersonal violence. The co-occurrence of child abuse and domestic violence with animal abuse, and the significance of childhood animal abuse means that animal welfare overlaps with

both family welfare and public safety. Veterinarians with training in veterinary forensics can be especially valuable to animal cruelty investigations.

Animal Torture: Predictor of **Extreme Violence**

Animal cruelty, including animal torture and killing, is often associated with violence involving people and sometimes is a precursor event. In the instance of school shootings, 43 percent of the perpetrators committed animal cruelty before massacres, and the cruelty was usually directed

against anthropomorphized species (dogs and cats) in an up-close manner. For example, in 1997, Luke Woodham, a high school student in a suburb of Jackson, Mississippi, killed two girls and wounded seven other students with a hunting rifle. He also stabbed and bludgeoned his mother to death earlier that morning. Woodham's journal included a description of his and an accomplice's torturing and killing of the family dog "Sparkle." He wrote about beating her inside a plastic bag and setting it on fire. He referred to this incident as his "first kill"; he wrote "I will never forget the howl she made. It sounded almost human. We laughed and hit her hard."2

On May 21, 1998, 15-year-old Kip Kinkel shot his parents to death and emptied three firearms at his fellow Thurston High School classmates in Springfield, Oregon, leaving 1 student dead and 26 others injured. His earlier attacks on animals also illustrated an upclose and personal variety of animal abuse; he allegedly decapitated cats, dissected live squirrels, blew up cows, set a live cat on fire, and put firecrackers in gophers and cats.3 Albert DeSalvo (the "Boston strangler"), David Berkowitz (the "Son of Sam"), and Jeffrey Dahmer all reported animal torture as their first acts of violence, as well.4

Interestingly, animal cruelty can come before, coincide with, or follow many antisocial behaviors, including interpersonal violence. Rather than the graduation or escalation hypothesis, which proposes that animal cruelty precedes subsequent acts of human violence, a more accurate description of animal abuse may be that of generalized deviance. Data suggests that sadistic serial killers abuse animals at a rate of close

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to 90 percent when all kinds of animal abuse, including negligence, are considered.⁵ Perpetrators of mass shootings frequently have both domestic violence and animal abuse in their histories.

School shooters and sadistic serial killers seem to share the drive to have power and exercise control over the lives of others, deciding who dies and who lives. In these crimes, the perpetrators get to be the ones who regulate the degree of pain and suffering experienced by their victims. Some cases of animal cruelty and human-oriented violence are similarly motivated: compensating for the perpetrator's feelings of powerlessness and vulnerability by imparting a sense of strength and superiority.⁶

The Link

The connection between violence to people and animals is not only found in extreme examples such as mass killings. Domestic violence is also associated with violence to animals—threats to pets or actual harm to pets are sometimes used to control domestic violence victims. This association between social violence, particularly domestic violence, and animal cruelty is commonly referred to as "The Link."

In one study of women in a domestic violence shelter, 71 percent of pet-owning women reported that their partners had threatened to kill or had actually killed their pets. Women in shelters were 11 times more likely to report that their partner had hurt

or killed a pet than those in the comparison group. Batterers who abuse pets also demonstrate a greater incidence of controlling behaviors including sexual violence, marital rape, emotional abuse, and stalking. 10

Youth participation in animal cruelty is a significant marker for the development of aggressive behavior. Among juveniles who were referred to an arson intervention group, those who were cruel to animals were more likely to repeat fire setting.

Abusers exercising power and control over any vulnerable being through violence and intimidation flag themselves as violent threats; therefore, effective policing includes aggressively pursuing crimes against animals.

Animal Cruelty Laws and Prosecutions

In the United States, felony provisions for animal cruelty offenses exist in all 50 states. There are 32 states (and Washington, DC, and Puerto Rico) that permit pet protection orders for domestic violence victims, and 35 states have statutes that either permit or mandate veterinarians to report suspicions of animal maltreatment.¹³

In a recent survey, prosecutors were asked to list the types of animal cruelty cases they have prosecuted in the last five years. Of the respondents, 85 percent have prosecuted cases of criminal neglect or animal hoarding; almost 79 percent have prosecuted cases of intentional abuse or torture;

nearly 31 percent have prosecuted cases of organized animal abuse or animal fighting; and 21 percent have prosecuted cases of animal sexual abuse. Of those cases, nearly 82 percent were accompanied by other criminal charges, including (in order of frequency) intimate partner abuse, assault, child or elder abuse, drugs, weapons, gambling, and gangrelated crime, as well as other crimes such as arson, burglary, and theft.¹⁴

Change in NIBRS Status: Crime Against Society

Reflecting the current understanding of animal cruelty's association with other crimes, in 2016, the Federal Bureau of Investigation (FBI) added a separate category of animal cruelty to Group A of the National Incident-Based Reporting System (NIBRS). The FBI's adoption of animal cruelty crime as a separate category in NIBRS acknowledges that animal maltreatment is linked to other offenses.

Additionally, animal cruelty is now designated as a Crime Against Society, rather than a Crime Against Persons, or a Crime Against Property; this change implies the FBI's adoption of the concept that nonhuman animals are in a category other than that of property and that animal cruelty crimes are important to investigate and to charge. NIBRS has four subcategories for incidents of animal cruelty: A—simple abuse or neglect, I—intentional abuse or torture, O—organized animal abuse or fighting, and S—animal sexual abuse.

CASE STUDY

"Coco" McCarriston was a 7-year-old, 11-pound female Maltese dog found dead in the family garage in Marblehead, Massachusetts. The family brought the dog to their veterinarian for cremation. The veterinarian, being a mandated reporter for suspicions of cases of animal cruelty, reported her concerns about the cause of the animal's death to local law enforcement.

The body was submitted to a forensic veterinarian for postmortem examination. The body was examined externally, shaved of fur, radiographed (x-rayed), and examined internally. When the fur was shaved, two pairs of linear contusions were discovered; these bruises are consistent with blunt force trauma with a long implement such as a board or a bat. The skull was crushed, the head received lacerations from bone fragments, and the teeth had fresh chips in them (see Figures 1 and 2).

Andrew's family told the veterinarian that he had killed the dog, but did not report it to the police even though Andrew's mother is alleged to have asked "Should I be afraid of my son?" prior to Coco's killing. However, as a mandatory reporter, the veterinarian did report the information to authorities.

When faced with the evidence from the postmortem examination, 18-year-old Andrew McCarriston admitted that, while he was alone with the dog, he bludgeoned it to death with three blows from a baseball bat.

Andrew McCarriston was sentenced to five years of probation, which included mandatory residential mental health treatment. Should he leave the residential program against medical advice, he will be deemed in violation of probation and subject to incarceration for the remainder of his term.

Note: Information and photos provided by author.





The National Coalition on Violence Against Animals developed the NIBRS User Manual for Animal Control Officers (ACOs) and Humane Law Enforcement Officers (HLE) to ensure ACOs and HLE officers are aware of and fully equipped for their new and critical role in reporting animal cruelty incidents to the FBI.15 ACOs are generally employed by municipalities while HLE officers are employed by private animal welfare organizations. HLE officers may have peace officer rights and responsibilities through a contract, memorandum of understanding (MOU), or other arrangement. In many cases, ACOs and HLE officers lack access to the records management software system necessary to submit data directly to NIBRS and will in fact also require an MOU with any agency who can provide that resource.

Animal Cruelty Investigations in the Vortex

Despite the increased understanding of their importance, animal cruelty investigations can sometimes be a crime that occupies an "other" space, even falling through the cracks. This might be due in part to the variety of agencies or authorities that may respond to these calls and a failure to understand the roles of other agencies. Law enforcement, animal control, town animal inspectors, the department of agriculture, and nonprofit organizations with police powers have a variety of rights and responsibilities with regard to allegations of animal maltreatment, depending on individual jurisdictions. Because of a lack of clarity in reporting and response responsibilities, animal victims sometimes do not benefit from an investigation, and their abusers might not be brought to justice. There is no single uniform, reliable way to report animal cruelty and know that the case will be fully and appropriately investigated.

It is estimated that approximately half of animal control offices are located within the jurisdiction of a police department or a sheriff's office. With the various placements of the animal control agencies, the training, investigatory, and arrest powers of ACOs also vary widely within and across states. A more standardized approach would facilitate dispatch; align the animal control officer with law enforcement, providing training and support services as well as more efficient backup when needed; and help the public know whom and where to call for services.

"Broken Animals Policing"

Laws against animal cruelty are important to enforce because of the crime's relationship to interpersonal violence and because violence toward animals is a criminal act on its own merit. Directing resources to crimes of violence, whether against people or animals, may have an interrupting effect that is more effective than a focus

on petty or property crime. In addition to locating animal control within the public safety department, police officers and detectives should be appropriately trained in the recognition and documentation of crimes against animals-and they should have sufficient resources to enforce animal cruelty

The NYC Example

Animal cruelty investigations are often delegated to ACOs with little training or resources or to private nonprofit organizations with small departments of HLE officers. Increasingly, local police departments are investing more in the investigation of allegations of animal maltreatment. The rewards of apprehending an animal abuser may be that the abuser is also interrupted from engaging in other illegal activities.

When animal cruelty investigations are siloed away from law enforcement, the opportunity for comprehensive engagement with a scene or suspects is lost. The best departments are working collaboratively with available resources such as veterinarians; ACOs; animal behavior experts; the federal, state, or local Department of Agriculture; and humane agents from animal welfare organizations to better understand what animal cruelty looks like and what is appropriate evidence to collect.

The American Society for the Prevention of Cruelty to Animals (ASPCA) in New York City elected to get out of the business of law enforcement, choosing to instead train the New York Police Department on the specifics of animal cruelty investigations. Currently, the ASPCA provides case support through the provision of veterinary forensics support and live animal evidence housing for the duration of legal action.

The Veterinarians' Role

Veterinarians have been referred to as "the other family doctor" by the American Veterinary Medical Association (AMVA).¹⁶ There is a movement among international health organizations, veterinary associations, environmental organizations and others to recognize "one health," the concept that the wellness of the environment, people, and animals are inexorably intertwined. The one health approach considers environmental health and environmental interventions as central to addressing emerging infectious disease threats.¹⁷ Because the one health movement is centered on infectious disease risks, the terms "one welfare" and "one safety" have also been used to imply or include the threats or effects of violent actions.18 The AVMA website provides a manual, available for download, to help veterinarians more easily and confidently report suspected animal cruelty.19 In addition, the National Link Coalition maintains a directory of where to report abuse.20

A study on battered pets examined veterinary records for more than 400 cats and dogs in the United Kingdom for which veterinarians suspected non-accidental injury. The study revealed a wide range of injuries including bruises, fractures, repetitive injuries, scalds and burns, stab and incise wounds, asphyxiation, poisoning, and drowning—a list with notable similarities to common non-accidental injuries (NAI) in children, as well as sexual abuse and injuries specifically caused by firearms. Skeletal traumas in the dogs were more commonly found in the skeleton's anterior (toward the front of the animal), unlike those resulting from road traffic accidents. Young cats and young male dogs were particularly at risk of

Veterinarians can help with the identification and documentation of NAI, but the level of training and interest in assisting in these types of cases vary widely. There is no equivalent to medical examiner training for veterinarians, and not one U.S. state offers coroner or medical examiner services for animals. For this reason, animals that are found dead in the United States are discarded more often than they are examined, which means that potentially important cases go uninvestigated. When one considers that harmed animals are the canary in the coal mine for violent behavior, this failure means that a perpetrator of crimes of general deviance may go undetected.

Veterinary Forensic Scientists

Forensic veterinarians and veterinary forensic scientists (non-veterinarians) may be involved any time an objective, scientific analysis is needed to find the truth and to seek justice in a legal proceeding involving an animal. Forensic investigations are objective and unbiased; results can be utilized in both criminal and civil cases. Veterinary forensic science can be applied for the good of society; public safety; and animal health, welfare, and safety.

In the survey previously referenced, prosecutors reported that information from an animal that influenced a decision to prosecute a case of animal cruelty included documentation of the animal's condition in a veterinary medical record, pictures of the animal taken during a veterinary forensic exam, documentation of the animal's recovery and return to a healthy condition, the animal's behavior, diagnostic tests, scar or wound charts, radiographs (x-rays), the normal values expected in diagnostic tests, or the dental exam. Other evidence that influenced the decision to prosecute included the investigator's report; eyewitness reports; a veterinary report; defendant statement or confession; owner statements; neighbor statements; expert witness testimony; statement, behavior, or identity of a person at a veterinary office; social media posts; 911 In a recent survey, prosecutors were asked to list the types of animal cruelty cases they have prosecuted in the last five years.

85% HAVE PROSECUTED CASES OF CRIMINAL NEGLECT OR ANIMAL HOARDING.

ALMOST ON THE PROSECUTED CASES OF INTENTIONAL ABUSE OR TORTURE.

21% HAVE PROSECUTED CASES OF ANIMAL SEXUAL ABUSE.

31% HAVE PROSECUTED CASES OF ORGANIZED ANIMAL ABUSE OR ANIMAL FIGHTING.

OF THOSE CASES, NEARLY 82%

WERE ACCOMPANIED BY OTHER CRIMINAL CHARGES.

calls; cellphone calls or texts; jail calls; and phone or financial records.²²

Most cases of suspected animal maltreatment involve veterinary examination of a live or deceased animal or animals. In other cases, the forensic veterinary examiner may assist by attending the scene to participate in on-site investigation, gather evidence, or document facts for later analysis. To join in the execution of a search warrant, the veterinarian or veterinary forensic scientist should be written into the search warrant.

Whether they are provided with information or have personally gathered the relevant information, the forensic scientists then must decide which examinations, tests, or analyses are appropriate and relevant to the issues in dispute. (Are those marks evidence of an animal trying to escape? Did natural disease or an accident cause the findings?) The most important aspects of veterinary reports are the photographic evidence, comments on pain or suffering, determination of the cause of harm or death, and a determination of the duration of any neglect or illness.

