

HHS Public Access

Author manuscript

Police Chief. Author manuscript; available in PMC 2015 December 22.

Published in final edited form as: *Police Chief.* 2015 April; 82(4): 22–23.

Research in Brief: Motor Vehicle Safety for Law Enforcement Officers-Still a Priority

Hope M. Tiesman, PhD and

Research Epidemiologist, National Institute for Occupational Safety and Health, Morgantown, West Virginia,

Rebecca Heick, PhD

Assistant Professor of Public Health, MCPHS University, Boston, Massachusetts

Abstract

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.

Between 2013 and 2014, the number of officers who died in the line of duty increased by 24 percent. In 2014, 50 officers were killed in firearm incidents, and 49 died due to motor vehicle events. In the last decade, one officer a week, on average, has been killed on U.S. roads (2005-2014=61.9 deaths annually).

Even though motor vehicle crashes are a leading cause of job-related deaths among law enforcement officers, data on motor vehicle injury and crash trends are scant. The National Institute for Occupational Safety and Health (NIOSH) embarked on a comprehensive statewide study of motor vehicle safety among law enforcement officers to better understand these issues. The study was conducted in one state (Iowa); however, the results and recommendations are useful to law enforcement leaders across the United States.

A State-Based Study

In 2011, 136 agencies were randomly selected for the study from a list of all Iowa law enforcement agencies, stratified by type (municipal, state patrol, sheriff) and size. Of those 136 agencies, 60 agencies (44 percent) participated, representing 1,466 officers. Surveys were distributed by agency leadership and returned to researchers using a self-addressed stamped envelope; individual officer response rate was 79 percent (1,157 responses). The survey included questions on occupational characteristics, motor vehicle training, safety practices and perceptions, and motor vehicle crashes (MVCs) and "struck-by" events in the last three years.

Key Findings

Most officers believed driver training was critical to their safety (96 percent); however, only half of the respondents believed that academy-provided driver training adequately prepared

Tiesman and Heick Page 2

young officers to safely function in the field, and only 12 percent believed the average academy recruit had driving skills sufficient to safely operate a law enforcement vehicle. Additionally, only 29 percent of the officers received annual motor vehicle training. Handson training, such as pursuit driving, was reported about one-third of the time. While most officers reported having a motor vehicle policy, such as general operations or standard operating procedures, only 66 percent had received any training on the actual policy. The least common elements of written motor vehicle policies were speed restriction when using lights or sirens (27 percent of policies) and cellphone use restrictions (39 percent).

MVCs and struck-by events were reported as common. In the prior three years, 20 percent of the officers had at least one MVC, and 16 percent reported being struck by or nearly struck by a passing motorist. Most of the reported MVCs occurred during daylight (49 percent), in clear weather (70 percent), during non-emergency responses (64 percent), and at speeds lower than 50 mph (79 percent). Additionally, nonfatal roadside incidents mostly occurred during daylight (60 percent) and in clear weather conditions (60 percent). Nearly half of the non-fatal roadside incidents occurred during traffic stops (47 percent).

Finally, 81 percent of officers reported wearing a seat belt "all of the time," but only 8 percent of officers reported wearing reflective gear while outside their patrol cars on highways.

Recommendations

Motor Vehicle Training

Agencies could consider providing more opportunities for motor vehicle training and provide officers with more hands-on experience. A study by the California Commission on Peace Officer Standards and Training (CalPOST) found that behind-the-wheel training resulted in the fewest collisions when conducted every two years.³ Also, since many officers felt that academy-provided driver training was insufficient, states and agencies could conduct analyses of their current training programs to assess the consistency and effectiveness of their motor vehicle training efforts. Expanding hours of motor vehicle training and providing more hands-on training may be warranted.

Use of Personal Protective Equipment

In this study, reported seat belt usage was high. Agencies should strive for 100 percent seat belt use by implementing strong policies and supporting officers in the wearing of seat belts. Recently, the United States' largest police unions and a coalition of major city police chiefs called all agencies to implement mandatory seat belt use. The use of reflective gear was very low; wearing high-visibility vests can significantly reduce an officer's chances of being struck on the roadway. Agencies should encourage officers to wear high-visibility apparel whenever they work in the vicinity of moving vehicles.

