



Fatality Assessment and Control Evaluation (FACE) Program – Law Enforcement Officer Motor Vehicle Fatality Investigations

LCDR Melanie Fowler, MS, CSP



The National Law Enforcement Traffic Safety Summit – July 28, 2022

National Institute for Occupational Safety & Health (NIOSH)



- Research to prevent work-related injuries and illnesses
- Part of the Centers for Disease Control & Prevention (CDC)
- Not a regulatory agency

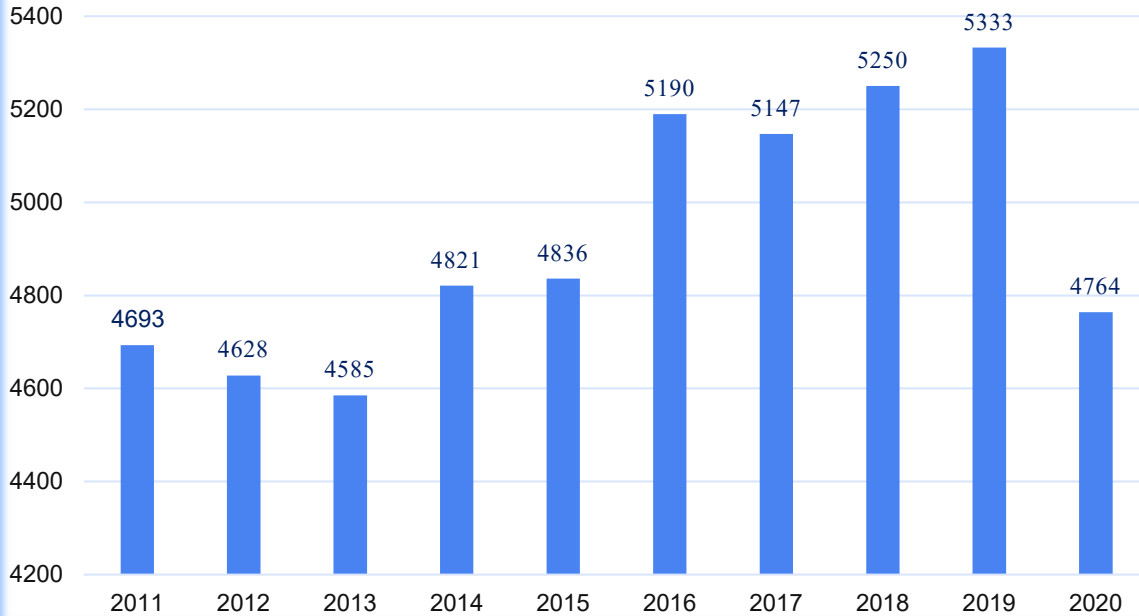
Division of Safety Research (DSR)

- Mission is to address the safety issues in the workplace, and is the focal point for traumatic injury research at NIOSH
- Through our research we identify, reduce, and prevent work-related injuries and deaths across all industries
- Our research programs include:
 - Injury data collection and analysis
 - Field investigations
 - Analytic epidemiology
 - Protective technology
 - Safety engineering



Why Research Workplace Fatalities?

Annual Fatal Occupational Injuries



Source: Bureau of Labor Statistics Census of Fatal Occupational Injuries



NIOSH Fatality Assessment and Control Evaluation Team

Morgantown, WV



- Jeff Funke, FACE Team Lead
- Nancy Romano, FACE Project Officer
- LCDR Melanie Fowler, FACE Investigator

FACE Program Objective and Components

Objective: To identify work situations at high risk for fatal injury and formulate and disseminate prevention strategies to those who can intervene in the workplace

Components:

NIOSH FACE (1982)

- DSR Fatality Investigation Team receives case identification from state and federal agencies

State FACE (1989)

- Identifies case through state-level surveillance systems
- CA, KY, LA, MA, MI, NY, OR, WA



NIOSH Fire Fighter Fatality Investigation and Prevention Program

Overview and Relationship with the Fire Service

- Funded by Congress in 1998
- To address the national problem of firefighter fatalities
- To implement a firefighter safety initiative
- More than 768 investigations have been conducted since the inception of the program
 - Trauma
 - Medical



