American Public Health Association Meeting,
Washington, DC, November 7th, 2007

Politics, Policy and Public Health

Occupational transportation safety challenges:

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

Nadine Levick, MD MPH
Research Director, EMS Safety Foundation
CEO, Objective Safety
New York, NY

Background:

- Ground 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

Occupant protection… Transportation systems safety??
July 5, 2007

Medic Survivors

Medic Fatality

“…I’d like to know what can be done so this never happens again….”

Posted By:mad at July 5, 2007 4:38 PM (Suggest Removal)
to all the people worried about how fast the emt was going. would it be fast enough if it was your loved one in there.....

| **Add your comments**

Posted By:Concerned at July 5, 2007 4:49 PM (Suggest Removal)
To mad: It would be too fast if they ran over my family member on their way to another's family member...

| **Add your comments**

Posted By:Concerned at July 5, 2007 4:58 PM (Suggest Removal)
To X responder: Why can't I second guess this? A man is dead and I want to know if the actions and situation surrounding this were worth this sort loss. And I'd like to know what can be done so that this never happens again.

Friday July 20th 2007... The worst ambulance crash in USA history

Five Killed in Crash of Ambulance and Semi

July 21, 2007 08:20 AM EDT

VAN WERT, OHIO (AP) -- The Ohio State Highway Patrol continues to investigate the crash of an ambulance that killed five people Friday night, including three emergency medical technicians. Troopers say the ambulance was broadsided by a semitrailer in Crane Township, about 65 miles southwest of TOledo.

The ambulance, with four Antwerp Emergency Medical Services workers aboard, was taking two victims from an earlier car crash to a hospital. Troopers say it was broadsided by a tractor-trailer at the intersection of County Road 176 and County Road 87. The ambulance then burst into flames.

The Highway Patrol says three EMS workers were killed. They were identified as 64-year-old Sammy Smith, 31-year-old Heidi McDougall and 25-year-old Kelly Rager. The two patients were also killed. They were identified as 64-year-old Robert Wells 60-year-old Armelda Wells of Hicksville.

Another emergency medical technician, Matt McDougall, and the truck driver, Gerald Chapman, Jr. of Indiana, were both taken to the hospital. It's not yet clear whether they suffered any injuries.

Authorities have not said who had the right of way at the rural intersection nor have they said if the ambulance's emergency siren and lights were turned on.

Antwerp fire chief says, 'They were doing what they loved...'

Lisa Nicely
July 22, 2007

By LISA NICELY

nicely@crescent news com

ANTWERP -- They were heroes until the end.

Emergency personnel throughout the region are also shocked and mourning their own.

"That's one of our worst scenarios when it's one of our own," said Con Shuherk of the Payne Fire Department.

"Everyone is a brotherhood," said Friend. "Everybody looks after everybody."

Randy Shaffer, director of Paulding County Emergency Management Agency, said the accident has had a deep impact.

"It has affected every emergency personnel in the county," he said. "We know it could happen at any time. We read about it in our newsletter. We just don't think it's going to happen to us."

Shaffer said when a call came in that an ambulance was involved in an accident Friday, "I think every squad in the county activated."

…as he had been trained to do…??

Sides differ on who ran red light in ambulance wreck that killed teen - Alabama

Assistant District Attorney Robert Becher told the jury today in his opening statement that Tennessee ambulance driver Charles Christopher Eakes was speeding and ran a red light when he collided with Dianna Bowden at U.S. 231/431 and West Limestone Road.

But Eakes' lawyer, Robert Presto, said in his opening argument that Bowden ran the red light and darted into the path of the ambulance.

Bowden, 18, was killed in the wreck Oct. 13, 2005, about seven miles north of Huntsville in Hazel Green.

Troopers estimated that Eakes was driving 81 mph in a 60 mph speed zone. But Presto said Eakes had slowed to about 50 mph to go through the intersection, as he had been trained to do.

When the wreck occurred, the ambulance was transporting a patient, Earnest Cook, to Huntsville Hospital from Fayetteville on a non-emergency basis.

