CONDUCTED ENERGY DEVICES: POLICIES ON USE EVOLVE TO REFLECT RESEARCH AND FIELD DEPLOYMENT EXPERIENCE

BY **PAUL A. HASKINS**

Better knowledge of the use and effects of conducted energy devices (CEDs) and developments in constitutional law have prompted law enforcement in the past decade to revisit policies on the widely used "less-lethal weapon" that stuns and usually immobilizes subjects to make it easier for law enforcement officers to subdue them.

Evolving jurisprudence regarding excessive force as well as research insights on CED impacts, especially when improperly deployed, have steered many agencies away from reliance on the "stun gun" to control fleeing or resisting subjects — once commonplace authorized uses. Increasingly, law enforcement rules are proscribing CED use absent an immediate threat of physical harm to an officer or others.

Even with more circumscribed permissible use, however, law enforcement has embraced CEDs as a uniquely effective tool for handling certain problematic subjects without resorting to other use-of-force options. Over the past two decades, more than 15,000 agencies have adopted the use of CEDs.[1]

Still, since their introduction, CEDs have been a magnet for controversy, given the extreme if momentary pain and loss of muscle control they impart, the sometimes indistinct line between justified and improper uses of the device, and the rare but real possibility of death after CED exposure. As noted in a 2010 NIJ research report on police use of force with an emphasis on CED use outcomes, "The use of force is among the most controversial of all police activities."[2]

A common refrain in NIJ-sponsored research on CED effects has been that more research is needed to fully grasp the elusive and complex impact of a CED's electrical insult.

Notwithstanding close scrutiny from medical researchers and defendants' rights groups, science has yet to yield conclusive evidence that CEDs — when used properly — cause any lasting cognitive, physiological, or physical damage to individuals in nonvulnerable categories. Further, the same in-depth 2010 NIJ-sponsored research found that, compared with the use-of-force alternatives available to law enforcement in similar scenarios, CEDs resulted in fewer instances of injury and lethality for both the subjects and the officers.[3]

Although proponents of CEDs have emphasized a reduced incidence of injury and death, critics have spotlighted serious harm or fatalities from CEDs in certain cases. Research has revealed that improper use of a CED — for instance, too many activations of the device, prolonged exposure, or use on the chest, thus risking heart abnormalities — can cause significant injury or be a factor in those statistically rare occasions when death follows CED exposure.[4]

Deployment and Misuse Concerns

As the popularity of CEDs among law enforcement grew, so did concern about how the electrical weapons were being deployed. In 2006, a report from the Police Executive Research Forum (PERF) and the U.S. Department of Justice (DOJ) noted widespread uncertainty among law enforcement leaders on the appropriate role of CEDs, due largely to inadequate knowledge of the nature of CED technology and its effects on targeted subjects, resulting in uneven standards and parameters for use across departments.[5]

"As more and more conducted energy devices ... were deployed across the United States, their use sparked considerable confusion," the report's authors observed. The research team also found, "Policy issues emerged on a plethora of concerns ranging from placement [of CEDs] on the force continuum to activation parameters on at-risk populations such as children, the elderly, persons under the influence of drugs, and pregnant women."

The PERF-DOJ study pointed to an acute absence of data for guiding CED use: "The dearth of available information on how CEDs worked and how they were used in daily police work had hampered the ability of police executives to make informed policy decisions about the devices." The PERF-DOJ initiative produced the first set of standardized CED guidelines for law enforcement agencies to consider.

By 2010, when the use of CEDs as a physical control tactic was still widely accepted, the problem of misuse was manifest. In the police use-of-force study sponsored by NIJ, researchers said that although CED use to establish physical control "may be beneficial in many cases, their ease of use and popularity among officers ... raise the specter of overuse." A leading authority on police use of force who contributed to that study, Geoffrey P. Alpert, later elaborated on observed CED misuse in a 2012 NIJ.ojp.gov interview, referencing the study findings:[6]

> I think, again, that it's a great tool. How do you use it properly? Well, you use it when nothing else is going to work. You use it obviously as an alternative to deadly force, but even to fend off a threat of active aggression, and I think that becomes a very important tool ... but officers have to understand that when you use this tool, people will fall down, people will injure themselves, and it's got to be used against a limited number of people in a limited number of circumstances ... . And our research showed that it was used too often. And I think that's a training and a supervision and, again, an accountability issue.