Veterinary Forensics in the Field

Very few employers hire full-time forensic veterinarians, forensic veterinary technicians, or other types of forensic scientists. The ASPCA has a handful of veterinarians and other forensic specialists who work in New York City and respond to large-scale cases across the United States involving hundreds of animals (e.g., animal hoarding, animal fighting). Some veterinary schools have veterinary pathologists on faculty with an interest in veterinary forensics. Confoundingly though, some veterinary pathology laboratories will refuse cases with any forensic

questions to be answered, citing a lack of sufficient staff to be available for court proceedings. The International Veterinary Forensic Sciences Association is one resource that may be able to help with referrals to a veterinary forensic scientist.²³

Most frequently, veterinary forensics is a part-time pursuit of a veterinarian employed in a municipal or private animal shelter, especially a facility with a humane law enforcement function. A few veterinarians have established veterinary forensics consulting businesses, but most will tell you that they do not make a living through veterinary forensics consulting alone.

The U.S. Fish and Wildlife Service and some state governments employ wildlife forensic scientists. Poaching violations, the development of state and federal hunting regulations, the Endangered Species Act of 1973, and the United Nations Convention on International Trade in Endangered Species (CITIES) are some of the factors that guide wildlife forensics.

Summary

The association between crimes of violence against people and animals provides an avenue to identifying violent actors in communities. Abusers exercising power and control over any vulnerable being through violence and intimidation are flagging themselves as threats. Allegations of animal cruelty are not always fully investigated by the police due to confusing or conflicting information on where to report and who has jurisdiction. Violence is not limited to crimes against people, and it does not have any single socioeconomic niche. Effective policing includes aggressively pursuing crimes against animals. When a person dies in questioned circumstances, his or her body will be thoroughly examined by a medical examiner whose services are supplied by the state or other governmental office. When it comes to investigating the death of or harm to animals in questioned circumstances, there is no equivalent office to turn to for investigative support. Veterinarians contributing to the investigation of allegations of animal cruelty help to protect both animal welfare and human safety.

Notes

¹Arnold Arluke and Eric Madfis, "Animal Abuse as a Warning Sign of School Massacres," *Homicide Studies* 18, no.1 (2014): 7–22.

²Kevin Sack, "Grim Details Emerge in Teen-Age Slaying Case," *New York Times*, October 15, 1997.

³Suzanne E. Tallichet and Christopher Hensley, "Exploring the Link between Recurrent Acts of Childhood and Adolescent Animal Cruelty and Subsequent Violent Crime," *Criminal Justice Review* 29, no. 2 (2004): 304–316.

⁴Gail F. Melson, "Do Mass Killers Start Out by Harming Pets?" *Psychology Today* (blog), February 20. 2013, https://www.psychology today.com/blog/why-the-wild-things-are/ 201302/do-mass-killers-start-out-harming-pets.

⁵Jack Levin and Arnold Arluke, "Refining the Link between Animal Abuse and Subsequent Violence," in *The Link between Animal Abuse and Violence*, ed. Andrew Linzey (Eastbourne, UK: Sussex Academic Press, 2009).

⁶Stephen R. Kellert and Alan R. Felthous, "Childhood Cruelty toward Animals among Criminals and Noncriminals," *Human Relations* 38, no. 12 (1985): 1113–1129.

⁷Lenore E. Walker, *The Battered Woman Syndrome* (New York, NY: Springer Publishing, 1984).

⁸Frank R. Ascione, "Battered Women's Reports of Their Partners' and Their Children's Cruelty to Animals," *Journal of Emotional Abuse* 1, no. 1 (1998): 119–133

⁹Frank R. Ascione et al., "Battered Pets and Domestic Violence: Animal Abuse Reported by Women Experiencing Intimate Violence and by Non-abused Women," *Violence Against Women* 13 (2007): 354–373.

¹⁰Catherine A. Simmons and Peter Lehmann, "Exploring the Link between Pet Abuse and Controlling Behaviors in Violent Relationships," *Journal of Interpersonal Violence* 22, no. 9 (2007): 1211–1222.

¹¹Linda Merz-Perez, Kathleen M. Heide, and Ira J. Silverman, "Childhood Cruelty to Animals and Subsequent Violence against Animals," *International Journal of Offender Therapy and Comparative Criminology* 45, no. 5 (2001): 556–573.

¹²Michael L. Slavkin, "Enuresis, Firesetting, and Cruelty to Animals: Does the Ego Triad Show Predictive Validity?" *Adolescence* 36, no. 143 (Fall 2001): 461–466.

¹³Rebecca F. Wisch, "Domestic Violence and Pets: List of States that Include Pets in Protection Orders," Michigan State University College of Law, Animal Legal & Historical Center, 2017, https://www.animallaw.info/article/domestic -violence-and-pets-list-states-include-pets -protection-orders; Stacy Wolf "Raising Awareness About the Link: Link Cited as Key in Advancing Legal Protections for Animals," The LINK-Letter 10, no. 6 (June 2017): 13-14, http://nationallinkcoalition.org/wp-content/ uploads/2017/06/LinkLetter-2017-June.pdf.

¹⁴Randall Lockwood, "What Prosecutors Need for Successful Prosecution of Animal Cruelty: Results of a Survey" (lecture, 7th Annual Prosecuting Animal Cruelty Conference, Portland, OR, November 16, 2017).

¹⁵Daniel DeSousa et al., NIBRS User Manual for Animal Control Officers and Humane Law Enforcement (National Council on Violence Against Animals, 2016), https://awionline.org/ sites/default/files/products/AWI-CA-NIBRS -Manual.pdf.

¹⁶Phil Arkow, Paula Boyden, and Emily Patterson-Kane, Practical Guidance for the Effective Response by Veterinarians to Suspected Animal Cruelty, Abuse and Neglect (Schaumburg, IL: American Veterinary Medical Association, 2011), https://ebusiness.avma.org/Files/ ProductDownloads/AVMA%20Suspected%20 Animal%20Cruelty.pdf.

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¹⁷Lisa A. Conti and Peter M. Rabinowitz "One Health Initiative," Infektološki Glasnik 31, no. 4 (2011): 176-178.

¹⁸Tyler Jordan and Michelle Lem, "One Health, One Welfare: Education in Practice Veterinary Students' Experiences with Community Veterinary Outreach," The Canadian Veterinary Journal 55, no. 12 (December 2014): 1203-1206; Martha Smith-Blackmore, "Do YOU Wear the Badge?" LinkedIn post, August 9, 2016, https://www.linkedin.com/pulse/ do-you-wear-badge-martha-smith-blackmore -dvm?published=t.

¹⁹Arkow, Boyden, and Patterson-Kane, Practical Guidance for the Effective Response by Veterinarians to Suspected Animal Cruelty.

²⁰Helen M.C. Munro and Michael V. Thrusfield, "'Battered Pets': Non-accidental Physical Injuries Found in Dogs and Cats," *Journal of Small Animal Practice* 42 (2001):

²¹Lockwood, What Prosecutors Need for Successful Prosecution of Animal Cruelty.

²²International Veterinary Forensic Sciences Association, www.ivfsa.org.

²³The National Link Coalition, "How Do I Report Suspected Abuse?"http://national linkcoalition.org/how-do-i-report-suspected -abuse.



Addressing the **Complexities of**

DIGITAL **EVIDENCE**

By Scott Vantrease, Assistant Special Agent in Charge, U.S. Department of Health and Human Services, Office of Inspector General, Office of Investigations, Digital Investigations Branch; Christopher Kelly, Director, Digital Evidence Laboratory, Massachusetts Attorney General's Office; and Jim Emerson, Lieutenant Colonel (Ret.), U.S. Marine Corps, Chair, IACP Computer Crime and Digital Evidence Committee

As noted in a 2014 *Police Chief* article, "Assessing the Impact of Digital Evidence on State and Local Policing," the International Association of Chiefs of Police (IACP) has recognized that state, local, tribal, and territorial (SLTT) law enforcement agency (LEA) executives have been increasingly challenged by the universal presence and value of digital evidence (DE) in all aspects of professional policing over the past decade and a half.¹ This trend has continued, and, in 2018, LEAs currently face policy, legal, and technical challenges to accessing critical DE needed for successful investigations and for performing other public safety functions. Law enforcement has a significant, growing need for reasonable and legal access to DE, the creation of proper digital evidence policies and practices, the development of adequate digital forensic capability (particularly human capital), the establishment of a DE quality management program that includes a sustainability model, and the integration of DE practices with operational risk management. To this end, the IACP Technology Policy Framework identifies a number of principles to guide policy development that are relevant to DE.²

Increasingly, various digital technologies complement all aspects of life, and the individuals using them deserve fundamental respect and privacy regarding their use of these technologies and the information stored on or transmitted by them. Likewise, this saturation of digital technology regularly finds digital technology to be a tool for or evidence of a crime; therefore, agencies collect vast and diverse amounts of DE. Thus, the importance of handling DE properly and efficiently is fundamental to successful policing at all levels. It is also



fundamental to the protection of life and property. These same LEAs are challenged to form and maintain trust with their communities and the people whom the agency's officers protect. Since legal access to and use of DE by LEAs in the United States is controlled by the courts, statutory guidelines, and constitutional requirements, the process for SLTT LEA access to DE stands in stark contrast to that of national security organizations or the intelligence community. SLTT LEA capabilities are practically and financially limited, yet public perception sometimes suggests law enforcement is part of a surveillance state with limitless amounts of information. In truth, if an officer or an LEA steps out of bounds, they suffer systematic consequences after strict scrutiny by trial and appellate courts. Given the dependence of SLTT LEA operations and investigations on DE, great care is needed in striking the proper balance between community privacy concerns and the effective, lawful use of DE for public safety.

While DE is easy to discuss, it is complex to master. DE poses significant challenges for smaller agencies, which are more than two-thirds of all U.S. LEAs, according to the Bureau of Justice Statistics (BJS) census released in 2011. Most SLTT LEAs appear to be wrestling with the volume, complexity, and diversity of DE. However, precise measurement of the challenge is impossible in the absence of criminal justice metrics. Anecdotally, a range of research indicators suggest that DE is common to critical law enforcement operations from traffic enforcement to the investigation of serious crimes.4 Varied emerging legal, policy, and technical trends limit LEA access to and complicate LEA use of DE. In combination with the challenges listed above, these trends create a formidable challenge and a developing perfect storm.

Should LEAs Have Seen This Coming?

In 2001, a report funded by the National Institute of Justice (NIJ), Electronic Crime Needs Assessment for State and Local Law Enforcement, clearly illustrates the emerging challenges of electronic crime and resulting DE for SLTT LEAs and states that "any potential for growth

in electronic crime raises serious concerns about the capability of law enforcement resources to keep pace." This NIJ study effectively forecasted the key issues noted in IACP research conducted in this area with the National Sheriffs' Association and the National White Collar Crime Center. Further, the study supports assertions regarding the challenges associated with DE for SLTT LEAs. It was clear three years ago, when the aforementioned *Police Chief* article was published, that SLTT LEA executives were struggling with issues of shortfalls in resourcing, capacity, training, retention, and examination backlog. There is a need for meaningful metrics regarding the presence and involvement of DE in any crime, whether the crime is a complex computer or network intrusion or the simple use of a mobile device in a fatal traffic accident.

Moving forward, the National Institute of Standards and Technology (NIST), Organization of Scientific Area Committees (OSAC), Forensic Science Standards Board (FSSB) developed standards for DE via a variety of subcommittees composed of subject matter experts. Their standards are useful to SLTT LEAs and can be easily found online via the Law Enforcement Cyber Center. Enhancements to standards can represent both an advantage and burden for SLTT LEAs already struggling to keep pace with the many challenges associated with DE.

Why Is DE Complicated?

It is difficult to point to technologies that do not result in the creation of digital information and, consequently, potential evidence. This is true with technologies employed by police agencies (such as in-car or body video systems or digital forensic tools) just as it is with a host of technologies external to these agencies (such as online application providers and social media platforms), all of which produce DE that is very much needed for public safety and police operations.

For example, the contemporary availability of video and the human tendency to trust it as a record of historical events have thrust video DE into this discussion. For law enforcement, this is both an asset and a challenge. Video is produced by hundreds of millions of private individuals, video recorders, systems, and sensors. Also, consider that SLTT LEAs and other government sources of video produce millions of hours of video data. While it is cheap for anyone to produce video, it is expensive and sometimes overwhelming to efficiently store video. As the digital quality of video continues to improve and more video evidence is created, the challenge becomes larger. The storage and maintenance of these data are not trivial in either the cost or the human effort required. This type of DE issue traverses the entire criminal justice system: law enforcement, prosecutors, courts, and corrections. Currently, no single, simple tool addresses the complexity of video technical diversity. Further, the process for the review and examination of digital video evidence, whether for investigative purposes, redaction, or compliance with external requests, is currently not automated and largely depends upon human review. This process can be time consuming and costly.

Next, "connectedness" and "cloud" are two very popular terms of the 21st century. A myriad of technologies interact with large networks and depend upon Internet connections. This means that the evidence to help a victim in one jurisdiction could be on the opposite side of the world. It could also be the case that the legal system for collecting that evidence may be different or that critical evidence could be in the control of a third party or commercial business with priorities that are at odds with SLTT LEAs. The first challenge is locating potential sources of evidence within a complex distributed internetwork, also known as "the cloud." This is not always an easy task given criminal schemes to obfuscate complicated infrastructure and the methods by which subjects really connect online. Adding to that challenge are hosting environments that assist criminals with accomplishing their objectives (known as bulletproof hosting) or registrars that do not validate registrant information properly for domain names or IP address space; very quickly, it is easy to understand

why cybercrime and cyber-facilitated crime appear to be viable alternatives to other crime. There is no simple solution available to law enforcement to address these challenges, and international law enforcement collaboration and cooperation are essential to support agencies dealing with this type of DE.

Connected sensors and smart technology sources—the Internet of Things or IoT-have expanded greatly in recent years and continue to do so. Consider the DE produced by the commercial security technologies and do-it-yourself smart home technologies that have become widely popular. In addition, health care, critical infrastructure sectors, smart consumer products, and smarter automobiles all contribute to this situation by bringing diverse proprietary data and DE to the table. LEAs are not exempt from this discussion; sensor technologies, such as those to detect gunfire in communities, are increasingly in use. These technologies are generally lightweight appliances or sensors and are usually simple elements of a more complex network by design. IoT devices also typically lack the computing power found in most systems, and are thus vulnerable to a range of attacks. The disparate technologies in use, combined with the security vulnerability inherent in most of these technologies, combine to create DE challenges that agencies must plan for in advance of a critical investigative need.

