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Occupational transportation safety challenges: Contrasting the transportation safety data for Emergency Medical Services with other commercial vehicles

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Background: Emergency Medical Services (EMS) have been identified to have high risk of crash related injury and fatality, however comparative data with commercial vehicles is scant.

Objective: To identify transportation safety data and data capture systems for EMS vehicles in contrast to commercial vehicles.

Methodology: Search of online databases for EMS transportation safety and commercial vehicle transportation safety data, 1996-2005. Analysis of data fields and types of data captured nationally for these two different occupational environments.

Results: Estimates for ambulance fatality per mile traveled are 3 to 50 fold the rate of large truck fatal crashes of 2.2 per 100 million miles traveled in 2005, with general estimates of 7.7 to 109 fatal crashes per 100 million ambulance miles traveled. Estimates of 37 truck crashes injuries per 100 million miles, are well exceeded by ambulance estimates of crash injury of 308 to 4,360 injuries per 100 million ambulance miles traveled. Ambulance invehicle crash fatality percentage is double that for large trucks. The Federal Motor Vehicle Carrier Safety Administration (FMCSA) data capture system provides extensive data on both numerator and denominator aspects of truck travel safety – NHTSA data fields captured for EMS were minimal with incomplete numerator data for both morbidity and mortality and virtually non- existent denominator data.

Conclusion: There appears to be wide disparity in transportation safety between EMS and commercial transport per mile traveled. Additionally the FMCSA database provides extensive detail on many aspects of truck safety - similar national data are not practically identifiable for EMS transport.

Learning Objectives:

- Determine databases and fields for transportation safety data capture nationally for EMS transport and commercial vehicles
- Describe the transportation safety statistics data for Emergency Medical Services and commercial vehicles
- Identify gaps in transportation safety data for these two diverse occupational environments

Keywords: Data Collection, Challenges and Opportunities

Related Web page: www.objectivesafety.net

Presenting author's disclosure statement:

Any relevant financial relationships? No