Alpert also said that the 2010 NIJ-supported research had shown there were "officers out there who go to their Taser[7] far too early in an encounter and far too often."

Federal Courts Weigh In

As the 2000s progressed, a number of federal courts sounded warnings on the intense nature of the blow CEDs deliver, declaring that CEDs are built to cause "excruciating pain"; the CED is a "per se dangerous weapon at common law"; it inflicts "a painful and frightening blow"; it causes "severe pain"; and "the physiological effects, the high levels of pain, and foreseeable risk of physical injury lead us to conclude that the [Taser model] X26 and similar devices are a greater intrusion than other non-lethal methods of force we have confronted."[8]

Consistent with emerging awareness of the danger of CED misuse, federal courts began moving toward a stricter constitutional standard for CED use, clarifying that a subject's mere physical resistance or failure to comply physically with police commands did not warrant being shocked by a CED. For example, in 2010 the U.S. Court of Appeals for the Seventh Circuit ruled that a plaintiff's refusal to release his arms for handcuffing did not justify police use of a CED, where the subject was unarmed and there was little risk that he could access a weapon.[9] Similarly, a 2011 decision by the Ninth Circuit held that police used excessive force in deploying a CED against a pregnant woman who actively resisted arrest but posed no immediate threat to the officers.[10]

This trend culminated in the Fourth Circuit's 2016 decision in *Armstrong v. Pinehurst,*[11] which drew a line in the sand against police use of a CED for "pain control," that is, using CED-induced pain to physically control a subject, as opposed to CED use to protect an officer or third party from an immediate threat of harm. *Armstrong* effectively banned CED use by law enforcement absent immediate danger to officers or others.

The Fourth Circuit, whose appellate decisions are binding federal law in North Carolina, South Carolina, Maryland, Virginia, and West Virginia, held in *Armstrong* that "Taser use is unreasonable force in response to resistance that does not raise a risk of immediate danger."[12] Even when the subject was unrestrained and physically resisting law enforcement, the Fourth Circuit held that use of a CED would be excessive absent a safety threat to police or others: "A rule limiting Taser use to situations involving a proportional safety threat does not countenance use in situations where an unrestrained arrestee, though resistant, presents no serious safety threat."[13]

The Fourth Circuit also raised the bar among federal courts at the time with its sharp assessment of the CED's inherent danger, declaring that CEDs impart not only pain but also injury. The court deemed a CED's impact "severe and injurious regardless of the mode to which the Taser is set."[14]

The 2016 *Armstrong* decision also proscribed CED use on a fleeing subject, again absent an immediate danger posed to others. In contrast, an NIJ-supported pre-2010 survey of more than 500 law enforcement agencies found that almost three-fourths of the agencies using CEDs allowed their use against fleeing subjects.[15]

The U.S. Supreme Court declined to hear an appeal of the *Armstrong* decision.

Policy and Use After *Armstrong*

The *Armstrong* decision's restrictive impact on CED-use policy countered preexisting guidance from researchers urging that both CEDs and "pepper spray" (oleoresin capsicum, or OC; see sidebar, "Pepper Spray: Research Insights on Effects and Effectiveness Have Curbed Its Appeal") "should be authorized as possible response alternatives to defensive forms of suspect resistance such as muscle tensing, struggling to escape physical control, and fleeing on foot."[16] (It should be noted that 2011 CED-use guidelines issued jointly by the Department of Justice's Office of Community Oriented Policing Services and PERF called for limits on the use of CEDs against fleeing subjects.)[17]

Pepper Spray: Research Insights on Effects and Effectiveness Have Curbed Its Appeal

Conducted energy devices (CEDs) were the second technology to expand law enforcement's "less-lethal weapon" repertoire over the past quarter century. The first technology was pepper spray, or oleoresin capsicum (OC), an organic extract of the cayenne pepper plant that can stop most subjects cold — by temporarily blinding them, creating a burning sensation in the eyes and skin, and often affecting breathing.