Finally, and perhaps most significant, it is easy to recognize the prolific use of handheld or portable wireless computing devices or smartphones that connect to the Internet virtually everywhere their users go. On one level, this constant presence of mobile devices has created serious public safety concerns for motor vehicle traffic, resulting in regular incidences of injury and death attributed to a driver using such a device. On the other end of the public safety scale, these devices regularly contain evidence central to very serious and violent crimes, including terrorism. SLTT LEAs regularly need to process this type of DE and, many times, they find it to be overwhelming. This challenge is further complicated by many of the factors already stated, including changes to the technology, changes to the legal means of collection, privacy concerns, and advancements in encryption. These are challenges that LEAs have been wrestling with for over a decade. While there are numerous tools that assist with the collection and analysis of DE, they are expensive, numerous, and imperfect. Encryption, lock out safeguards, and data wiping capabilities increasingly prevent SLTT LEAs from legal access to critical evidence necessary to detect, investigate, and prosecute serious offenses.

While the notion of "Going Dark" is not new to the law enforcement community, the increasing complexity of access presented by the various proprietary nuances and the distributed nature of available technologies is frequently exploited by criminals of all types.

As the DE landscape changes rapidly, it is important for law enforcement executives at every level, and particularly at SLTT LEAs, to undertake assessment to understand the full spectrum and value that DE presents to each agency. Law enforcement executives must also assess the extent to which DE challenges their agency at various levels and the need for creative solutions. To address these pressing DE challenges, the IACP currently has its Computer Crime and Digital Evidence Committee, the Police Investigative Operations Committee, and the Forensic Science Committee formally collaborating on the development of DE-related resources for law enforcement.



Why Is DE Not Accessible?

At the 2017 IACP Annual Conference and Exposition, FBI Director Christopher Wray indicated the FBI, in less than a year, had encountered almost 7,000 mobile phones related to investigations that they could not forensically access due to encryption.⁸ The FBI director's remarks followed similar concerns voiced by U.S. Deputy Attorney General, Rod Rosenstein, regarding the impact of encryption on public safety in a public address at the U.S. Naval Academy only weeks prior.⁹

Because of growing technological, data control policy, and legal restraints, access to DE is not always possible for SLTT LEAs in criminal cases or, more importantly, to save human life. While the notion of "Going Dark" is not new to the law enforcement community, the increasing complexity of access presented by the various proprietary nuances and the distributed nature of available technologies is frequently exploited by criminals of all types. The tools available to SLTT LEAs must encompass the variety and the proprietary considerations, while simultaneously being nimble enough to connect to a single port; a simple sensor-based system; an Internet-enabled appliance; or a large, complex distributed network. However, at present time, a single set of tools to address the entire DE landscape does not exist.

As mentioned, law enforcement is increasingly confronted with the implementation of encryption. Encryption addresses a myriad of legitimate security and privacy concerns; nonetheless, the value of encryption is not lost on criminals and has led to large numbers of investigations where access to DE is not possible. U.S. Deputy Attorney General Rod Rosenstein stated,

Encrypted communications that cannot be intercepted and locked devices that cannot be opened are law-free zones that permit criminals and terrorists to operate without detection by police and without accountability by judges and juries. ¹⁰

Encryption as a limiting factor in accessing DE is not restricted to only data at rest, it is common for data in motion to use end-to-end encryption as well, ensuring that lawful intercept is not possible.

The current focus on privacy rights and assertions of anonymity online or safety of personal devices in relation to individual constitutional rights drives increasing legal scrutiny regarding SLTT LEA access to DE. Emerging case law, as well as proposed legislation, promises minimal to negligible access to data believed to be evidence. Most digital technology infrastructure and related data are created, controlled, or serviced by the commercial private sector. Business concerns about security and consumer trust are also shaping technological change, leading to the adaptation of encryption and counter-forensic capabilities as standard consumer offerings on devices, systems, or services. SLTT LEAs are continually confronted by the need for exceptional access to encrypted data, advanced tools, and forensic capabilities, as well as resources to address the increased expense resulting from barriers to DE access. The speed of change for technology and use of encryption, the culture of digital technology use, pervasive privacy concerns, and the increasing importance of DE to public safety must all be understood, balanced, and planned for within the SLTT law enforcement community.

While encrypted devices and encrypted communications are discussed as the primary SLTT LEA barriers to DE access, one must consider also that foreign stored data, fragmentation of stored data, data stores in motion, unknown stored data, data retention gaps,

service provider responsiveness and cooperation challenges, and explicit service provider restrictions for SLTT LEA access and use of their data and metadata all compound the DE access challenge.

How Can SLTT LEAs Catch Up?

Given the last published BJS LEA census (2011), the overwhelming majority of SLTT LEAs have less than 25 sworn personnel. Considering the human, technical, and financial overhead implied by the issues discussed herein, the effect on small agencies is potentially overwhelming. That said, law enforcement executives leading those organizations continually demonstrate frugal, creative, collaborative, and frankly amazing solutions to address difficult policing challenges and to protect their communities. It is critical that policy facilitates these types of solutions for DE, especially considering its saturating presence in the world of public safety.

Collaboration and mutual aid already appear to be the lifeblood of most SLTT LEA approaches to managing DE. However, in some instances, collaboration is akin to professional networking and informal assistance, and, in other cases, it is very formal mutual aid or shared support embodied in the policies and operations of a task force environment with a specific mission. While both approaches are notable, SLTT LEA policy should seek to prescribe goals and objectives with adequate levels of DE support and collaboration to ensure the success of the LEA mission. LEA executives should consider participation with regional labs; state labs; regional networks such as county assets; metropolitan area networks; local mutual aid relationships; task force environments; commercial service providers; and professional networks and organizations, and other resources such as the Law Enforcement Cyber Center, a training and information clearinghouse. Each of these potential resources will present both operational advantages and limitations, and policies must consider the need to engage with multiple stakeholders in order to address the DE challenge and the success of the SLTT LEA mission. Moving forward, IACP efforts and committee collaborations will consider how to help its members address the complexities of a very important SLTT LEA asset—digital evidence. ❖

Notes

¹James J. Emerson, "Assessing the Impact of Digital Evidence on State and Local Policing," *The Police Chief* 81 (October 2014): 64–68, http://www.policechiefmagazine.org/assessing-the-impact-of-digital-evidence-on-state-and-local-policing.

²IACP, *IACP Technology Policy Framework*, January 2014, http://www.theiacp.org/Portals/0/documents/pdfs/IACP%20Technology%20 Policy%20Framework%20January%202014%20Final.pdf.

³Brian A. Reaves, *Census of State and Local Law Enforcement Agencies*, 2008, Bulletin, Bureau of Justice Statistics, July 2011, https://www.bjs.gov/content/pub/pdf/csllea08.pdf.

⁴Emerson, "Assessing the Impact of Digital Evidence on State and Local Policing."

⁵Hollis Stambaugh et al., *Electronic Crime Needs Assessment for State and Local Law Enforcement* (Washington, DC: National Institute of Justice, 2001), https://www.ncjrs.gov/pdffiles1/nij/186276.pdf.

 $^6\mathrm{Emerson}$, "Assessing the Impact of Digital Evidence on State and Local Policing."

⁷Law Enforcement Cyber Center, http://www.iacpcybercenter.org. ⁸Cyrus Farivar, "FBI Director: Unbreakable Encryption Is a 'Huge, Huge Problem,'" *Ars Technica*, October 23, 2017, https://arstechnica.com/tech-policy/2017/10/fbi-director-unbreakable-encryption-is-a-huge -huge-problem.

°U.S. Department of Justice, "U.S. Deputy Attorney General Rod J. Rosenstein Delivers Remarks on Encryption at the United States Naval Academy," news release, October 10, 2017, https://www.justice.gov/opa/speech/deputy-attorney-general-rod-j-rosenstein-delivers-remarks -encryption-united-states-naval.

¹⁰U.S. Department of Justice, "U.S. Deputy Attorney General Rod J. Rosenstein Delivers Remarks on Encryption."





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This project was supported by Cooperative Agreement Number 2013-CK-WX-K023 awarded by the Office of Community Oriented Policing Services, U.S. Department of Justice. The opinions contained herein are those of the author(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice. References to specific agencies, companies, products, or services should not be considered an endorsement by the author(s) or the U.S. Department of Justice. Rather, the references are illustrations to supplement discussion of the issues.

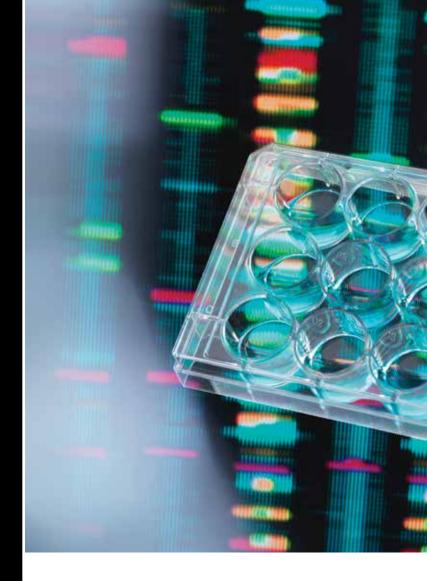
Booking Station Hits: Arrestee Rapid DNA Analysis, Enrollment, and CODIS Hits

By Thomas Callaghan, Chief Biometric Scientist, Laboratory Division, Federal Bureau of Investigation, Member, IACP Forensic Science Committee, and Stephanie Stoiloff, Commander, Forensic Services Bureau, Miami-Dade Police Department, Miami, Florida, Co-Chair, IACP Forensic Science Committee

In June 2013, the U.S. Supreme Court found the collection of DNA samples from arrestees under the Maryland DNA collection law constitutional and concluded that

DNA identification of arrestees is a reasonable search that can be considered part of a routine booking procedure. When officers make an arrest supported by probable cause to hold for a serious offense and they bring the suspect to the station to be detained in custody, taking and analyzing a cheek swab of the arrestee's DNA is, like fingerprinting, and photographing, a legitimate police booking procedure that is reasonable under the Fourth Amendment.*

*Maryland v. King, 569 U.S. 435, 465, 133 S. Ct. 1958 (2013).



What if law enforcement could determine during booking if the arrestee being fingerprinted and photographed matched DNA evidence left 10 years ago at a murder scene hundreds of miles away in another state? Passage of the Rapid DNA Act of 2017 by the U.S. government has brought the possibility of these matches of DNA profiles from unsolved violent crimes to DNA profiles from arrestees at booking stations closer to reality.¹ Efforts are under way by the Federal Bureau of Investigation (FBI) to generate a Combined DNA Index System (CODIS) profile using Rapid DNA instruments from arrested individuals at the time of booking. The expansion of CODIS enrollment and searching from booking stations could be implemented in the next two to four years in states authorized to collect and analyze DNA at the time of booking.

Rapid DNA Background

Over the last eight years, the U.S. Departments of Defense, Homeland Security, and Justice have together funded the development of Rapid DNA instruments.² Rapid DNA, a hands-free DNA analysis process, has been designed for use to develop a CODIS profile in near real time at the point of sample collection from an oral swab (buccal swab). The Rapid DNA technology is designed to provide DNA analysis capabilities for reference samples by a self-contained instrument or "black box" that can be housed at any booking facility and requires no forensic science expertise for operation and interpretation. Although the intended use for these machines by the three federal departments might differ, the core set of requirements to develop a DNA profile at the 20 CODIS genetic locations in a "swab in, profile out" automated manner from a buccal swab in under two hours are the same.³



The capability to search an individual's CODIS profile against an unsolved crime database during the booking process is currently under development as part of the FBI's plan to expand CODIS enrollment and searching to the booking station as authorized by the Rapid DNA Act of 2017.4 The goal of the Rapid DNA project is to produce a CODIS profile at the point of collection (booking) and use the existing CODIS structure to enroll and search the FBI DNA database to determine if the individual being booked is linked to an unsolved *crime of special concern* while the arrestee is in police custody.

Forensic DNA technology is hailed as one of the most important law enforcement tools of the 21st century as it is used, for example, to perform forensic identification, to exonerate the innocent, to identify missing persons and victims of mass disasters, to perform detainee screening, and to link improvised explosive devices to bomb makers. The U.S. Supreme Court noted in its 2013 review of the constitutionality of DNA sample collection from arrestees that DNA identification is superior to fingerprinting and that the DNA collected from arrestees provides an "irrefutable identification."5 Presently, 31 states, the U.S. federal government, and Puerto Rico have authorized the collection of DNA from individuals arrested for qualifying offenses.⁶ In addition, 16 states and the federal government have authorized the analysis of an arrestee DNA sample for a CODIS profile at the time of collection. The remaining 15 states permitting DNA collection from arrestees must wait until an arrestee is indicted or for another determination of probable cause before submitting the sample to DNA analysis for CODIS submission.⁷

Since the early 1990s, the FBI has funded the development of software to database and search DNA profiles from crime scenes and known offenders. The CODIS software serves as the foundation

of a program that includes more than 190 state and local forensic DNA laboratories in the United States, including the FBI and the U.S. Department of Defense laboratories.8 The FBI maintains the National DNA Index System or NDIS, which is the highest level of these databases and contains the DNA profiles contributed by federal, state, and local forensic DNA laboratories. As of November 2017, NDIS contained close to 17 million DNA profiles with more than 16 million arrestee, detainee, and offender DNA profiles and more than 817,000 forensic or crime scene profiles.9

The Rapid DNA initiative's objective is to build upon the existing capabilities of the CODIS software by leveraging the analysis and comparison of the DNA sample during the booking process, while the individual is in police custody-so, if that individual is suspected of other serious crimes, that information can be taken into consideration when making a determination about release. The time between arrest and trial is often measured in months rather than days or weeks; thus, it is critical to know if the individual being booked is suspected of any other serious crimes.

Current State and Future of Rapid DNA

With all 50 U.S. states requiring felony offenders to provide a DNA sample upon convictionand more than half of the states now requiring persons arrested or arraigned for specified felony offenses to provide a DNA sample—

the number of known arrestee and offender profiles is steadily increasing each year. Taking a DNA sample upon arrest, analyzing it immediately, and searching it against the crime scene database should provide law enforcement with important information early in the criminal justice process by identifying suspected perpetrators of unsolved crimes before they are released from police custody. In doing so, Rapid DNA technology possesses the potential to reduce the number of future victims from that perpetrator, as well as decrease investigative resources devoted to unsolved crimes.

