

# New Federal Guidance for Injury Prevention

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NIOSH (the National Institute for Occupational Safety and Health) and NHTSA's Office of EMS have released a new resource to help EMS employers keep their workers safe on the job.

The fact sheet, [available here](https://www.cdc.gov/niosh/docs/2017-194/pdfs/2017-194.pdf), (<https://www.cdc.gov/niosh/docs/2017-194/pdfs/2017-194.pdf>) is titled "Emergency Medical Services Workers: How Employers Can Prevent Injuries and Exposures." Its background: Over a four-year period, investigators determined that more than 22,000 EMS workers a year visited emergency departments for work-related injuries. That data was published this summer in *Prehospital Emergency Care*. The new document (DHHS [NIOSH] publication No. 2017-194) offers employers recommendations for preventing injuries and exposures to their personnel.

"Employers need to understand why injuries occur in order to prevent them," NIOSH notes. "Fewer injuries can result in a healthier workforce and decreased costs to the agency."

Research also shows EMS workers have higher rates of work-related injuries than the general workforce and three times the lost-workday rate of all private-industry workers. Key findings:

- Full-time workers and workers with less than 10 years' experience had the most injuries;
- Most injuries occurred while responding to 9-1-1 calls;
- Sprains/strains were the most common injuries; most occurred to the back and neck;
- Body-motion injuries and exposures to harmful substances each hurt 6,000 workers a year, and slips, trips and falls injure another 4,000.

## Reference

1. Reichard AA, Marsh SM, Tonozzi TR, Konda S, Gormley MA. Occupational Injuries and Exposures Among Emergency Medical Services Workers. *Prehosp Emerg Care*, 2017 Jul–Aug; 21(4): 420–31.

Source

NIOSH

From staff

# Emergency Medical Services Workers: How **Employers** Can Prevent Injuries and Exposures



Emergency medical services (EMS) workers are important to public health and safety. However, work-related injuries present a challenge to EMS worker productivity and retention. Research shows that EMS workers have higher rates of work-related injuries than the general workforce<sup>1,2</sup> and three times the lost workday rate of all private-industry workers.<sup>2</sup>

Employers need to understand why injuries occur in order to prevent them. Fewer injuries can result in a healthier workforce and decreased costs to the agency. This fact sheet highlights results from a four-year study capturing data from EMS workers treated in emergency departments<sup>1</sup> and provides recommendations for prevention.

More than **22,000 EMS workers** visited emergency departments each year for work-related injuries.<sup>1,3</sup>

## Who

### had the most injuries?

Workers with less than 10 years' experience

Full-time workers



## What

### types of injuries occurred most?

Sprains/strains

Most sprains and strains occurred to the back and neck.



## When

### did injuries occur?

Most were injured while responding to a 9-1-1 call

Response includes patient care and transport.



## How did injuries occur?



**Body motion** (e.g., excessive physical effort, awkward posture, or repetitive movement):

6,000 injured workers per year



**Exposures to harmful substances**

(e.g., exposure to blood or respiratory secretions):

6,000 injured workers per year



**Slips, trips, and falls:**

4,000 injured workers per year



**Motor vehicle incidents** (e.g., sudden stops, swerves, and crashes):

2,000 injured workers per year



**Violence/assaults:**

2,000 injured workers per year



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



## What can **employers** do to prevent workplace injuries and exposures?



**Employers:** Promote a culture of safety by requiring practices to help keep EMS workers safe and maintaining a reporting system to capture and monitor injuries and near misses.

- Protect workers and promote safety, health, and well-being through workplace policies, programs and activities.**
  - Create a work environment supporting exercise, healthy diet, and good sleep habits.
  - Provide access to mental health services and support use of these services.
- Promote safe patient-handling techniques.**
  - Provide safe patient handling equipment.
  - Train and encourage workers to use available on-scene resources (e.g., equipment and additional persons).
  - Teach workers proper lift and transport techniques (e.g., good body mechanics and communication).
- Protect workers from exposures to blood and other potentially infectious body fluids.**
  - Implement and maintain a comprehensive exposure control plan to address standard precautions, work practice controls, engineering controls, decontamination procedures, waste disposal, etc., as specified in OSHA's Bloodborne Pathogens Standard.
  - Provide PPE to allow workers to follow standard precautions.
- Prevent slips, trips, and falls.**
  - Educate workers on ways to identify and reduce fall risks (e.g., be aware of the environment and adjust path to patient if hazards are present).
  - Set policies requiring workers to wear durable, slip-resistant footwear.
- Improve motor vehicle safety.**
  - Require the use of occupant restraints (e.g., seat belts) in ambulances, including in the patient compartment.
  - Prohibit texting, use of handheld phones, and manual data input while driving.
  - Provide emergency vehicle operator training and complete periodic motor vehicle record checks for drivers.
  - Secure equipment in the patient compartment and driver's cab of all ambulances.
- Prevent violence by patients.**
  - Establish a program and set policies to prevent workplace violence.
  - Provide risk management, de-escalation, and self-defense training to reduce the risk for violence.

<sup>1</sup> Reichard AA, Marsh SM, Tonozzi TR, Konda S, Gormley MA. Occupational injuries and exposures among emergency medical services workers. *Prehosp Emerg Care.* 2017;21(4):420-431.

<sup>2</sup> Maguire BJ, Smith S. Injuries and fatalities among emergency medical technicians and paramedics in the United States. *Prehosp Disaster Med.* 2013;28(4):376-382.

<sup>3</sup> These data were collected from July 2010–June 2014. The numbers presented in this fact sheet are based on a sample and subject to sampling error.

**Mention of any company or product does not constitute endorsement by NIOSH.**

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For resources related to EMS injury prevention, visit [www.cdc.gov/niosh/topics/ems/othlinks.html](http://www.cdc.gov/niosh/topics/ems/othlinks.html).

For more about Federal initiatives related to EMS workers, visit [www.ems.gov](http://www.ems.gov).