By the early 1990s, OC was spreading quickly as a preferred use-of-force option for many agencies and officers.[1] As of 2013, an estimated 94% of all police departments had authorized the use of pepper spray, including 100% of all forces in jurisdictions with populations of 500,000 or more.[2] Yet its actual use by law enforcement would wane over time with the surge in popularity of CEDs among officers. As noted in a 2008 NIJ report, by then the CED had already "become the less lethal weapon of choice for a growing number of law enforcement agencies."[3]

Several factors help account for the more constrained deployment of pepper spray as a standard policing tool today, including:

- A more advanced understanding of pepper spray's effects on subjects and officers.
- A belief that pepper spray is less reliable than a CED activation, with a real risk that the spray will contact the officer, other officers, or bystanders, exposing them to the same symptoms as the subject. Research also has shown that OC is generally less effective than CEDs in subduing subjects.
- Court decisions since 2000 making it clear that overuse or improper use of pepper spray can constitute excessive force in violation of the subject's constitutional rights.

Development of Science on OC Safety and Effectiveness

A March 1994 report of NIJ's Technology Assessment program observed that at the time, OC was "gaining acceptance and popularity among law enforcement officers and police agencies as a safe and effective method of incapacitating violent or threatening subjects." The report emphasized, however, that there was "a lack of objective data on OC, its risks, and its benefits."[4]

With NIJ's support in ensuing years, data on OC inhalation by experimental subjects were gathered and analyzed. Sponsored by NIJ and the Office of Community Oriented Policing Services, a research team at the University of California–San Diego found no evidence that, when inhaled by volunteer subjects, OC "resulted in any additional change in respiratory function in the restraint position."[5] The resulting 2001 report, however, had two important caveats: (1) Because the study was motivated in part by concern over reports that a number of arrestees exposed to OC in custody had experienced breathing-related deaths, the research focused on the effects of inhaled OC on respiration, and not on its ocular or vision effects when sprayed in a subject's eyes — subjects wore goggles. (2) The study measured only the effects of OC sprayed for one second, as recommended by the manufacturer.

The "safe and effective" guidance was reinforced two years later. A 2003 NIJ Research for Practice report, *Effectiveness and Safety of Pepper Spray,* discussed outcomes of two NIJ-supported research studies that examined (1) both officer and subject injuries in three North Carolina jurisdictions and

(2) 63 incidents nationwide in which suspects were sprayed with OC while being arrested and later died in custody. The report noted that the North Carolina research found that injuries to officers and suspects declined after pepper spray was introduced, and the second study determined that pepper spray contributed to only two of the 63 deaths and that both of those deaths were asthma-related. The report concluded, "The results of all studies in this Research for Practice seem to confirm that pepper spray is a reasonably safe and effective tool for law enforcement officers when confronting uncooperative or combative subjects."[6]

Over time, however, concerns over pepper spray's negative effects would emerge. The comprehensive 2010 multimethod evaluation of use of force, prepared for NIJ, examined law enforcement's experience with OC spray in multiple jurisdictions and noted the following anomaly: Although OC application was associated with a decrease in subject injuries compared with injuries from other use-of-force options, OC was found to significantly increase officers' injury risk: "For officers, the use of OC spray increased the probability of injury by 21 to 39 percent (depending on the model). This finding was unexpected and suggests that cases involving the use of OC spray differ from those involving CEDs in ways that were not accounted for in the models."[7]

Separate research on 10 years of pepper spray injuries, as reported to the national poison control system, also noted disproportionate injuries among officers. Research by a University of California–San Francisco team, published in 2014, concluded that although there was a "low 1 in 15 potential risk for more severe adverse health effects in persons exposed to pepper spray that warranted a medical evaluation … the risk was highest when used for training law enforcement personnel and involved severe ocular symptoms."[8]

The ascendancy of CEDs over OC was bolstered by evidence that CEDs were significantly more effective than pepper spray in subduing subjects. A 2017 report of research on the effectiveness of CEDs relative to OC observed, "The overall effectiveness of Tasers in this study is striking. In the overwhelming proportion of incidents where a Taser was used, once a Taser was used that incident came to an end. The same cannot be said with OC spray."[9] The research, a single-site study of a large police department — more than 2,000 sworn officers — examined supervisor reports of use-of-force incidents and assessed the use and effectiveness of OC spray and CEDs.