The FBI began exploring Rapid DNA technology in 2008 and later added a dedicated program office to oversee the administrative and technical management of all FBI Rapid DNA activities, including technology development, test and evaluation, advancement of quality assurance standards, and the enhancement of the infrastructure necessary to ensure rapid communications between law enforcement agencies and CODIS. Input from the law enforcement community is obtained through the Rapid DNA Task Force, which was established in 2010 by the FBI Criminal Justice Information Services Advisory Policy Board (CJIS APB). The task force has provided recommendations on booking station operations, procedures, and arrestee data format for the efficient integration of Rapid

Figure 1: Next steps for **Rapid DNA initiative**

RAPID DNA

2018 CODIS 8.0 Deployment



- · Identify requirements and issues to address for Rapid DNA booking station pilots.
- · Develop plans for short pilots at local, state and federal booking stations.
- CODIS laboratories enter DNA from unsolved rape, homicide and kidnapping cases into the DNA Index of Special Concern (DISC).

2019



· Initiate limited state and federal booking station pilots with action taken on samples generating CODIS hits.

DNA analysis into booking locations at police stations throughout the United States.¹⁰

Following guidance provided by both the CJIS APB Rapid DNA Task Force and the Scientific Working Group on DNA Analysis Methods (SWGDAM), a multiphase approach is envisioned for the implementation of Rapid DNA technology into booking stations. The FBI has adopted the CJIS APB recommendations that State Identification Numbers (SIDs) form the basis for the identity of arrestees through their criminal history records for DNA profile tracking and identification in CODIS. It is important to note that no criminal history or other personal information is stored at NDIS. The FBI has also modified CODIS to accept the APB-approved arrestee enrollment format (AEF) for data submission from arrestee DNA profiles developed in booking stations.¹¹

CODIS, already a well-established program of software and support for law enforcement DNA databases, will be implementing features for the use of Rapid DNA technology in CODIS 8.0, its next software release, planned for release this year (2018). CODIS 8.0 will allow authorized arrestee states to establish booking station upload capability as soon as they are able to modify their state criminal history record systems to provide the required Rapid DNA arrestee enrollment information in the required format. CODIS 8.0 will also allow all CODIS laboratories to register unsolved homicide, rape or sexual assault, and kidnapping cases in the DNA Index of Special Concern (DISC). Unsolved homicide, rape or sexual assault, and kidnapping cases with single-contributor complete CODIS profiles (at the original 13 core loci) entered into DISC will be searched immediately in NDIS when an arrestee profile is submitted from a booking station through CODIS. If there is a perfect match between the arrestee and DISC profiles, then an automatic message will be transmitted to the investigating agency, arresting agency, and booking agency (if different than the arresting agency). This Unsolicited DNA Notification (UDN) message is similar to the Want or Warrant Notification message that occurs when an arrestee's fingerprint submission triggers an automatic notification. All CODIS laboratories involved in a hit will also be immediately notified through normal CODIS notification protocols. Not all unsolved crimes will be eligible for DISC and the immediate searching capability it creates because the search will be limited to those unsolved homicide, rape or sexual assault, and kidnapping cases identified by the CODIS laboratory that developed the profile. Because NDIS also contains DNA profiles from crime scene mixtures and DNA profiles with less than 13 CODIS core loci, these non-DISC profiles might not necessarily result in a perfect match and will therefore require human review when they are involved in a candidate match. However, the Rapid DNA arrestee profiles will be searched against all NDIS DNA profiles during the next day's regularly scheduled search, and any hit notifications from that search will follow normal NDIS operating procedures. Integrating Rapid DNA in booking stations will result in the searching of all unsolved DNA profiles in the United States in 24 hours, thus removing the weeks to months it may take for an arrestee DNA sample to be mailed, accessioned, analyzed, uploaded, and searched in CODIS. The DISC will also benefit states without arrestee DNA collection laws because of the instant searching and notification of the unsolved violent crime DISC profiles from all 50 states; Washington, DC; and Puerto Rico.

The FBI's Rapid DNA Program Office was established in 2010. All Rapid DNA activities are now being coordinated out of the Laboratory Division's CODIS Unit after the enactment of the Rapid DNA Act. The Rapid DNA initiative has been primarily focused on the development of a robust, "swab in, DNA profile out" capability for reference sample buccal swabs. These developmental efforts have produced instruments capable of analyzing buccal swabs for complete CODIS DNA profiles in less than two hours under the operation of non-laboratory personnel. The Rapid DNA initiative included the testing and evaluation of the Rapid DNA instruments

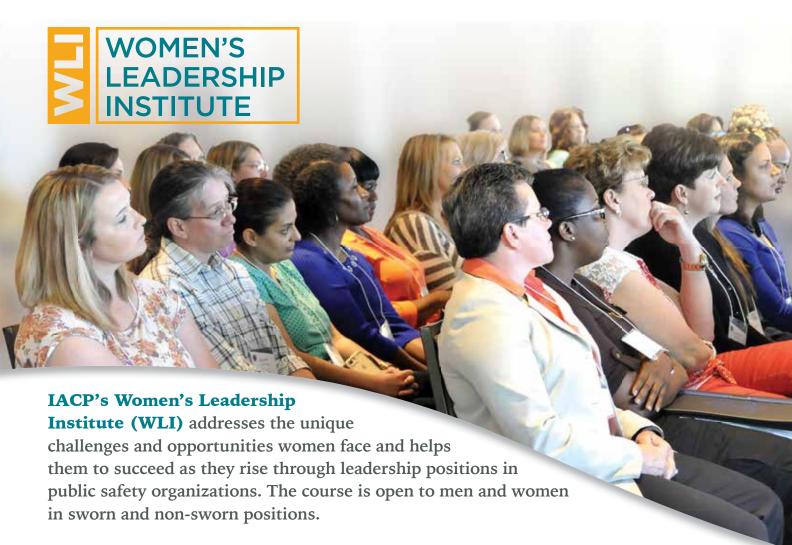
Figure 2: Phases of Rapid DNA deployment

RAPID DNA 2018-2019



and development of an interface specification guide for the integration of required criminal history data into CODIS in order to support necessary communications for pilot testing and booking station operation.

Similar to CODIS experiences with forensic DNA technology, continued testing, validation, and training will be crucial components for the proper implementation of Rapid DNA technology and its use by non-laboratory booking station personnel. Three phases are anticipated for the implementation of Rapid DNA into booking stations. During 2018, the FBI will deliver the capability to utilize Rapid DNA outside of crime laboratories with the deployment of the new CODIS software. With CODIS 8.0, CODIS laboratories will begin to populate their DISCs for immediate searching. It is worth noting that states have entered more than 817,000 DNA profiles from both violent crimes and property crimes that must be reviewed for DISC eligibility; this review will be time intensive at the onset in order to make sure that qualifying homicide, rape, and kidnapping profiles are added.¹² In 2019, pilot testing will be initiated to test standards and procedures for booking station submission of Rapid DNA arrestee profiles to CODIS. The final phase will be the use of Rapid DNA technology in a high-volume booking agency to test the system in operation and to finalize standards, workflows, and procedures for the routine use of Rapid DNA in booking stations. It is anticipated that state and local jurisdictions will need at least one



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to two budget cycles to create and implement the requisite information technology infrastructure to support Rapid DNA in booking stations. As such, a large burden is placed on state and local jurisdictions to make the necessary changes to utilize the technology.

The testing, validation, development of standards, and training of personnel are intended to establish a solid scientific foundation for the use of Rapid DNA technology. This point-of-collection DNA analysis with CODIS searching will allow law enforcement agencies to determine if an arrested individual is potentially the perpetrator of an unsolved crime. Through this program, access to CODIS will be easier and faster, providing key information that law enforcement needs while the suspect is still in custody, ultimately providing a positive, real-time impact on crime prevention. Solving cases sooner, reducing investigation costs, and preventing additional crimes and victims are all potential benefits of Rapid DNA, a revolutionary tool for law enforcement.

For an update on the progress on the FBI's Rapid DNA initiative, visit the FBI's CODIS web site at www.fbi.gov/services/laboratory/biometric-analysis/codis.

Notes:

¹Rapid DNA Act of 2017, Pub. L. No. 115-50 (2017).

²Federal Bureau of Investigation (FBI) Laboratory Division "Rapid DNA," https://www.fbi.gov/services/laboratory/biometric-analysis/codis/rapid-dna.

³FBI Laboratory Division "Rapid DNA."

⁵Maryland v. King, 569 U.S. 451 (2013).

⁶The state codes of the following 31 states permit the collection of DNA from individuals arrested for qualifying offenses: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Illinois, Indiana, Kansas, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wisconsin.

Minn. Stat. §299C.105(1)(a)(1), which authorizes DNA sample collection from persons who have appeared in court and have had a probable cause determination on a designated charge (murder, manslaughter, assault, robbery, kidnapping, false imprisonment, criminal sexual conduct, etc.) was found unconstitutional in *In Re Welfare of C.T.L.*, 722 N.W.2d 484 (Minn. Ct. App. 2006).

⁷The state codes of the following 16 states authorize the analysis of an arrestee DNA sample for a CODIS profile at the time of collection: Alabama, Alaska, Arizona, Arkansas, California, Florida, Kansas, Louisiana, Michigan, Mississippi, Missouri, New Jersey, North Dakota, Ohio, South Carolina, South Dakota.

⁸FBI, "Combined DNA Index System (CODIS)," https://www.fbi.gov/services/laboratory/biometric-analysis/codis.

°FBI, "CODIS-NDIS Statistics," November 2017, https://www.fbi.gov/services/laboratory/biometric-analysis/codis/ndis-statistics.

¹⁰FBI's Plans for the Use of Rapid DNA Technology in CODIS, Statement Before the House Judiciary Comm., Subcommittee on Crime, Terrorism, Homeland Security, and Investigations, 114th Cong. (2015) (statement by Amy S. Hess, Executive Assistant Director, Science and Technology Branch, FBI), https://www.fbi.gov/news/testimony/fbis-plans-for-the-use-of-rapid-dna-technology-in-codis.

¹¹FBI, "Combined DNA Index System (CODIS)."

¹²FBI, "CODIS-NDIS Statistics."



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PRODUCT FEATURE:

BODY-WORN CAMERAS: VIDEO DISCUSSION GOES BEYOND THE CAMERA

By Scott Harris, Freelance Writer

f any piece of equipment symbolizes the modern world of law enforcement, it could well be the body-worn camera.

As they rose in prominence alongside smartphones, body-worn cameras enabled police officers to record incidents from a law enforcement perspective. Agencies in various countries began to pilot the technology, and, with the goal of enhancing transparency and accountability for both officers and civilians, the U.S. federal government poured tens of millions into bodyworn camera programs for agencies around the United States.

However, as relatively new devices, bodyworn cameras have, to date, provided inconclusive data on their effectiveness. At the same time, concerns over privacy and other issues began to emerge in the discussion around body-worn cameras.

"[Body-worn cameras] came into the marketplace as a police tool to increase transparency," said Paul DiModica, chief revenue officer for Equature, a Southfield, Michigan, software company focusing on public safety. "But now we're at a tipping point. We're at a lot of tipping points. In the last 18 months, because of shootings and demonstrations, there was a perception that there wasn't enough transparency. We felt like this was incorrect. There were strengths and weaknesses with a first-generation device. People just wanted more."1

As public debate continues—shaped by the same high-profile incidents that are driving much of the debate around law enforcement as a whole-officers in the field or in administrative roles are grappling with a different kind of challenge. As with the videoenabled smartphones in the pocket of nearly every adult, it is hard to imagine a future that does not include body-worn cameras. But for all the video footage the cameras capture, the day-to-day challenge lies in leveraging bodyworn camera videos into meaningful, actionable information.

Manufacturers and solution providers say they have learned valuable lessons from the first generation of body-worn cameras. New hardware and software are smarter, they say, and are ready to transform bodyworn cameras and the data they produce into the tools many have long envisionedsomething that makes the work of law enforcement easier and more effective, not harder and more controversial.



Photo courtesy of Safarliand-VEIVU

The cameras themselves are continuously evolving, but a major part of the equation is the software that helps departments make video more useful—both in the moment and after a video has been taken.

"Over the last couple of years, there were a lot of players who got into this space," said Kevin Mullins, CEO of Intrensic, a law enforcement technology company head-quartered in San Mateo, California. "What has happened since then is we've seen two separate needs come out. One is a need for video capture, and the other is for evidence

management. Law enforcement discovered they were producing thousands of records every month. So how do you handle that? That's where our expertise is."2

More Options During an Incident

The effect of body-worn cameras remains inconclusive. In October 2017, the Metropolitan Police Department in Washington, DC, released a study showing that body-worn cameras had no major effects on use of force, civilian complaints, officer discretion (as measured by arrests for disorderly conduct), the likelihood of a case's prosecution, or case disposition.3

According to experts, this may be a reflection not so much on the cameras themselves as with the procedures that occur during and after the video is recorded. That is something that companies like Equature are aiming to address.

"We just rewrote the platform," DiModica said. "We rewrote it from a regular bodyworn camera approach to a body-worn camera approach that uses Android and works in real time."4

This new functionality allows users to activate cameras from remote locations and capture footage of incidents as they are happening. Long known for public safety dispatch software, Equature recently created Interactive Policing, a real-time video and audio recording platform that connects a body-worn camera to the officer's command and control dispatch center.

To illustrate how it works, DiModica uses a dramatic and tragic example: the October 1, 2017, shooting spree in Las Vegas, Nevada, that left 58 concert-goers dead.

"Las Vegas had 150 first responders on the scene, and the best video anyone saw was from peoples' personal cellphones," DiModica explained. "If [Interactive Policingenabled cameras] were worn by first responders, you could have had 150 different views... If there are five officers chasing an active shooter, you would have five video feeds coming in simultaneously in real time.

2018 Police Chief Calendar

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And you can do that from the command position."5

An increased connection between bodyworn cameras in the field and those working in command and control capacities has extra benefits. One is that the video and other data transmitted from the field are sent into the cloud, offering extra security. A built-in GPS capability can help locate cameras and even officers, if necessary.

"If you attack me as an officer, and my camera gets destroyed, usually that means that all the footage gets destroyed," DiModica said. "But with this it goes to the cloud... A GPS system means you can find the camera and the officer. No officer is ever alone."6

More Options After an Incident

If body-worn cameras are truly going to retain their recently won recognition as a tool for greater public safety, more evidence will need to be produced that cameras themselves can produce evidence.

To Mullins and Intrensic, meeting that goal means more thoughtful management of the videos after they are taken.