Investigation Report F2014-09 MA

NIOSH-NIJ Pilot Program: Law Enforcement Officer Crash Investigations

- Line of Duty Deaths from crashes are preventable
- Data on crashes hard to come by and little evidence how to prevent them
 - Minimal research into risk factors
- Could the NIOSH model of investigating occupational deaths work in LE?
 - Investigate, develop report/recommendations, share with the law enforcement community



Photo by ©2017 Getty Images

NIOSH LEO Reports

- Pilot study – 5 completed investigations
 - 2 crashes
 - 3 struck-by events
- Team moving forward with future investigations



Photo by ©2017Welcomia/Getty Images

Situations Studied

- Motor vehicle crash while in pursuit, patrol, emergency response, or commute between duty station
- Struck by a motor vehicle while operating a traffic stop/roadblock, other emergency, or assisting motorists
- Law enforcement ground vehicles, excluding motorcycles



Investigation Format

Step 1: Investigators evaluate the location where the death occurred to examine the worksite and collect facts about what happened before, during, and after the incident.

- Investigations follow public health model
- Investigations are conducted on a cooperative basis with all agencies involved
- We interview law enforcement and other agency witnesses on a cooperative basis
- Investigations are impartial and transparent and do NOT place blame



Investigation Sources

Step 2: Investigators interview company officials, witnesses, and workers to learn about the work environment and victim.

- Site visit
- Training and SOPs
- State Police Academy Instructors
- Witnesses (non-civilian)
- Firefighter, EMS responders
- Dash camera videos
- Department reports/reconstructions
- Coroner/medical examiner reports



NIOSH Report (Steps 3 & 4)

- Describes event without personal identifiers
- Does not place blame
- Contributing factors and lessons learned
- Reviewed by subject matter experts
- Draft sent to department for comment and fact check
- Pre-publication copy sent to department
- Published on NIOSH law enforcement officer motor vehicle safety page
www.cdc.gov/niosh/topics/leo
- Published on NIOSH FACE page
www.cdc.gov/niosh/face

Law Enforcement Officer
Vehicle Struck-by Investigation

NIOSH[®]


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LEO 2016-01
November 7, 2017

**Officer Struck By a Motorhome While Establishing
Temporary Traffic Control on Interstate—Tennessee**

EXECUTIVE SUMMARY

On May 10, 2014, a 25-year-old police officer was fatally injured when he was struck by a motorhome and drug under the trailer it was pulling on a four-lane interstate highway. The officer had responded to a jackknifed and overturned pickup/trailer combination that was blocking an entrance ramp to the interstate northbound lanes. To assist with traffic control, the officer positioned his patrol unit south of the entrance ramp in lane three, and a Tennessee Department of Transportation help truck operator positioned his vehicle next to the patrol unit to block the shoulder and lane four. The officer and help truck operator were standing between their vehicles, near the help truck's driver's side door, when a motorhome pulling a trailer approached the scene in lane three (lane second from the right). The driver of the motorhome reported the speed and volume of traffic in lanes one and two prevented him from moving to the left; as a result, he attempted to drive between the police car and the help truck. The help truck operator saw the oncoming motorhome, yelled to the officer, and ran out of the way; the officer was unable to do so. The motorhome and trailer sideswiped the help truck and struck the officer. The officer was dragged underneath the trailer for 116 feet before the motorhome came to a stop. He died at the scene.