Limited OC effectiveness and concerns over its safety for officers help account for the decline in popularity of pepper spray as a standard policing tool, culminating in a decision by some departments to no longer issue OC. As the *Tampa Bay Times* reported in October 2016, by that time four sheriffs' offices in Florida had stopped issuing OC.[10] Pinellas County Sheriff Bob Gualtieri, explaining his decision to drop OC, told the newspaper that his 1,500 sworn deputies rarely used it and many no longer carried it — pepper spray was deployed only 15 times in the county in 2015. "The feedback from the bottom up was that it was no problem to get rid of it," Gualtieri reportedly said. "It's probably a tool ... that has had its day."

Courts Have Restricted Permissible Use of OC

Courts have stepped in when pepper spray use is deemed objectively unreasonable. An often-cited representative case is the Ninth Circuit Court of Appeals' 2002 decision in *Headwaters Forest Defense*

(continued on next page)

v. County of Humboldt,[11] in which environmental protestors used a "black bear" metal device to lock themselves together but offered no physical resistance when law enforcement attempted to remove them. It was alleged that the officers repeatedly used pepper spray against the protestors, spraying full bursts from inches away and applying OC directly to the eyes of some protestors with Q-tips, while refusing for a long period to provide water for the protestors to wash off the OC to relieve their pain.

The court noted the following facts: (1) the use of pepper spray was unnecessary to subdue, remove, or arrest the protestors; (2) the officers could safely and quickly remove the protestors, while in "black bears," from protest sites; and (3) the officers could safely remove the "black bears" in a matter of minutes with electric grinders. The court held that "it would be clear to a reasonable officer that it was excessive to use pepper spray against the non-violent protestors under these circumstances." Upon finding that excessive force was used, the court held that the officers were not entitled to partial immunity from liability as public officials.

Notes

1. Michael R. Smith et al., "A Multi-Method Evaluation of Police Use of Force Outcomes: Final Report to the National Institute of Justice," grant number 2005-IJ-CX-0056, July 2010, 1-2, https://www.ncjrs.gov/pdffiles1/nij/grants/231176.pdf.

2. Brian A. Reaves, *Local Police Departments, 2013: Equipment and Technology,* Bulletin, Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, July 2015, NCJ 248767, https://www.bjs.gov/content/pub/pdf/lpd13et.pdf.

3. John Morgan, "Medical Panel Issues Interim Findings on Stun Gun Safety," *NIJ Journal* 261, October 2008, 20, NCJ 224083, https://www.ncjrs.gov/pdffiles1/nij/224083.pdf.

4. National Institute of Justice, "Oleoresin Capsicum: Pepper Spray as a Force Alternative," Washington, DC: U.S. Department of Justice, National Institute of Justice, Technology Assessment Program, March 1994, NCJ 181655, https://www.ncjrs.gov/pdffiles1/nij/grants/181655.pdf.

5. Theodore C. Chan et al., "Pepper Spray's Effects on a Suspect's Ability to Breathe," Research in Brief, Washington, DC: U.S. Department of Justice, National Institute of Justice, December 2001, NCJ 188069, https://www.ncjrs.gov/pdffiles1/nij/188069.pdf.

6. National Institute of Justice, "The Effectiveness and Safety of Pepper Spray," Research for Practice, Washington, DC: U.S. Department of Justice, National Institute of Justice, April 2003, 13, NCJ 195739, https://www.ncjrs.gov/pdffiles1/nij/195739.pdf.