"How do you bundle the information, aggregate it, archive it, retrieve it, audit it, and share it?" Mullins said. "What's the cost of managing this data? Just putting it in a folder somewhere, or archiving it using a table and putting that somewhere can be burdensome. We're treating [the data] as evidence, and we're building cases on it, and we're pushing it out electronically to a prosecuting agency."7

The name of Intrensic's solution, Evidence on Cloud, contains one of its key attributescloud storage. Unlimited, secure storage on the cloud enables agencies to easily store as many video files as needed and makes those files far easier to retrieve when the time is right compared with other, more ad-hoc setups. The scalable solution makes it workable for large and small agencies at all levels, and unlimited sharing makes it easy to transfer files to other stakeholders. A chat feature inside the software also facilitates easier communication between parties.

Although it is an open-source network that can be configured to work with a range of body-worn cameras, Intrensic's official hardware partner for Evidence on Cloud is the manufacturer GoPro. Long well known for its high-quality work in action photography and the consumer market, GoPro's law enforcement camera models have delivered the same quality to police work.

Hardware Makes Advances

GoPro, which, like Intrensic, is based in San Mateo, California, has quickly established itself as a key player in body-worn cameras. But there are plenty of other leaders in the space—and hardware continues to evolve even as software solutions begin to coalesce.

Safariland VIEVU, based in Seattle, Washington, is a widely recognized leader in the field of body-worn cameras. Its newest model, the LE5, uses efficient wireless technology and is integrated with holstercamera auto-activation. Although it has not yet been released for sale, the LE5 is available for advance reservations on the Safariland VEIVU website.8

"At Safariland, we are committed to providing law enforcement with the most innovative and effective solutions," said Jason Wine, vice president of engineering and technology at VIEVU. "With our deep understanding of the connected officer, innovation is focused on safety and performance. Our CAS auto-activation technology is an essential tool to enhance officer ability, removing the decision-making process and allowing them to focus on the task at hand. The selectable options on our new LE5 body-worn camera are core elements. Both are defining the way law enforcement agencies integrate connectivity and technology into policing."9

Another provider, WatchGuard Video, has long been known for delivering a wide array of video tools to the public safety community. The Allen, Texas, company's newest body-worn camera model, the Vista XLT, is a two-piece, lightweight system that was built to be highly adaptable to different assignments and even uniform types.¹⁰

Software continues to evolve, and hightech camera features can be highly desirable, but the most valuable keys to a body-worn camera—affordability and reliability—remain constant, according to Andrew Beach, director of sales and service for PRO-VISION Video Systems, a Byron Center, Michigan, company and leading body-worn camera provider.11

Each PRO-VISION body-worn camera model costs less than \$300, Beach said. But that doesn't come at the expense of features like a full-shift battery life, night-vision mode, ease of use, and durable construction.

"It's got to be affordable," Beach said. "You should not have to pay \$600 or \$800 for a camera. The touchstone of a good product is that you don't need a 10-day training session to learn how to use it... You don't want to overthink it."12

Body-worn camera providers are listening to the discourse around body-worn cameras and engineering new hardware and software solutions to allay concerns by the public and law enforcement. As the profession works to figure out the place of body-worn cameras and the videos they produce in police work, the technology industry is working to make sure law enforcement has access to the best options currently possible. �

Notes:

¹Paul DiModica (chief revenue officer, Equature), telephone interview, November 29,

²Kevin Mullins (CEO, Intrensic), telephone interview, November 30, 2017.

³David Yokum, Anita Ravishankar, and Alexander Coppock, Evaluating the Effects of Police Body-Worn Cameras: A Randomized Controlled Trial (Washington, DC: The Lab @ DC, Metropolitan Police Department, and Government of District of Columbia, 2017), http:// bwc.thelab.dc.gov/TheLabDC_MPD _BWC_Working_Paper_10.20.17.pdf.

⁴DiModica, interview.

⁵DiModica, interview.

⁶DiModica, interview.

⁷Mullins, interview.

⁸Safariland VIEVU, http://www.vievu.com.

⁹Jason Wine (vice president, engineering and technology, VIEVU), email, December 4, 2017.

10WatchGuard Video, https://watchguard video.com/body-cameras/vista-xlt.

¹¹Andrew Beach (director, sales and service, PRO-VISION Video Systems), telephone interview, November 30, 2017.

¹²Beach, interview.

-PRODUCT FEATURE: -----

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For contact information, please visit www.policechiefmagazine.org.

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IACP THROUGH THE YEARS

Investigation of Typed Documents

By Detective Sergeant J. H. Rogers, Scientific Investigation Bureau, C.I.B. Sydney

In celebration of IACP's 125th anniversary, each 2018 issue of Police Chief will include a republished article from the magazine's history, which dates back to 1934. The following article is from the January 1947 Police Chiefs' News Letter, the forerunner to the modern Police Chief and is an extract of an article that appeared in the October 1946 Australian Police Journal.

he principle underlying the identification of typewriting rests on the improbability of two typewriters possessing, in a number of identical type characters, irregularities of an identical nature. The degree of proof varies in proportion to the nature and number of the irregularities present. Although this type of evidence, in common with all other expert testimony, is confined to the expression of an opinion by the witness, the experience of those who have studied the subject during the past thirty-five years shows that, given favorable conditions, the identification of typewriting can be carried to a state of certainty.

If, in two samples of typewriting, we find that the size and design of the type characters agree and that the only irregularity present is a defect in one letter, which irregularity is present in both samples, we have an identification that both were typed on one machine. If it is found that peculiarities of an identical nature are present in three letters this would, undoubtedly, be a much stronger indication of identity. But, in the event of a discovery that one sample bears abnormalities of a certain distinctive nature in ten different letters or characters, and in no others, and a comparison reveals that the other sample also possesses these same peculiarities in the same ten characters, and also in no others; then the conclusion that both samples were typed on the one machine becomes irresistible. Especially does this inference present itself when it is considered that each type of character may develop abnormalities of at least four kinds and in several different parts of its design. Now to consider our problems in their order.

Two Documents Typed on Same Machine

In those cases where it is desired to ascertain whether or not a document was typed on a particular machine, try to obtain a specimen of the work of the suspect machine done with a ribbon in as near as possible the same condition as that used in typing the exhibit document. This is desirable because any great difference in the thickness of the ribbon, or quantity and moisture of the ink on the ribbon will result in a difference in the size and appearance of the type characters. The general appearance of specimens of typewriting done on the one machine may vary a great deal if different ribbon conditions were present.

Wherever possible any specimen of typewriting obtained from a suspect machine should be a copy of at least part of the document in question as this will facilitate the process of comparison, especially as regards the relative alignment of various letters.

Design and size.—In the comparison process, the first item to be considered is letter and figure design and size. An examination of the typewriting from different makes of typewriters, and from different models by the same maker, will show that a wide variety of letter and figure designs is employed.

By careful visual comparison without any optical aids, it is often possible to notice immediately even minor differences in design in documents typed on different makes or models. In this phase of the examination, pencil and paper should be kept at hand in order to note the figures and letters as they are compared in two documents, to ensure that none is overlooked. Comparison should include the overall sizes, lengths of the cerifs (the small bars placed at top and bottom of strokes), the degree of curve in the letters, the position of the crossing in f and t and the lengths of these crossings. Small letters which provide a variety of designs are f, g, m, y, and t, but the differences are usually apparent if consideration is careful. In the letter f check the lengths of the crossing and bar at the foot and the shape of the top curve; in a g check the sizes, both actual and relative. Of the two bulbs forming the top and bottom of the letter, the space between the two bulbs, the shape of the line joining them, the position of the top formation in relation to the lower, and the position and design of the small appendage on the top right extremity. With the m and n consider the relationship existing between the width and height of the letter, the length of the cerifs at the bottom of each strike and at the top left corner. The t should be examined for shape of the finishing curve, length of crossing, position of crossing on the downstroke, and relative lengths of the parts of the crossing on either side of the downstroke. In the letter y, consider the lengths of the cerifs, the angle formed in the v portion, length of lower projection, and the shape of the finishing curve.

The figures should be carefully compared for size and design. Often differences in design are more readily apparent in figures than letters. The 5, which may be either the long type found in many Remington machines, or the shorter more compact design; the lengths of the 6, 7 and 9, the shape of the bulbs in the 8, the design of top and bottom of the 2 and 3, and the proportions of the 4, are all matters for careful consideration.

Those letters and figures which have been especially mentioned provide a wide field for differences in design, but the comparison must cover all type characters available. Even the parentheses, comma, or inverted commas may have a difference in design which alone would be sufficient to eliminate a suspect machine. Should it be found that there is a difference in the designs of some type characters it is clear that the machine under examination must be discarded from consideration. If the comparison in this field reveals no difference, proceed with the next phase of the examination, which is the alignment.

Alignment

The mechanics of the operation of a typewriter result in each character being given the same paper area, regardless of its shape. Whereas in printing the lateral space occupied by the letters i, I and t is considerably less than that taken up by the m or w, because of the difference in the widths of these letters, in typewriting all letters and figures are allotted the same space, which,

in the more common size known as Pica type, is 1/10th inch. In their lateral spacing then, the letters and figures in Pica type will, in theory, each be set in the center of an area 1/10th inch wide. In practice, it is often found that through wear, ill use, or errors in adjustment, certain characters do not fall squarely into the center of their allotted spaces, but are placed either to the left or right of center.

Similar errors may be found in the vertical alignment of the characters. The manufacturer intended that the bottoms of the small letters, excluding the g, j, p, q and y, would be in perfect alignment and the tops of small letters, excluding b, d, f, h, k, l and t, would also be on the same line. Here, also, and through the same causes, errors may develop and a letter may be consistently too high or too low in relation to the imaginary line.

The lines in a single space typewriter are spaced 6 to the inch, so that each letter should occupy the center of a rectangle 1/6th inch long and 1/10th inch wide. In practice certain letters may be found, not in the center of this rectangle, but too close to one of the sides, or to one of the corners. Abnormalities of this class are detected more readily if the same words or letter combinations are compared in the two documents. If we compare, for example, the word, "yesterday" in each specimen, we may find that the t is a little too high, the e a little low and the r is a little too far to the right. In comparing the positions of these letters in the two documents, the fact that each has the same neighbors gives a better basis for gauging the extent of the discrepancy in each case.

In this examination, also, have the pencil and paper handy and note each letter as it is checked for alignment. The better procedure is to go through one document first, noting each peculiarity then repeat the process in the other document. Subsequently, check the results in your notes, and then compare the documents, selecting, wherever possible, the same words.

Slope.—The next consideration is slope, and errors in this feature are more easily detected in the tall letters such as l, h, f, d, b, k, t and especially in capitals. It may be found that certain letters persistently lean to right or left of vertical. Any peculiarities here should be noted and the comparison process repeated

Characters "off their feet."—The fourth point for consideration is the peculiarity which is usually described as letters being "off their feet." As the roller of a typewriter is cylindrical, it is necessary for the type faces to be curved in order to allow an even pressure over all parts of the type face when it strikes the roller through the ribbon. If, through wrong adjustment of the type, ill use, or wear, a type face does not strike the roller with exactly the same pressure on all parts, the resulting impression will reflect

the error. This fault is indicated by a variation in the density of the impression; if the type face is twisted slightly so as to cause the left side to strike the roller first, the right side of the impression will be light. This lightness in density may occur at either side, top or bottom, or at one of the corners. When making the examination, the letters which are "off their feet" in one document should be noted and the process repeated with the other, subsequently, compare the impressions. Faults of this nature in the broader letters, such as the m, w, o, g and s, and the capitals, are usually the first to be noticed.

Defects.—The last, and usually most distinctive series of abnormalities, includes the breaks and defects in the type faces which become reproduced in the impression. Minute imperfections in this class may have been present when the machine left the assembly line, but the more prominent, such as damaged cerifs, will be due to collision between type or to some other form of ill use. Some of the defects noticed in typewriting from old machines are most striking and distinctive; they are particularly useful in identification. In this last phase of the examination, the documents should again be viewed one at a time, making sure that the impression of every character present is examined, before being directly compared.

A cautious attitude should be adopted by the investigating officer when tracing the typewriter on which an exhibit document was typed in those cases where a lengthy period of time has elapsed between the typing of the document in question and the commencement of the inquiry. The more prominent of the points relied upon in identification are peculiarities attributable to wear, ill use, and errors in adjustment, and it is reasonable to assume that one or both of two conditions, either of which may mislead, could obtain. First is the possibility of defects being found noticeable in the earlier document, or have resulted at the time of the examination which were not evident when the questioned document was typed;



and secondly, the possibility of mechanical repairs and adjustments having been made to the machine in the meantime, which have corrected some of the faults noticeable in the earlier document, or have resulted in the replacement of some of the type.

Usually, nothing short of complete remanufacture will correct all faults and defects, but a minor series of adjustments may alter many. Where the circumstances of an inquiry indicate a particular machine, and some months have elapsed since the document was typed, the fact that one character differs in design will not be accepted without question as evidence of non-identity, nor will fresh defects which are absent from the original. In cases of the former nature, some inquiries directed to ascertaining whether or not the suspect machine has been in the hands of a local mechanic for repairs will be commenced; and, in regard to the second condition, the obvious course to follow is to try and check documents known to have been typed on the suspected machine at various dates after that of the exhibit, with a view to dating the birth of the fresh irregularity.

Who typed the document?—The identification of the person who typed a document is often desired, but seldom effected from examination of the typewriting alone. There are, however, many cases in which one may gain a fairly strong indication of the author's

identity, particularly when he is not a skilled typist who adheres strictly to the correct rules of typing. The matters to be considered in this problem are: spelling; use of punctuation marks; incorrect use of the hyphen; incorrect use of capitals; peculiarities in phrasing; spacing after punctuation marks; arrangement and spacing of addresses; paragraphing; size of margin; manner of finishing a letter; space left at right extremity of lines and methods of dividing words; and the striking of certain letters consistently heavier than others. Many people, sometimes including skilled typists, develop peculiarities in their typing habits which assist in identifying their work.

If a problem of this type is on hand, and a specimen of typewriting is to be taken from a suspect, the nature of the document in question should first be explained to the person concerned, and then he or she should be requested to type the contents of the document to dictation. He should be given complete freedom in the choice of arrangement so that his natural habits will become evident in the sample, and can then be compared, on the lines referred to above, with those evident in the questioned document.