Motor Vehicle Policy

An uncommon component of motor vehicle policies was cellphone restrictions. Research among commercial drivers shows that cellphone use is associated with an increased crash

Tiesman and Heick Page 3

risk.⁶ Agencies should consider implementing policies that reduce distractions in patrol cars by restricting the use of cellphones while officers are driving.

Another uncommon component was speed restriction. Both the National Highway Traffic Safety Administration and CalPOST found that "driving too fast for conditions or in excess of posted speed" was a leading factor in many officer-involved crashes.⁷ Agencies could implement and enforce policies that restrict excessive speed.

Motor Vehicle Safety Culture

Experienced officers were less likely to have had an MVC and more likely to use safe driving techniques than those with less law enforcement experience. Mentoring programs may help to change driving culture, and formal mentoring programs in law enforcement have led to higher job satisfaction and a stronger work ethic in those mentored.⁸ Agencies should also consider adding personal testimonies of officers who have been involved in MVCs into their motor vehicle training like those used in such programs as Below 100, since personal stories have been shown to have a large impact.⁹

Motor vehicle—related events have prompted some agencies to make significant changes to their motor vehicle policies and training in an attempt to change their driving culture. One such agency is the Las Vegas Municipal Police Department, whose crash prevention program's impact on MVCs and related injuries and costs is currently being evaluated through a jointly funded effort by the National Institute of Justice and NIOSH.

Action Items

- Encourage or require seat belt use.
- Provide periodic motor vehicle training.
- Include personal testimonies of officers who have been involved in MVCs into motor vehicle training.
- Add cellphone restrictions and speed restrictions into current written motor vehicle policies.
- Encourage or require officers to use reflective gear while working in the vicinity of moving vehicles.

Acknowledgments

This project was supported by the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention. The full report can be found online at www.cdc.gov/niosh/docs/2015-101.

Notes

- National Law Enforcement Officers Memorial Fund (NLEOMF). [accessed January 5, 2015]
 Preliminary 2014 Law Enforcement Officer Fatalities Report. http://www.nleomf.org/assets/pdfs/reports/Preliminary-2014-Officer-Fatalities-Report.pdf
- 2. NLEOMF. [accessed January 5, 2015] Causes of Law Enforcement Deaths. http://www.nleomf.org/facts/officer-fatalities-data/causes.html

Tiesman and Heick Page 4

 California Commission of Peace Officer Standards and Training (CalPOST). POST Driver Training Study. Sacramento, CA: CalPOST; 2009.

- Johnson, Kevin. [accessed March 4, 2015] Police Union, Chiefs Call for Mandatory Armor, Seat Belts. USA Today. Nov 20. 2014 http://www.usatoday.com/story/news/nation/2014/11/20/ mandatory-armor-seat-belts/19326349
- Federal Highway Administration. [accessed March 4, 2015] Worker Visibility, 23 CFR 634. 2007. http://edocket.access.gpo.gov/cfr_2007/aprqtr/pdf/23cfr634.4.pdf
- Federal Motor Carrier Safety Administration (FMCSA). [accessed March 4, 2015] Synthesis of Literature Relating to Cellular Telephone/Personal Digital Assistant Use in Commercial Truck and Bus Operations. Apr. 2011 http://ntl.bts.gov/lib/51000/51200/51275/Cell-PDA-Use-in-Commercial-Truck-and-Bus-Operations.pdf
- National Highway Traffic Safety Administration (NHTSA). [accessed March 4, 2015]
 Characteristics of Law Enforcement Officers' Fatalities in Motor Vehicle Crashes. Jan. 2011 http://www-nrd.nhtsa.dot.gov/Pubs/811411.pdfCalPOST, POST Driver Training Study
- 8. Sprafka, Harvey; Kranda, April H. Best Practices Guide: Institutionalizing Mentoring into Police Departments. Alexandria, VA: International Association of Chiefs of Police; http://www.theiacp.org/Portals/0/pdfs/Publications/BP-Mentoring.pdf [accessed March 4, 2015]
- 9. Ricketts, Mitch, et al. Using Stories to Battle Unintentional Injuries: Narratives in Safety and Health Communication. Social Science & Medicine. 2010; 70:1441–1449. [PubMed: 20176428]