7. Smith et al., "A Multi-Method Evaluation," 8-2.

8. Thomas Kearney, Patricia Hiatt, Elizabeth Birdsall, and Craig Smollin, "Pepper Spray Injury Severity: Ten-year Case Experience of a Poison Control System," *Prehospital Emergency Care* 18 no. 3 (2014): 381-386.

9. Steven G. Brandl and Meghan S. Stroshine, "Oleoresin Capsicum Spray and TASERS: A Comparison of Factors Predicting Use and Effectiveness," *Criminal Justice Policy Review* 28 no. 3 (2017): 279, 301, doi:10.1177/0887403415578732.

10. Tony Marrero, "Pepper Spray Falls From Favor as Law Enforcement Turns to Taser," *Tampa Bay Times,* October 2, 2016.

11. 276 F.3d 1125 (9th Cir. 2002).

For law enforcement agencies within the Fourth Circuit's five-state jurisdictional reach, the *Armstrong* opinion mandated immediate revision of existing CED policies that allowed police to use stun guns on subjects who were fleeing or even physically resisting police but posed no immediate danger to officers or others.

The decision had an immediate and dramatic impact on CED use. As part of its series chronicling the toll of excessive CED use nationally, the news agency Reuters reported that after the *Armstrong* decision, CED use dropped precipitously in 2016 in major cities within the Fourth Circuit, as follows:[18]

Norfolk, VA: 95% decline
Virginia Beach, VA: 65% decline
Greensboro, NC: 60% decline
Charleston, SC: 55% decline
Huntington, WV: 52% decline
Baltimore, MD: 47% decline

Other courts have since adopted the bright-line rule that only a need to protect police or others from a present threat — and not mere desire to control the subject — can justify CED use. For example, in 2017, the Ninth Circuit, holding that an individual subjected to multiple CED applications when already subdued by police could go forward with an excessive-force civil action, explained that "any reasonable officer should have known that such use can only be justified by an immediate or significant risk of serious injury or death to the officers or public."[19]

The Use-of-Force Continuum

The *Armstrong* decision and related CED jurisprudence stand as a firm reminder that every agency should regularly reassess its use-of-force continuum. The continuum is a guidance tool depicting the authorized escalation of force techniques by law enforcement officers as warranted by circumstances. A typical progression, adopted as department policy, would be police presence, verbal instruction, verbal command, "soft hand" physical force, "hard hand" physical force (such as pushing), chemical weapon (such as pepper spray), impact weapons (such as batons), and lethal weapons.

Like law enforcement standards generally, the use-of-force continuum can vary by community. Brett Chapman, an NIJ social scientist and police use-of-force authority, explained that individual departments "try to find standards that are appropriate for their community. You have to consider the relationship between the police and the community." In some cities, Chapman explained, law enforcement leadership placed CEDs right below guns on the force continuum — only to be used in serious confrontations. In other communities, CEDs have been used more liberally, based on the belief that CEDs are a mid-level use-of-force tool.

Those localized determinations of where CEDs lie on the use-of-force continuum are also constrained by court precedent. A 2013 Seventh Circuit opinion, for example, relied on earlier circuit authority for the position that a CED "falls somewhere in the middle of the nonlethal-force spectrum" and "does not constitute as much force as so-called impact weapons, such as baton launchers and beanbag projectiles."[20] In contrast, the Fourth Circuit in *Armstrong* made it clear that the court saw CEDs as closer to the lethal-force end of the spectrum. The court relied, in part, on a Ninth Circuit opinion finding that the Taser X26 and similar devices "are a greater intrusion than other non-lethal methods of force we have confronted."[21]

Understanding the Effects of CEDs

Heightened caution about the effects and possible risks of CEDs has been reflected in recent news coverage. The Reuters series on negative CED impacts nationally, published in 2017, found from a review of records — including rulings by medical examiners — that 1,005 people in the United States had died after encounters with law enforcement officers who used CEDs. In 153 of those cases, coroners or medical examiners cited the CED as a cause or contributing factor in the death. Regarding issues of liability, the news service found 442 CED-related lawsuits.