Detecting an Addition or Alteration

If a portion of a typewritten document is a suspected addition, made after the main

body of the document, consider the question from two angles. First, decide whether or not the suspected addition was typed on the machine used in the other part, and in this problem, apply the procedure set out above. If it is clear that the one machine was used throughout then examine the density of the ink deposit on the impressions to determine whether the ribbon at the time of the suspected addition was in the same condition as that used for the original matter. Where an addition is made to a document some time after the original was typed, it is extremely difficult to arrive at the same density of impression, provided, of course, that the typewriter has been in use in the

If these examinations reveal no differences, the problem may be decided by examining the position of the impressions of the suspected addition. With a sheet of typewriting done without removing the paper from the machine, or releasing the ratchet, it should be possible to rule a series of lines 1/10th inch apart from the top of the paper to the bottom, and a further series 1/6th inch apart from side to side, so that each type character is placed in its own 1/6th inch by 1/10th inch rectangle. It is almost impossible to replace a sheet of typewriting, once removed from a typewriter, so that the fresh matter typed will agree exactly in vertical and horizontal alignment with the original. Often a discrepancy in this regard may be detected with an ordinary foot rule, provided its edges are straight and parallel.

In searching for a solution to this and the other problems raised in this article the expert often needs finely calibrated measuring instruments, and perhaps a microscope or enlarged photographs, but in many cases, the solution will result from a careful visual examination without any scientific aids. In the second and less difficult class, the investigating officer, temporarily deprived of the services of an expert, may travel quite a long way towards solving the problem in question provided he takes time and care, and the actual test was prefaced by some preliminary experiments. •



Coming next month:

"International Narcotics Control: A Program of Cooperation" by Glen D. King, taken from the April 1979 edition of *Police Chief*.





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- In order to qualify for prizes, new members must use the 2018 Memberto-Member Membership Drive application. Photocopies are acceptable.
- 2 Applications must be received at IACP Headquarters by the close of business June 30, 2018.
- 3 Renewing members do not qualify for this drive.
- 4 Prizes are non-transferable.
- 5 Members will be sent/notified of all prizes and incentives following the conclusion of the drive.
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City, State, Zip, Country:	☐ General \$150 ☐ Academic \$150
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E-mail:	☐ Student—Leader of Tomorrow University name: \$30
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Have you previously been a member of IACP? ☐ Yes ☐ No	Optional Section Memberships:
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Approximate pop. served (<i>if applicable</i>) □ a. under 2,500 □ b. 2,500–9,999 □ c. 10,000–49,999	Expert (DRE) \$25
□ d. 50,000–99,999 □ e. 100,000–249,999 □ f. 250,000–499,999 □ g. 500,000 +	☐ Indian Country Law Enforcement \$25
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Date elected or appointed to present position:	Law Enforcement Information Management (LEIM) \$25
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NEW MEMBERS

This posting of new member applications is published pursuant to the provisions of the IACP Constitution & Rules. If any active member in good standing objects to any application, written notice of the objection must be submitted to the executive director within 60 days of publication. The application in question shall then be submitted to the Executive Committee and shall require the affirmative vote of two-thirds of the members of that committee for admission of the applicant.

The full membership listing can be found in the members-only area of the IACP website (www.theiacp.org).

Contact information for all members can be found online in the members-only IACP Membership Directory.

*Associate Members

All other listings are active members.



BRAZIL

Sao Paulo

Aguilar, Paulo Augusto, Captain, Policia Militar do Estado De Sao Paulo

Cardozo, Adriano, Chief of Police Special Ops Group, Policia Civil do Estado De Sao Paulo

CANADA

Alberta

Lethbridge

*Harding, Kristen, Strategic Communications Manager, Lethbridge Police Service

Manitoba

Smyth, Danny G, Chief of Police, Winnipeg Police Service

Ontario

Oakville

*Demetriou, Jim, Global Director of Security & Investigations, OMERS

Saskatchewan

Regina

Bray, Evan J, Chief of Police, Regina Police Service

NIGERIA

Agege

*Emmanuel, Anthony, Sergeant, Nigeria Police Force

Akure

*Esan, Taiwo James, Assistant Superintendent of Corps, Nigeria Security and Civil Defence Corps

*Adeoje, Adetunji, Security Analyst, Myriad View Ltd

UNITED STATES

Alabama

Barbour, David E, Chief of Police, Dadeville Police Dept

Union Springs

Dean, Sharon, Captain, Union Springs Police Dept

Arizona

Tucson

Kazmierczak, Eric, Assistant Chief of Police, Tucson Police Dept

California

Dublin

Hassna, Rick, Chief Pilot Air Operations, Alameda Co Sheriff's Office

Fremont

*Delema, Stephen, Sergeant, Fremont Police Dept

*Kopp, Phillip M, Assistant Professor, California State Univ Fullerton

*Rosales, Jose, Corporal, California State Univ Fullerton

Havward

*Rippy, Michelle, Assistant Professor, California State Univ Hayward

Oakland

Holmgren, Roland, Captain, Oakland Police Dept

Santa Clarita

*Stewart, Joe, Executive Director, California Narcotic Officers' Assn

Santa Cruz

Flippo, Daniel V, Deputy Chief of Police, Santa Cruz Police Dept

West Sacramento

*Bushey, Alison, Sergeant, California Hwy Patrol

Yuba City

Harris, Shon L, Captain, California Hwy Patrol

Connecticut

Chester

*Ellison, Tom, International Sales Manager, Whelen Engineering Co Inc

Greenwich

Zuccerella, Mark, Lieutenant, Greenwich Police Dept

Meriden

Sherwood, Nicholas, Captain, Meriden Police Dept

Delaware

Wilmington

*Perron, Cody, Chief Operations Officer, Fidelis Global Group 11C

District of Columbia

Washington

*Gigliotti, Dana R, Transportation Specialist, Federal Hwy Administration

*Kehrli, Mark R, Director Transportation Operations, Federal Hwy Administration

Florida

Boca Raton

*Arthur, Tiffany, Student, Florida Atlantic Univ

Clearwater

McAuley, Brian, Major, Clearwater Police Dept

Jacksonville

Lewis, Derrick L, Chief of Support Services, Jacksonville Sheriff's Office

Miami

Ledee, Frank, Division Chief/Assistant State Attorney, Miami Dade State Attorney's Office

Pandolfi, Roland D, Chief of Police, Miccosukee Tribal Police Dept

Patterson, Taylor A, Major, Miccosukee Tribal Police Dept

*Delgado-Webster, Cela, Assistant General Counsel, Sarasota Co Sheriff's Office

Winter Park

Watson, Jamie, Captain of Operations, Winter Park Police Dept

Georgia

Athens

Brinkley, Willie, Captain, Athens-Clarke Co Police Dept

*Lijoi, Mario, Special Agent, Drug Enforcement Administration

Brunswick

Scott, Brian, Sergeant/PIO, Glynn Co Police Dept

Decatur

Rich, Bahan, Deputy Director of Public Affairs, Georgia Bureau of Investigation

Doualasville

Conner, Kenneth, Chief Deputy, Douglas Co Sheriff's Office Edwards, Mark, Lieutenant, Douglasville Police Dept

Dunwoodv

*Sillah, Anwar, Public Information Officer, Dunwoody Police Dept

Jonesboro

*McKay, Margaret L, Sergeant, Clayton Co Police Dept

Norcross

*Pine, Jonathan, CEO, Renova Technology

Valdosta

McGraw, Bobbi, Commander, Valdosta Police Dept

Hawaii

Aiea

*Wiech, Amy, Behavioral Scientist, ABC Group Hawaii

Honolulu

Ballard, Susan M, Chief of Police, Honolulu Police Dept Grems, Jonathon, Deputy Chief of Police, Honolulu Police Dept

McCarthy, John D, Deputy Chief of Police, Honolulu Police Dept

Illinois

Alsip

Miller, Jerald P, Chief of Police, Alsip Police Dept

Jacksonville

Mefford, Adam, Chief of Police, Jacksonville Police Dept

Lake Bluff

Smizinski, Matthew J, Deputy Chief of Police, Lake Bluff Police Dept

Kentucky

Frankfort

Ellis, Travis D, Chief of Police, Frankfort Police Dept

Grayson

McDavid, Kevin, Chief of Police, Grayson Police Dept

Vine Grove

Fernandez Rubio, John, Captain Military Police, US Army

Maryland

Greensboro

Petyo, Michael A, Chief of Police, Greensboro Police Dept

Massachusetts

Boston

*Evans, Victor L, Detective Homicide Unit, Boston Police Dept

Wilbraham

Zollo, Robert G, Chief of Police, Wilbraham Police Dept

Michigan

Big Rapids

Eddinger, Jim, Director of Public Safety, Big Rapids Dept of Public Safety

Minnesota

Fridley

Guest, Jeffrey, Lieutenant, Fridley Police Dept Mork, James, Lieutenant, Fridley Police Dept

Motlev

*Borash, Jason, Officer, Motley Police Dept

Saint Paul

*Stano, Tony, Sales Director, Tip411

Missouri

Arnold

Fambrough, Leslie, Deputy Chief of Police, National Geospatial Intelligence Agency

New Jersey

Bridgeton

*Sabella, Frank, Detective, Cumberland Co Prosecutor's Office

Pine Beach

*Munoz, Juan, State Trooper Ret, New Jersey State Police

New York

Cortland

Rabusin, Eric, Assistant Chief of Police, SUNY-Cortland Police Dept

Malone

Premo, Christopher J, Chief of Police, Malone Village Police Dept

Manlius

Crowell, Michael J, Chief of Police, Manlius Police Dept

New York

*Daly, Patrick, Deputy Director/COO, Secure Community Network

*DeBlasi, Joseph A, Police Officer, New York City Police Dept

Tarrytown

Barbelet, John, Chief of Police, Tarrytown Village Police Dept

Yonkers

Hodges, Timothy, Deputy Chief of Police, Yonkers Police Dept

Monaco, Joseph M, Deputy Chief of Police, Yonkers Police Dept

Mueller, John J, Deputy Chief of Police, Yonkers Police Dept

North Carolina

Boon

Stephenson, Andy M, Chief/Director of Public Safety, Appalachian State Univ Police Dept

Charlott

*Ward, Shaun, Police Officer, Charlotte-Mecklenburg Police Dept

Garner

Smith, Lorie, Captain, Garner Police Dept

Weldon

Avens, James E, Chief of Police, Weldon Police Dept

North Dakota

Williston

Peterson, David A, Chief of Police, Williston Police Dept

Northern Mariana Islands

Saipan

Cabrera, Edward R, Chief Enforcement & Investigations, Commonwealth Casino Commission

Deleon Guerrero, Edward C, Executive Director, Commonwealth Casino Commission

Ohio

Akron

Hoover, David W, Chief of Police, Springfield Twp Police Dept

Medina

Kinney, Edward, Chief of Police, Medina Police Dept

Northfield

Zolgus, John M, Chief of Police, Northfield Village Police Dept

Oklahoma

Broken Arrow

*Dufriend, Jamie, Sergeant, Broken Arrow Police Dept

Okarche

Sterling, Mark D, Chief of Police, Okarche Police Dept

Oklahoma City

Sugg, Brent A, Troop Commander/Captain, Oklahoma Hwy Patrol

Oregon

Albany

*Means, Heather, Dispatcher Supervisor, Linn Co Sheriff's Office

Astoria

Gouge, Siscilee, Deputy Sheriff, Clatsop Co Sheriff's Office

Beaverton

*Berry, Michelle, Senior Support Specialist, Beaverton Police Dept

*Godinet, Kelly, Officer, Beaverton Police Dept

*Payne, Athena, Senior Support Specialist, Beaverton Police Dept

Bend

*Ksenzulak, Cynthia, Corporal, Bend Police Dept

Clackamas

Piper, Chelsea, Deputy Sheriff, Clackamas Co Sheriff's Office

Dallas

Fleming, Susan, Deputy Sheriff, Polk Co Sheriff's Office Steene, Alexandra, Deputy Sheriff, Polk Co Sheriff's Office *Westfall, Laura, Sergeant, Polk Co Jail

Eugene

*Barab, Caryn, Sergeant, Eugene Police Dept

*Menjou, Kim, Supervisor, Lane Co Parole & Probation

*Mosser, Amira, Records Officer, Lane Co Sheriff's Office

Hennner

*Smith, Sarah, Sergeant, Morrow Co Sheriff's Office

Hermiston

*Sandoval, Erica, Patrol Officer, Hermiston Police Dept

Hillsboro

*Greener, Holly, Deputy, Washington Co Sheriff's Office

*Martinek, Erin, Deputy, Washington Co Sheriff's Office

*Tarvin, Karen, Parole and Probation Officer II, Washington Co Parole and Probation

Independence

*Scharf, Sarah, Detective, Independence Police Dept

Keizer

*Anderson, Carrie, Officer, Keizer Police Dept

Lake Oswego

*Moisan, Karinya, Officer, Lake Oswego Police Dept

Newport

Boyd, Cari, Lieutenant, Oregon State Police

North Rend

*Crutchfield, Tiffany, Detective, Oregon State Police

Oregon City

*Babst, Wendi, Instructor, Clackamas Community College

*Meager, Jamie, Deputy, Clackamas Co Sheriff's Office

Portland

- *Childers, Jan, Acting Sergeant, Port of Portland Police Dept
- *Dunbar, Robin, Sergeant, Portland Police Bureau
- *Flinn, Erin, Officer, Port of Portland Police Dept
- *Quackenbush, James, Sergeant, Portland Police Bureau
- *Stockbridge, Diane, Sergeant, Port of Portland Police Dept

Redmond

*Huey, April, Sergeant, Redmond Police Dept

Salem

- *Cooper, Traci, Chief Financial Officer, Oregon State Police
- *David, Rebecca, Bureau Operations Director, Oregon State Police

Duncan, Mark, Lieutenant, Oregon State Police

- *Fitzpatrick, Kristy, Corporal, Salem Police Dept
- *Gibson, Gina, Support Service Supervisor, Oregon State Police

- *Hunter, Sabrina, Officer, Salem Police Dept
- *Lejeune, Karen, Supervisor, Oregon State Police
- *Merino, Jessica, Assistant Manager, Oregon State Police
- *Zavala, Sara, Office Manager, Marion Co Sheriff's Office