The incident scene showing the position of the patrol unit and the help truck.
(Photo courtesy of Metropolitan Police Department)

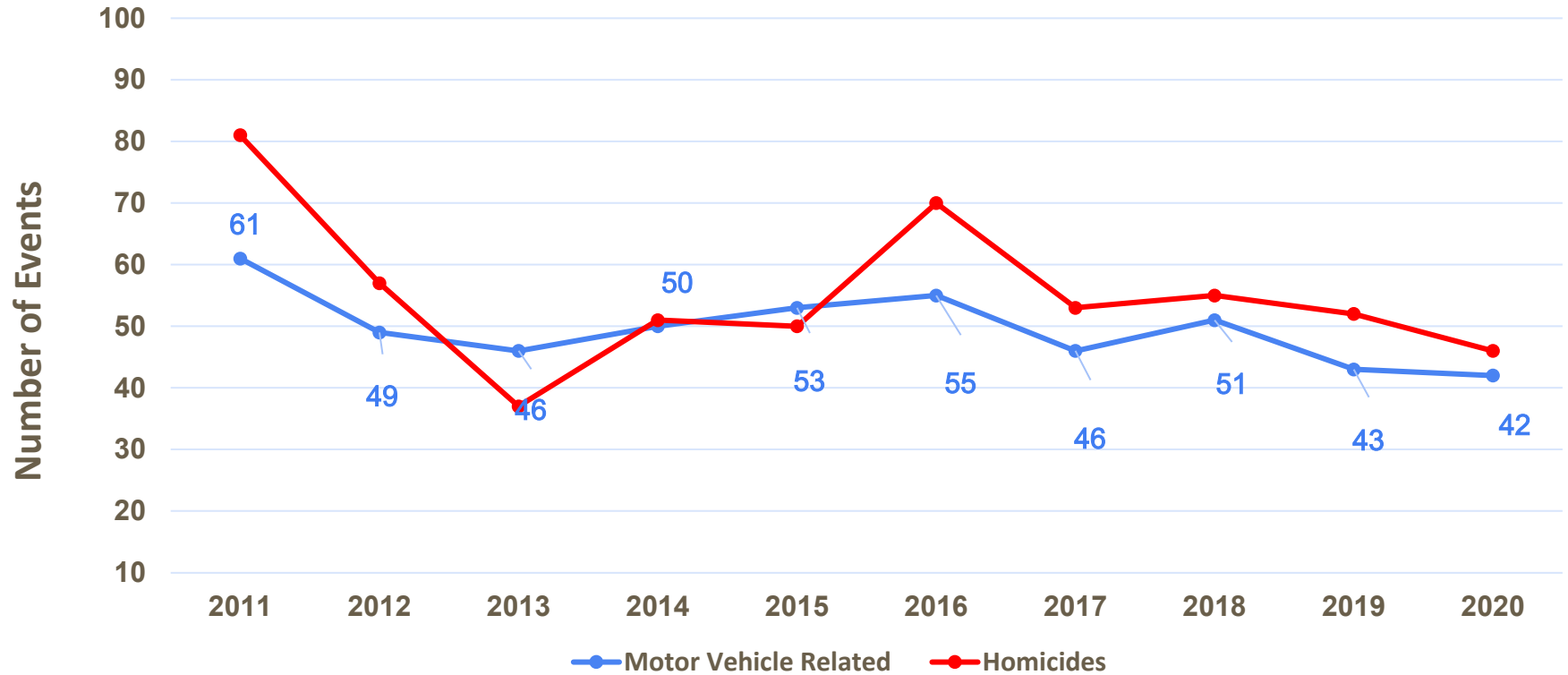
CONTRIBUTING FACTORS

Key contributing factors identified in this investigation include:

- Motorhome driver did not slow down and merge left.
- Positioning of patrol unit.
- Law enforcement officer standing in partially open lane.
- Law enforcement officer looking away from oncoming traffic; discussing traffic control with help truck operator.
- Delay in updating dynamic message sign.

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Fatalities among U.S. law enforcement officers



Law Enforcement Officer (LEO) Fatality Reports

NIOSH Case Studies

NIOSH LEO Report 2014-01 - Sergeant Struck by a Motor Vehicle on Interstate Highway – New Mexico

- Officer investigating several crashes on highway
 - Due to weather conditions
- Crossed highway to speak to other officers
- Motorist lost control and slid into officer striking him.