Settlements and judgments from these lawsuits totaled $172 million nationwide — a conservative estimate, according to Reuters.[22]

Thinking in the medical research field has evolved regarding the importance of medical monitoring of CED effects on subjects. In 2008, an NIJ special report on deaths following shocks by CEDs concluded, "Medical evaluation is not mandatory after all CED exposures," noting exceptions where medical care would be indicated.[23] By 2011, however, a medical panel convened by NIJ to study CED safety was advising that "regardless of how long the CED exposure lasts, some form of medical screening and ongoing observation of individuals exposed to CEDs is crucial. Screening should start at the scene and individuals should continue to be monitored in custody for abnormal physical and behavioral changes."[24] That recommendation foreshadowed the American Medical Association's 2014 call for standard medical and mental health assessments after CED exposures. (As early as 2006, the initial CED policy guidelines proposed by PERF and DOJ urged that "all persons who have been exposed to a CED activation should receive a medical evaluation."[25] A 2011 refinement of those guidelines stated that medical responders should provide the evaluation in the field or at a medical facility.[26])

A common refrain in NIJ-sponsored research on CED effects has been that more research is needed to fully grasp the elusive and complex impact of a CED's electrical insult. As a 2015 NIJ-supported study of cognitive functioning following CED exposure stated, in finding that CEDs cause fleeting deficits in neuropsychological functioning, "Our findings show that the effects of Taser exposure on brain functioning are not well understood. ... Findings indicate that additional research is needed to understand the effects of Taser exposure on brain functioning."[27] That study revealed a number of cognitive impacts from CED exposure, but no effects were observed more than one hour after exposure:[28]

> Results indicate that Taser exposure causes statistically significant reductions in one measure of verbal learning and memory (HVLT), as well as several subjective state self-measures (concentration difficulty, feeling overwhelmed). The effects lasted less than 1 hour and were limited to the HVLT test.

Even with wider knowledge of CED risks and the narrowing of scenarios when their use is permitted, CEDs remain a favored less-lethal weapon option for law enforcement — one that, overall, spares injuries to officers and subjects.

In the end, the effectiveness and safety of CEDs are a function of the quality of training received by officers on the street. As leading police-use-of-force researcher Geoffrey P. Alpert told the *Chicago Tribune,* "If it's not really good training, you're going to end up with not really good practices."[29]

About the Author

Paul A. Haskins is a social science writer and contractor with Leidos.

Notes

1. Source of the 15,000 figure: Geoffrey P. Alpert et al., *Police Use of Force, Tasers and Other Less-Lethal Weapons,* Research in Brief, Washington, DC: U.S. Department of Justice, National Institute of Justice, grant number 2005-IJ-CX-0056, May 2011, 1, NCJ 232215, https://www.ncjrs.gov/pdffiles1/nij/232215.pdf.
2. Michael R. Smith et al., "A Multi-Method Evaluation of Police Use of Force Outcomes: Final Report to the National Institute of Justice," grant number 2005-IJ-CX-0056, July 2010, 8-7, https://www.ncjrs.gov/pdffiles1/nij/grants/231176.pdf.
3. Ibid., 8-2 to 8-5.
4. After surveying the research, an NIJ-sponsored medical panel on CED safety recommended that law enforcement "apply CEDs for no longer than 15 seconds at a time and to limit the number of discharges to the fewest needed to control the suspect"; the medical panel also noted that "most deaths associated with CED use involved multiple or prolonged discharges." Brian Higgins, "Final Findings From the Expert Panel on the Safety of Conducted Energy Devices," *NIJ Journal* 268, October 2011, NCJ 235888, https://www.nij.gov/journals/268/pages/ceds.aspx; Douglas P. Zipes, "TASER Electronic Control Devices Can Cause Cardiac Arrest in Humans," *Circulation* 129 no. 1 (January

7, 2014), doi:10.1161/circulationaha.113.005504. Others have drawn attention to the October 2009 Taser International training bulletin warning that the device should not be aimed at the chest due to risks to heart function. Jack Ryan, "TASER™: The Target Zone, Policy and Training," Indianapolis, IN: Public Agency Training Council, 2009.