Tigard

*Rinell, Kristan, School Resource Officer, Tigard Police Dept

Wilsonville

*Dishion, Carol, Sergeant, Oregon Dept of Corrections

Woodhurn

*Altabef, Colleen, Sergeant, Woodburn Police Dept

Pennsylvania

Lancaster

Zerbe, Stephen, Chief of Police, East Lampeter Twp Police Dept

New Castle

*Brooks, Steven, Corporal, New Castle Police Dept

Reading

Schaeffer, Steve T, Lieutenant, Exeter Twp Police Dept

Wynnewood

*Weiman, David, Psychologist, Weiman Consulting

Texas

Amarillo

*Korinek, Kevin, Sergeant, Amarillo Police Dept

Austin

Newsom, Justin, Assistant Chief of Police, Austin Police Dept

Boerne

Lackey, Cody, Lieutenant, Boerne Police Dept

Houston

*Aud, Joel, Fellow, Univ of Houston

Tate, James D, Chief of Police/Director of Public Safety, Rice Univ

Sherman

Dawsey, Bruce W, Assistant Chief of Police, Sherman Police Dept

Virginia

Arlington

Driscoll, Derrick, Assistant Director, US Marshals Service

Manacca

Moore-Petty, Tara L, Lieutenant, Manassas Police Dept

Washington

Anacortes

Small, John, Chief of Police, Anacortes Police Dept

Bothell

*Seuberlich, Kenneth P, Sergeant Office of Professional Standards, Bothell Police Dept

Nespelem

Striedinger, Edward, Captain, Colville Tribal Police Dept

Renton

Schuldt, Jon, Deputy Chief of Police, Renton Police Dept

Spokane

*MacConnell, Jacquelyn, Director of Strategic Initiatives, Spokane Police Dept

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West Virginia

Charleston

*McElhaney, Rick L, Deputy Director, Kanawha Co Metro

Kenova

Sullivan, Bob, Chief of Police, Kenova Police Dept

Wisconsin

Eau Claire

*Roder, Kyle, Public Information Officer, Eau Claire Police

The IACP notes the passing of the following association members with deepest regret and extends its sympathy to their families and coworkers left to carry on without

Richard L. Dotson, Captain (ret.), Louisville, Kentucky (life member)

John J. Finnegan, Chief of Police (ret.), Barnstable, Massachusetts; Salem, Massachusetts (life member)

Frank V. Meehan, Chief of Police (ret.), Redondo Beach, California; Redding, California (life member)

Noel M. Schultz, Deputy Chief of Police (ret.), Long Island Railroad Police; Sarasota, Florida (life member)



REMEMBER: Law enforcement professionals at every level qualify for membership in the IACP.



Line of Duty Deaths

"They will be remembered—not for the way they died, but for how they lived."

The IACP wishes to acknowledge the following officers, who made the ultimate sacrifice for their communities and the people they served. We extend our prayers and deepest sympathies to their families, friends, and colleagues.

Police Officer Paul Lazinsky

El Mirage Police Department, Arizona Date of Death: December 12, 2017 Length of Service: 17 years (with agency)

Officer Andrew Camilleri

California Highway Patrol Date of Death: December 24, 2017 Length of Service: 1 year, 4 months

Deputy Sheriff Zackari Parrish, III

Douglas County Sheriff's Office, Colorado Date of Death; December 31, 2017 Length of Service: 2 years, 7 months

Trooper Michael J. Anson

New York State Police Date of Death: January 2, 2018 Length of Service: 31 years

Lieutenant Christopher Robateau

Jersey City Police Department, **New Jersey** Date of Death: January 5, 2018 Length of Service: 23 years

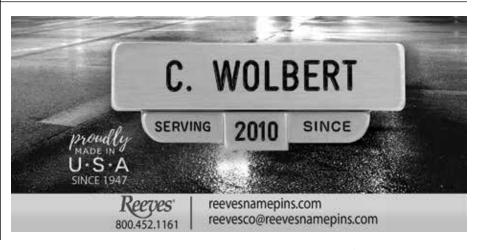
Officer Chris Beaudion

Monroe Police Department, Louisiana Date of Death: January 7, 2018 Length of Service: 1 year, 5 months

Deputy Sheriff Daniel A. McCartney

Pierce County Sheriff's Department, Washington Date of Death: January 8, 2018

Length of Service: 3 years (with agency)



Product update

The **Police Chief** keeps you on the cutting edge of law enforcement technology with monthly product announcements. For **free** in-depth information, visit us online at www.policechiefmagazine.org. Items about new or improved products are based on news releases supplied by manufacturers and distributors; IACP endorsement is in no way implied.

Customizable vehicle safety solution

InterMotive Vehicle Controls, a leading manufacturer of electronic control systems, has partnered with SoundOff Signal to create new features for their bluePRINT Control System that will help keep law enforcement officers' hands free with their eyes on the road. By integrating the technology of InterMotive's Upfitter Interface Module, SoundOff Signal has extended their bluePRINT Control System to create custom lighting and siren automation modes without cutting of factory wires. Customers will be able to choose from over 50 vehicle information parameters to create custom or standard solutions.

For more information, visit www .intermotive.net.

Emergency alert system

Information Station Specialists (the RADIOsource.com) offers a system that automatically converts text-style alerts into radio broadcasts, which is key to keeping people on the same page during an emergency. This solution is a comprehensive way to reach people with realtime emergency instructions. An ALERT AM Emergency Advisory Radio Network, integrated with special signs, outdoor warning sirens, and text-based emergency notifications will provide a means of communicating with the general public. The integration of the radio system with outdoor warning sirens, special emergency signs, and a text/email/phone notification platform provides a comprehensive means of alerting residents and visitors wherever they are—whether in vehicles, at home, or on foot.

For more information, visit www .theradiosource.com/resources/ stations-alert.htm.



Upgrades to rugged laptop

GammaTech Computer Corporation announces upgrades to its fully rugged DURABOOK R8300 laptop. The device now features Intel 7th generation Core processors, improved graphics capabilities, increased battery life, and the elevated security offered by Windows 10. The R8300 is used around the world by military forces, public safety agencies, and field service organizations. The updated DURABOOK R8300 R3 (Kaby Lake version) features i5 and i7 variants of Intel 7th generation core processors, delivering more computing power to mobile workers operating in extreme environments. The laptop is designed with a hot-swappable, dual battery option, now providing up to 21 hours of power for multi-shift performance.

For more information, visit www gammatechusa.com.

Facial recognition

Arteco has added intelligent face recognition capabilities to its suite of video event management solutions. Arteco Face Recognition (AFR) delivers rapid, accurate, and scalable face recognition capabilities to meet evolving security and safety needs. Its powerful algorithms address common challenges in analytics, such as lighting, pose, occlusions, motion, crowds, and expression. Designed to be easily deployed and managed, AFR empowers video surveillance deployments, including campus security efforts, such as traffic flow analysis and loitering, and law enforcement efforts, such as proactive crime monitoring, identifying undocumented individuals and suspected criminals, terrorist watch list matching, and intrusion detection.

For more information, visit www .arteco-global.com.

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Update to handheld analyzer

Law enforcement agents, narcotics officers, and customs personnel can now quickly and safely identify the synthetic opioid carfentanil and dozens of additional emerging drugs with the newest library update for the Thermo Scientific TruNarc handheld narcotics analyzer. Carfentanil is a fentanyl analog that is 10,000 times more powerful than morphine and 100 times more powerful than fentanyl. As part of the software update, the analyzer adds 45 new substances, including 14 new forms of fentanyl, to its onboard library. In addition to carfentanil, the analyzer library now includes acrylfentanyl, the pharmaceutical variants alfentanil and sufentanil, and the fentanyl precursors ANPP and NPP.

For more information, visit www .thermofisher.com/trunarc.



Video encoder

Vicon Industries introduces the ENC-H264-16 encoder, a 16-channel H.264 video encoder model that converts analog camera inputs into streamed IP video data. It incorporates high-quality H.264 video and audio encoding and compression technology and is specifically designed to support 960H, AHD, and TVI analog cameras. The encoder is designed to be the perfect solution for hybrid systems, simplifying the migration to network video without upgrading existing analog camera systems. It enables existing analog cameras and creates an IP-based system. This cost-effective, 16-channel video encoder supports all types of analog cameras including PTZ domes with full control over RS485. The H.264 video compression format reduces bandwidth and storage requirements.

For more information, visit www .vicon-security.com/network-encoder -enc-h264-16-valerus.

Phone number-identity data matching

LexisNexis Risk Solutions makes it easier for law enforcement and government agencies to locate hard-to-find individuals using phone numbers by enhancing its LexisNexis Accurint Real-Time Phones Search technology. The new LexisNexis Accurint Real-Time Phones Search provides primary phone contact information using enhanced data-matching intelligence. The technology enables federal, state, and local agencies to generate better investigative leads and solve investigations faster by finding identity information tied to a phone number instantly. In addition to locating individuals tied to a phone number, the technology can be used to uncover associates or other critical information tied to an investigation. Users can also run batch files for quick processing of a large number of records.

For more information, please visit www.risk.lexisnexis.com.

Disposable full-face particle respirator mask

SABRE-Security Equipment Corporation is pleased to announce the Readi-Mask Adhesive Sealing Particle Respirator for the law enforcement, corrections, and first responder markets worldwide. It is an adhesive sealing disposable full-face particle respirator mask designed to substantially reduce exposure to current and emerging threats including dry spores, bodily fluids, pepper spray, airborne particles, bloodborne pathogens, and many other threats. The mask uses a hypoallergenic medical adhesive to form a complete facial perimeter seal without damaging the wearer's skin, while a high-efficiency filter works to purify the air for breathing. Its flat configuration makes on-the-go storage simple and convenient, allowing it to fit easily in a cargo pocket, tactical vest, or go

For more information, visit www sabrered.com.

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On-site video management system

VIEVU announces an expansion to its VERIPATROL On-site Video Management System, now featuring compatibility with the LE5 LITE bodyworn camera. Ideal for agencies who utilize on-premise video storage, this new option lets agencies maintain their existing infrastructure when updating their cameras. The LE5 LITE body-worn camera is fully integrated system in a compact and lightweight package, allowing agencies to implement or upgrade to a comprehensive body-worn camera program at an affordable price. The VERIPATROL on-site solution is fully network capable and can support deployments of all sizes.

For more information, visit www .vievu.com/software/veripatrol-on-site.

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For more information, visit www .informationbuilders.com/products/accelerators.



Holster

Safariland introduces the Model 571 GLS Pro-Fit Concealment Paddle Holster. Building upon the strong momentum of the Pro-Fit series, this new model is made specifically for sub-compact, single-stack pistols with Safariland's micro paddle design. The GLS (Grip Lock System) retention features a unique device that securely holds the handgun in place and is released by the middle finger upon the

draw. The compact design of the micro paddle includes a locking feature with a hook that slides under the bottom of the belt to keep the holster secure. In addition, the holster uses the same three-hole pattern found on other Safariland holsters to allow for all belt mount options in the Safariland line, including the larger standard paddle.

For more information, visit www.safariland.com/dutygear.

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The Evolution of the Law Enforcement Flashlight

By Scott Jones, Director of Lighting Product Management, Pelican Products

As the needs of law enforcement officers have changed, the technology has also changed to meet those evolving needs. Many modern pieces of equipment look and perform differently than versions created 20 years ago. The evolution of these tools is worth examining, not only to review how law enforcement's needs have changed, but also to determine future potential requirements.

The law enforcement flashlight is a great example of a tool that has changed over time. A flashlight may seem like a simple piece of equipment—something kept on bedside tables or in garages for looking into small spaces or for the occasional blackout. And, for civilian use, a simple design usually suffices. However, for law enforcement, flashlights need to be more advanced. Law enforcement is a 24/7 service, which means that, close to half of the time, it is conducted when it is dark. Officers use flashlights for a variety of reasons, with the two main applications being duty use and tactical use.

Duty light use varies greatly and includes things such as identification checks, traffic control, and crime scene searches. These general uses comprise most times that flashlights are needed by law enforcement officers. Because flashlights are used so frequently for these duty applications, rechargeable batteries have become the preferred power source—a much more economical solution than having to purchase disposable batteries on a regular basis. Regarding size, in order to provide long run times and bright light output, duty flashlights were historically rather large. As technology advanced and the need to reduce the overall weight of the equipment worn by officers developed, duty flashlights have become more compact, while providing greater performance, and offering additional features.

The other type of law enforcement flashlight, a tactical light, is primarily used in escalated scenarios that might include life-threatening situations. Often these lights are used in tandem with a weapon and should meet four basic requirements: (1) high-performance light output, (2) sufficient beam distance, (3) compact size, and (4) tactically correct switching. Again, the advanced technology has provided the means to deliver on all these points and then some.

The LAPD Starts an Evolution in Lighting

In 2004, the Los Angeles, California, Police Department (LAPD) made the decision to mandate the issuance of upgraded flashlights to its officers. The new light was required to meet both duty and tactical requirements with the following attributes:

- Tremendous light production
- Compact size
- Dual switch design
- Robust and durable

At the time, there were no flashlights on the market that met the department's specifications. Therefore, the manufacturing industry was asked to develop a new model. This partnership between flashlight manufacturers and the LAPD jump-started the evolution of advanced technology for lighting devices that provide officers with a maximum performance tool.

Key Law Enforcement Flashlight Elements

Material

Modern law enforcement flashlights needed to be lighter, brighter, and more durable than their predecessors—a change that started with the materials from which the lights were made.

Law enforcement flashlights were traditionally made from metal. However, as the technology in composite materials has advanced, many high-quality flashlights are now offered in other durable and lightweight materials.

A common misconception about composite materials are that they are cheap and lack durability, but these materials, when developed by manufacturers with a background in composites and injection molding, can be just as strong and durable as more traditional materials. For example, composite material doesn't dent or scratch and is able to withstand extreme temperatures. As an example, many types of advanced aircraft today are made primarily of composite materials.

Batteries

As mentioned previously, law enforcement officials were finding that they were spending far too much money on disposable batteries, so law enforcement flashlights evolved to include rechargeable solutions.

Over time, rechargeable battery technology has evolved from nickel-cadmium (NiCad) to nickel-metal hydride (NiMH) to lithium ion. The most recent iteration, lithium ion, provides a lighter and higher capacity solution than previous battery makeups. These latest rechargeable batteries now provide the ability to recharge flashlights at home, in a vehicle, or even while using a laptop via a USB port.