Looking southbound on the interstate;
conditions immediately prior to a vehicle
striking the sergeant.
(dashcam courtesy of the sheriff department)

NIOSH LEO Report 2014-01 - Sergeant Struck by a Motor Vehicle on Interstate Highway – New Mexico

- **Contributing Factors**
 - Weather
 - Motorists not moving left or slowing
 - Scene management/traffic control
 - Low frequency/high risk event



Dashcam view of scene prior to incident from northbound MTD unit minutes prior to the incident. Note Number of disable and responding vehicles. (dashcam courtesy of sheriff department)

NIOSH LEO Report 2015-01 - Trooper Struck By Vehicle While Investigating Crash on Interstate Highway—Oklahoma

- Troopers struck by passing motorist
- Responded to a crash involving a tanker truck
- Troopers were not facing traffic
- Motorist left the roadway, and struck both officers
- Fatally injuring one and other in critical condition



Crash scene.
(Photo courtesy of Oklahoma Highway Patrol.)

NIOSH LEO Report 2015-01 - Trooper Struck By Vehicle While Investigating Crash on Interstate Highway—Oklahoma

- **Contributing Factors:**
 - Distracted motorist
 - Visibility/Weather
 - Law enforcement officers (LEO) positions
 - Positioning of patrol cars—one before, one beyond
 - Incident occurred during scene size-up
 - Roaming civilians distracting LEOs
 - 911 communication system



Crash scene.
(Photo courtesy of Oklahoma Highway Patrol.)

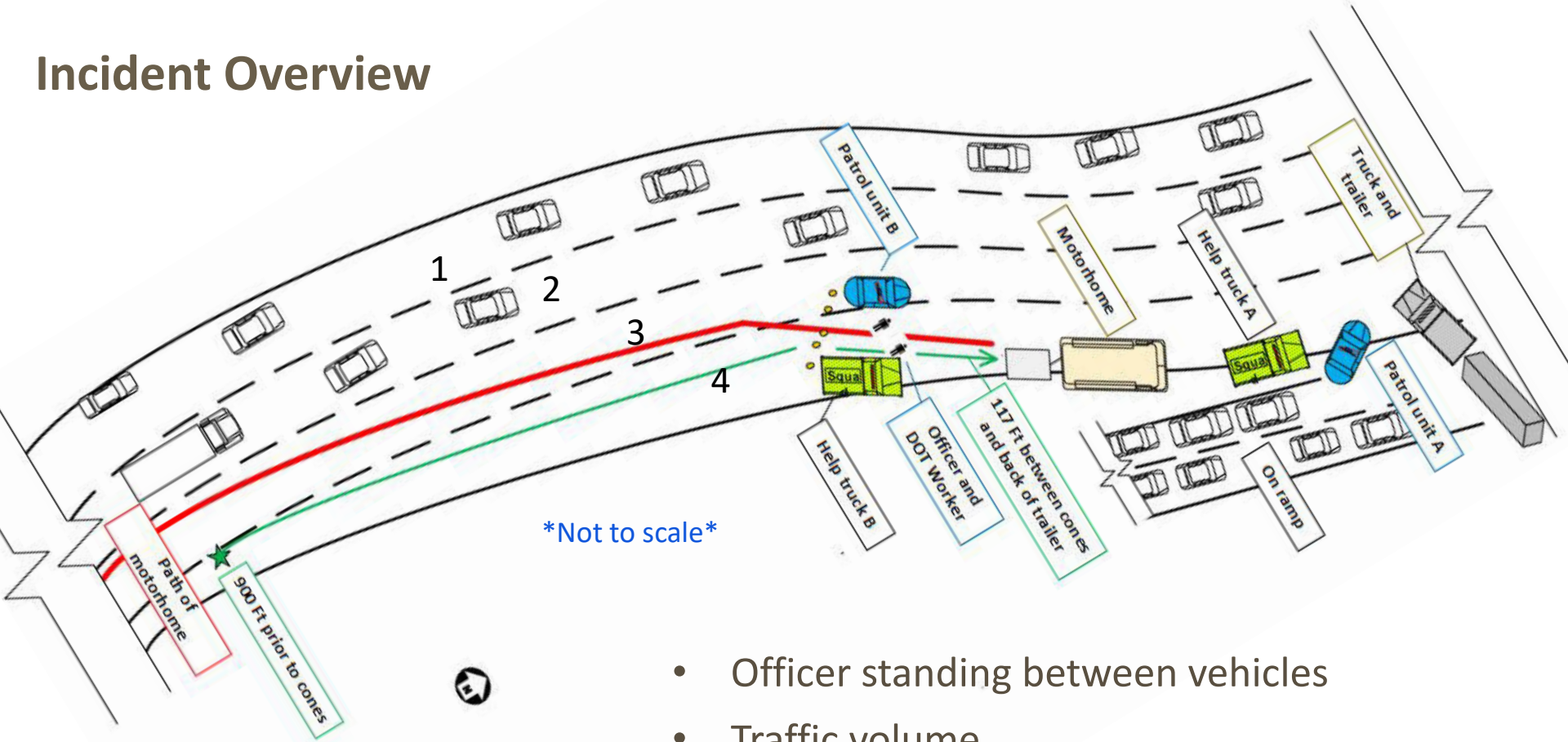
NIOSH LEO Report L2016-01 - Officer Struck By a Motorhome While Establishing Temporary Traffic Control on Interstate – Tennessee