5. James M. Cronin and Joshua A. Ederheimer, *Conducted Energy Devices: Development of Standards for Consistency and Guidance,* Washington, DC: Police Executive Research Forum and U.S. Department of Justice, Office of Community Oriented Policing Services and Bureau of Justice Assistance, November 2006, 1, 3-4.
6. Interview of Geoffrey P. Alpert, University of South Carolina, Department of Criminology and Criminal Justice, March 12, 2012, "Use of Force and Conducted Energy Devices," video transcript, https://nij.ncjrs.gov/multimedia/video-alpert.htm.
7. Taser technology is so ubiquitous that the name has become synonymous with CED.
8. *Armstrong v. Pinehurst,* No. 15-1191, 810 F.3d 892, 902 (4th Cir. 2016) (collecting cases). The 2016 federal appellate court opinion in *Armstrong v. Pinehurst* gathered that language from other federal court decisions.
9. *Cyrus v. Town of Mukwonago,* 624 F.3d 856, 863 (7th Cir. 2010).
10. *Mattos v. Agarano,* 661 F.3d 433 (9th Cir. 2011).
11. 810 F.3d 892 (4th Cir. 2016).
12. Ibid., 905.
13. Ibid., 904.
14. Ibid., 913, endnote 8.
15. Smith et al., "A Multi-Method Evaluation," 3-20.
16. Ibid., 8-5.
17. Guideline 26 stated, "Fleeing should not be the sole justification for using an ECW [electronic control weapon] against a subject. Personnel should consider the severity of the offense, the subject's threat level to others, and the risk of severe injury to the subject before deciding to use an ECW on a fleeing subject." Police Executive Research Forum [PERF] and U.S. Department of Justice [DOJ], Office of Community Oriented Policing Services [COPS], *2011 Electronic Control Weapon Guidelines,* Washington, DC: PERF and DOJ COPS, March 2011, 20.
18. Jason Szep, Peter Eisler, and Tim Reid, "'Breathe, Ronald, Breathe': The Court Case Curbing Taser Use," Special Report, *Reuters,* August 23, 2017.
19. *Jones v. Las Vegas Metro. Police Dept.,* 873 F.3d 1123, 1132 (9th Cir. 2017).
20. *Abbott v. Sangamon County,* 705 F.3d 706, 726 (8th Cir. 2013) (internal citations omitted).
21. *Armstrong,* 810 F.3d 892 at 902, quoting *Bryan v. MacPherson,* 630 F.3d 805, 825 (9th Cir. 2010).
22. Peter Eisler, Grant Smith, and Jason Szep, "How Reuters Tracked Fatalities and Taser Incidents," *Reuters Backstory,* August 22, 2017.
23. National Institute of Justice, *Study of Deaths Following Electro Muscular Disruption: Interim Report,* Special Report, Washington, DC: U.S. Department of Justice, National Institute of Justice, June 2008, 5, NCJ 222981, https://www.ncjrs.gov/pdffiles1/nij/222981.pdf.
24. Higgins, "Final Findings," 32-33.
25. See Guideline 13 in Cronin and Ederheimer, *Conducted Energy Devices,* 24.
26. See Guideline 36 in PERF and DOJ COPS, *2011 Electronic Control Weapon Guidelines,* 21.
27. Michael D. White et al., "Examining Cognitive Functioning Following TASER Exposure: A Randomized Controlled Trial," *Applied Cognitive Psychology* 29 (2015): 600.
28. Ibid., 606.
29. Dan Hinkel, "In Change to Force Rules, Chicago Police Discourage Using Tasers on People Who Flee," *Chicago Tribune,* December 26, 2017.

Image source: ands456, iStock.

NCJ 252727

Cite this article as: Paul A. Haskins, "Conducted Energy Devices: Policies on Use Evolve To Reflect Research and Field Deployment Experience," *NIJ Journal* 281, November 2019, https://nij.ojp.gov/topics/articles/conducted-energy-devices-policies-use-evolve-reflect-research-and-field-deployment.