It is still possible for an officer to find himself or herself in a situation where power is unavailable, despite advancements in battery technology. To combat these situations, manufacturers designed rechargeable flashlights that also have the capability to run on traditional, disposable batteries. Thus, the flashlight will be operable regardless of the situation.

Other modern elements of the flashlight are advanced features. One such feature is a battery-level indicator (a "fuel gauge" for the flashlight). This has proven invaluable for those who use a flashlight to conduct their work.

Brighter and Longer Run Times

Perhaps the most crucial—and most obvious—performance elements of flashlights are the light output and runtime. These are two of the performance metrics used in handheld lighting. To provide accurate and accountable specifications, the ANSI-FL1 standard for flashlights was established, and most reputable flashlight manufacturers have adopted these standards, which deliver valuable information to help law enforcement customers make the best selection for their officers.

Light output is measured in lumens, and runtime is provided in hours and minutes, but with specific definitions attached. For example, the reported lumen output is the measured number of lumens after the first 30 seconds of runtime. Once the light output reaches 10 percent of the original established lumens, the runtime clock stops.

One of the most notable evolutions in flashlights is a transition from incandescent light emitters to LEDs (light-emitting diodes), which are

superior in many ways. LEDs are more durable, carry a much longer life expectancy, use batteries more efficiently, and are able to produce far greater light output.

Unlike incandescent lights, LEDs use electronics that allow for many new options such as

- various modes, including high, medium, low, and strobe options
- multi-colored lights
- battery-level indicators
- programmable settings

Future Evolution

The future of the law enforcement flashlight has many possibilities. It may include things like wireless charging and programmable flashlights via Bluetooth apps. Advancements in lighting technology will continue to provide law enforcement with better performance, additional features, and a safer, more efficient means of getting the job done.

The need for an easily operated flashlight that is bright, reliable, and compact should not be underestimated. In fact, it can be the one piece of equipment that saves an officer's life. ❖

Scott Jones is the director of lighting product management at Pelican Products, Inc., a global leader in the design and manufacture of advanced portable lighting tools and high-performance protective cases and containers. They are based in Torrance, California. www.pelican.com.



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TRAFFIC SAFETY INITIATIVES

Stopping "Silent Killers" with Traffic Enforcement

By Paul M. Bernat, Chief of Police (Ret.), Dover, Delaware, Police Department

A ccording to the FBI, there were 17,250 murders and nonnegligent manslaughters in the United States in 2016.¹ These crimes always generate a feeling of fear and a demand for enforcement in all police jurisdictions. However, according to the National Highway Traffic Safety Administration, in 2016, there were 37,461 deaths due to traffic fatalities in the United States. This is nearly double the rate of murders and a 5.6 percent increase over 2015 statistics, but these deaths do not seem to generate the fear and demands for enforcement actions that the murder statistics generate.² These statistics and overall increase in traffic deaths show that traffic law enforcement should also be a priority in police departments across the United States, and, indeed, worldwide.

While often undervalued in law enforcement, it is not a secret that serious crimes are often solved through traffic enforcement actions. One of the most notable examples of this was on April 19, 1995, when Oklahoma Highway Patrol Trooper Charlie Hanger pulled over Timothy McVeigh for not displaying a registration plate just 90 minutes after McVeigh bombed the Oklahoma City Alfred P. Murrah Federal Building, murdering 168 innocent victims and injuring another 500 victims. Trooper Hanger noticed a gun on McVeigh and arrested him without incident. Two days later, the FBI identified McVeigh—after they found the axel from the rental truck used in the bombing and ran the VIN, identifying the rental truck and McVeigh as the renter.³

Case Study: Delaware

In 2016, Delaware had 56 murders and nonnegligent manslaughters and 120 traffic fatalities, aligning with the U.S.-wide trend of traffic fatalities being more than double the number of murders. However, Delaware did experience a 10 percent decrease from 2015 to 2016, unlike the United States' overall uptick of 5.6 percent over 2015 traffic fatalities. Delaware law enforcement and the Delaware Office of Highway Safety (DOHS) have used several initiatives and educational approaches to reduce the highway fatality rates in Delaware. These include using the Data-Driven Approaches to Crime and Traffic Safety (DDACTS) philosophy to help direct agencies to those areas most in need of traffic enforcement. Additionally, the DOHS also supports engaging and rewarding the local and state police department's executive-level officers and road-level supervisors through education, conferences, awards, and extra-duty traffic initiatives.

Crime mapping has become a popular tool in many Delaware law enforcement agencies. The DDACTS evidence-based philosophy proposes a correlation between crashes and high-crime areas. When both traffic crashes and high-crime areas are identified on a map, they typically are in the same area. This information directs police agencies to allocate their resources to these "hot spots." The data are sound evidence supporting the use of high-visibility enforcement strategies in certain neighborhoods and streets. When using this approach, it is important for agencies to build connections and communicate to community leaders why there is such a strong police presence in certain areas. Presenting the facts will help dispel any accusations of racial profiling and enhance the officers' credibility.

According to statistics, police traffic contacts have declined since the recent events that have placed law enforcement officers and their actions under intense scrutiny. Officers feel they are not respected as they once were. During this challenging time, it is imperative that officers are reminded of the importance and value to society of traffic enforcement. Likewise, law

enforcement leaders at the executive and supervisor levels must emphasize the importance of traffic safety on their roadways and highways to the rank and file of their agencies. The patrol or traffic supervisor must have "buy-in" when it comes to traffic enforcement and direct their officers accordingly.

In order to facilitate this buy-in among Delaware officers, DOHS partners with state and local police departments to implement annual traffic initiatives. DOHS has 35 traffic initiatives a year and provides funding from NHTSA for officer overtime to the tune of nearly \$1.3 million.6 These initiatives focus on traffic safety issues such as impaired driving, occupant protection, speed enforcement, distracted driving, and pedestrian outreach and enforcement. Awards and appreciation ceremonies are held annually for participating officers and agencies. In 2017, executive-level state and local officers were invited to attend the Governors Highway Safety Associations' National Meeting in Louisville, Kentucky. Additionally, DOHS holds a biennial State Highway Safety Conference. The participants at the most recent conference in November 2017 included both law enforcement and traffic safety partners such as Delaware Department of Justice, Delaware Department of Transportation, AAA, and the National Highway Traffic Safety Administration. The two-and-a-half-day conference had a packed agenda and ended with a motivational speech by esteemed presenter and former South Carolina chief of police, Paul Butler.⁷

Conclusion

The value of traffic enforcement in preserving safety and combatting crime is clear. With the help of partners such as a state's Office of Highway Safety, there are strategies to keep traffic enforcement a high priority in local and state police departments. Even if an officer issues a warning or uses a traffic stop encounter to educate the public, he or she may have saved a life. Law enforcement sets the tone on which traffic practices are accepted in society through enforcement and education. Impaired driving, speeding, not wearing a seat belt, distracted driving, and pedestrian violations are silent killers. By giving traffic enforcement the priority that it rates, law enforcement can lead the way to a safer world.

Paul M. Bernat is a retired police chief from the Dover, Delaware, Police Department. Paul retired in January 2017 after 29 years in law enforcement, and he is now working part time at the Delaware Office of Highway Safety as the law enforcement liaison.

Notes:

¹Federal Bureau of Investigation (FBI), Uniform Crime Reports (UCR), *Crime in the United States 2016*, table 1, https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/tables/table-1.

²National Highway Traffic Safety Administration (NHTSA), "USDOT Releases 2016 Fatal Traffic Crash Data," news release, October 6, 2017, https://www.nhtsa.gov/press-releases/usdot-releases-2016-fatal-traffic-crash-data.

³Hailey Branson-Potts, "After Oklahoma City Bombing, McVeigh's Arrest Almost Went Unnoticed," Los Angeles Times, April 19, 2015, http://www.latimes.com/nation/la-na-oklahoma-city-bombing-20150419-story.html; Lois Romano and Tom Kenworthy, "McVeigh Guilty on All 11 Counts," Washington Post, June 3, 1997, http://wwwww.washingtonpost.com/wp-srv/national/longterm/oklahoma/stories/guilty2.htm.

⁴FBI, UCR, 2016 Crime in the United States, table 2, https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/tables/table-2; Delaware State Police, Delaware's Annual Traffic Statistical Report, 2016, https://dsp.delaware.gov/pdfs/2016%20Traffic%20Annual%20Report.pdf.

⁵Delaware State Police, *Delaware's Annual Traffic Statistical Report;* NHTSA, "USDOT Releases 2016 Fatal Traffic Crash Data."

⁶Delaware Office of Highway Safety, FY 2018 Highway Safety Plan, https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/delaware_fy2018_hsp.pdf.

⁷Paul Butler Presentations, "Biography," http://www.paul-butler.com/biography html

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Strengthening Law Enforcement's Response to Domestic and Sexual Violence

By Michael Rizzo, Program Manager, IACP

For close to 20 years, the IACP has collaborated with the U.S. Department of Justice, Office on Violence Against Women (OVW) to provide direction and support to law enforcement on the complex issues of domestic and dating violence, sexual assault, stalking, strangulation, and other related crimes. The National Law Enforcement Leadership Initiative on Violence Against Women brings crimes of intimate partner violence to the forefront of policing and provides tools to strengthen the capability of law enforcement to effectively address and respond to these crimes.

Many law enforcement agencies worldwide lack the training opportunities, tools, and support needed to effectively address the crimes of domestic and dating violence, sexual assault, stalking, and strangulation. Responses to these crimes might possibly receive less attention and resources than other crimes due to social misunderstandings and misperceptions about trauma and the realities of crime victims and perpetrators. Nonetheless, these crimes need to be identified, addressed, and prioritized with the same dedication and focus as other major crimes.

To support agencies and contribute to the fundamental changes needed to transform organizational policies, priorities, and efforts, the IACP, with the support of OVW, developed an ongoing comprehensive training and technical assistance program for various ranks of law enforcement, as well as community and criminal justice system partners. This program has been operating continuously to serve law enforcement leaders since 2001.

The crimes of domestic and dating violence, sexual assault, stalking, and strangulation are complex and multifaceted. They often occur simultaneously within the same relationship and might be perpetrated by offenders who have committed or will commit child abuse, economic abuse, pet abuse, protection order and firearms violations, trafficking, and other significant crimes. Recent research and programs have increased the awareness and understanding of these crimes, enabling IACP to better equip law enforcement with the innovative tools and contemporary understanding necessary to respond more effectively to victims and offenders. By conducting thorough, comprehensive investigations, law enforcement can make a significant impact on the safety not only of victims, but also of the entire community by sending a strong message that these crimes will not be tolerated. The IACP has created numerous resources and tools that are available to agencies at no cost to support law enforcement's efforts to address domestic and dating violence, sexual assault, stalking, and strangulation.

Response and Training Guidelines

Sexual Assault Response Policy and Training Guidelines and Intimate Partner Violence Response Policy and Training Guidelines provide essential background material and supporting details to equip law enforcement agencies with information needed to develop up-to-date policies and training curricula that can then be tailored to the requirements and circumstances of their own communities and agencies. The guideline documents include investigative procedures and promising practices for working with victims of sexual and intimate partner violence, as well as policy recommendations that address various levels of law enforcement response, from dispatch to supervisors. Additionally, these guidelines present suggested content for training curriculum development that should accompany the implementation of new or updated policies.

Domestic Violence Training Video

The Crime of Domestic Violence is a four-part training video that presents viewers with information to strengthen the response to victims and comprehensively investigate domestic violence. The video presents an introduction into the nuances and dynamics of domestic violence and provides strategies for effective investigations. It is accompanied by a discussion guide to assist agencies facilitate group discussion among personnel about the information contained in the video and its practical application in the agency's jurisdiction.

Executive Guide

Sexual Offenses and Misconduct by Law Enforcement: Executive Guide presents strategies for law enforcement to address criminal offenses as well as non-criminal sexual conduct that is inappropriate, unprofessional, and damaging to the public's confidence in an agency and the profession. The guide provides information for executives to assist them in proactively addressing these issues and preventing incidents through agency mission, policy, and training.

Body-Worn Camera Considerations Brochure

Intimate Partner Violence: Body-Worn Camera Program Considerations is a brochure that compiles the deliberations from a multidisciplinary, national forum on creating victim-focused body-worn camera policies and programs. Law enforcement agencies are encouraged to use this brochure, as well as the full deliberations document, as their body-worn camera programs are updated or created and to engage in discussions on body-worn cameras and their impact on victim and officer safety, specific populations, and community trust.

Supervisor Report Review Checklists

These five checklists provide guidance for supervisors as they review reports for stalking, strangulation, sexual assault, domestic violence, and protection order violations. The checklists can also be used as training tools to highlight the information needed by first responders to complete thorough reports, effectively interview victims, and determine whether pertinent information has been documented.

The IACP also offers a series of ongoing training events to provide direct interactions with subject matter experts to assist agencies in effectively addressing domestic and dating violence, sexual assault, stalking, and strangulation agency wide. These highly interactive training experiences incorporate innovative IACP tools and provide participants with detailed information regarding promising practices, research, and resources. Participants use what they've learned to formulate plans for changing the culture within their agencies and effectively deploying strategies to

proactively respond to and investigate domestic and dating violence, sexual assault, stalking, and strangulation. The ongoing training series includes the following:

- National Law Enforcement Leadership Institute on Violence Against Women is an opportunity for law enforcement executives to assess their agency's current response to crimes of violence against women and identify strategies to improve their ability to meet the needs of the community.
- National Law Enforcement First-Line Supervisor Training on Violence Against Women is for individuals who hold primary responsibility of overseeing first responders, to explore current approaches for responding to and investigating the crimes of violence against women and enhance mentoring and supervisory capacity.
- Enhancing the Response to Violence Against Women On-Site Training Events provide tailored presentations and training curricula to increase the capacity of law enforcement agencies and partners to respond to victims of violence against women crimes.

Each resource and training event provides law enforcement agencies and multidisciplinary community partners with information to build or strengthen victim-focused, trauma-informed responses to the crimes of domestic and dating violence, sexual assault, stalking, and strangulation.

For further details about IACP's OVW-supported comprehensive training and technical assistance programs and resources, please visit www.theIACP.org/Violence-Against-Women or contact Michael Rizzo, IACP Program Manager, at rizzo@theiacp.org or 1-800-THE-IACP x 818.

For links to the resources mentioned, access the article online at www.policechiefmagazine.org.



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