- 25-year-old police officer struck by motor home and drug under trailer it was pulling on four-lane interstate highway
- Officer responded to jackknifed and overturned pickup/trailer combination that was blocking an entrance ramp to the interstate northbound lanes
- To assist with traffic control, the officer positioned his patrol unit south of the ramp in lane three, and at Tennessee Department of Transportation help truck positioned his vehicle next to the unit to block the shoulder and lane four



Photo courtesy of Metropolitan Police Department

Incident Overview



Recreation of motorist visibility; 900 feet south of crash site

*reconstruction and cones were not present the day of the incident



Contributing Factors

- Motorhome driver did not slow down and merge left
- Traffic Control Location of LEO and vehicle position
- Law enforcement officer looking away from oncoming traffic
- Delay in updating dynamic message sign



Photo courtesy of Metropolitan Police Department

Prevent Struck-by Incidents at Crash Scenes

More than 200 law enforcement officers died due to struck-by incidents from 2005-2019 (24% of motor vehicle-related officer deaths).* **You can lower your risk** of being struck by a passing vehicle while outside the patrol vehicle.



1 MAINTAIN situational awareness

- Keep your head on a swivel
- Work within traffic control zone
- Avoid the gap between vehicles
- Don't turn your back to traffic
- Always have an escape plan



2 WEAR your ANSI-approved tearaway high visibility safety vest any time you are exposed to vehicle traffic or working a crash scene.



3 FOLLOW your agency's standard operating procedures (SOPs) on temporary traffic control zones.



4 UNDERSTAND the incident command structure and work collaboratively with other responders.

*Source: National Law Enforcement Officers Memorial Fund (NLEOMF.org)



Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

Access fatality reports involving officer motor vehicle deaths
www.cdc.gov/niosh/face

Find more law enforcement motor vehicle resources
www.cdc.gov/niosh/topics/leo



Upcoming Report: L2021-01- Officer Struck While Assisting with Temporary Traffic Control on an Interstate—Texas

- Officer responded to motor vehicle vs. pedestrian hit and run fatality on interstate
- Tasked to assist with traffic control
- Individual under influence of Central Nervous System prescription struck the officer.



Photo of the scene with the Officer's patrol unit in Lane 1-2 and the vehicle that struck him in lane 2 in the distance.

(Photo courtesy of the city Police Department.)

Partner Support



National Law Enforcement Officers
MEMORIAL FUND
RESPECT. HONOR. REMEMBER.

NIJ | *National Institute
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STRENGTHEN SCIENCE. ADVANCE JUSTICE.

Questions?

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**NIOSH Law Enforcement Officer
Motor Vehicle Safety:**

www.cdc.gov/niosh/topics/leo

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the National Institute for Occupational Safety & Health, Centers for Disease Control & Prevention.