2 killed, 3 injured….
September 23, 2007 - PA

Car, Ambulance Collide In Marshall Township; 2 Dead

POSTED: 8:08 am EDT September 23, 2007
UPDATED: 9:52 pm EDT September 23, 2007

MARSHALL TOWNSHIP, Pa. --
An ambulance and car collided along Route 19 at Brushcreek Road in Marshall Township Sunday, killing two people and injuring three others.

Police said Douglas Stitt, 38, of Mercer, and Phillip Bacon, 31, of Sharpsville, were driving a car at about 2:30 a.m. when their vehicle and the ambulance collided.

The medical examiner said both Stitt and Bacon died of head injuries.

Three people riding in a Cranberry Township ambulance were also injured. Their conditions and names have not been released.

The three injured victims remain in the hospital.

2 counts of vehicular homicide... November 5, 2007 - PA

Drunken ambulance driver killed 2 in car crash - Pennsylvania

A 22-year-old ambulance driver drank before her shift and was impaired when she collided with a car in Marshall, killing two men instantly, Allegheny County District Attorney Stephen A. Zappala Jr. said today.

Shanea Leigh Climo, 22, of Evans City, is charged with two counts of homicide by vehicle and involuntary manslaughter, driving under the influence and several traffic offenses in the Sept. 23 collision at Perry Highway and Brush Creek Road. She was arrested this morning, arraigned and released on her own recognizance, authorities said.

Police said an on-board camera system in the ambulance helped them decide to file charges. The camera allegedly shows the face of the driver, Shanea Climo.

Zappala said Climo was traveling south on Route 19, transporting a patient with a do-not-resuscitate order to UPMC Passavant, when she ran a red light and hit a Chevrolet Cavalier driven by Douglas Stitt. Stitt and a passenger, Phillip Bacon, were killed.

The patient later died, but his death was not believed to be related to the crash, Zappala said.

Paramedic critically injured November 7, 2007 - yes… today…

Paramedic Critically Injured After Ambulance Crash

POSTED: 8:37 am EST November 7, 2007
UPDATED: 8:39 am EST November 7, 2007

GARRISON, N.Y. -- A paramedic for Empire State Ambulance Company was critically injured when the ambulance he was riding in went out of control along Route 9 in Garrison and crashed around five this morning. State Police at Cortlandt say the ambulance was patrolling the area when the driver apparently fell asleep, and crashed at Oak Hollow Road.

The injured man was in the back of the rig. Police say he was given CPR at the scene and rushed to the Hudson Valley Hospital Center - and then airlifted to the Westchester Medical Center.

Some recent adverse outcomes

UPS and Laundry trucks have very similar design and even more stringent safety requirements to EMS vehicles

BUT

very different cargo……

People are passengers and NOT packages or parcels

Objective:

- To identify transportation safety data and data capture systems for EMS vehicle transport in contrast to commercial vehicle transport

Methodology:

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

Results: Identified relevant databases

- FMSCA – MCMIS, Safetynet, SafetyStat
- NHTSA – FARS, GES, CDS/NASS
- NTSB -
- Non transportation Professional Association/Organization National Infrastructure -

FMCSA - Summary

- Established Jan 2000 as a separate administration within the U.S. DOT, pursuant to the Motor Carrier Safety Improvement Act of 1999
- Primary mission is to reduce crashes, injuries, and fatalities involving large trucks and buses.

FMCSA - safety mandate

- Develops and enforces data-driven regulations that balance motor carrier (truck and bus companies) safety with industry efficiency
- Harnesses safety information systems to focus on higher risk carriers in enforcing the safety regulations
- Targets educational messages to carriers, commercial drivers, and the public
- Partners with stakeholders including Federal, State, and local enforcement agencies, the motor carrier industry, safety groups, and organized labor on efforts to reduce bus and truck-related crashes.

FMCSA - Exceptions

- Unless otherwise specifically provided, the rules do not apply to —
  - (f)(1) All school bus operations as defined in §390.5;
  - (f)(2) Transportation performed by the Federal government, a State, or any political subdivision of a State, or an agency established under a compact between States
  - (f)(3) The occasional transportation of personal property by individuals not for compensation nor in the furtherance of a commercial enterprise;
  - (f)(4) The transportation of **human corpses or sick and injured persons;**
  - (f)(5) The operation of **fire trucks and rescue vehicles while involved in emergency and related operations;**

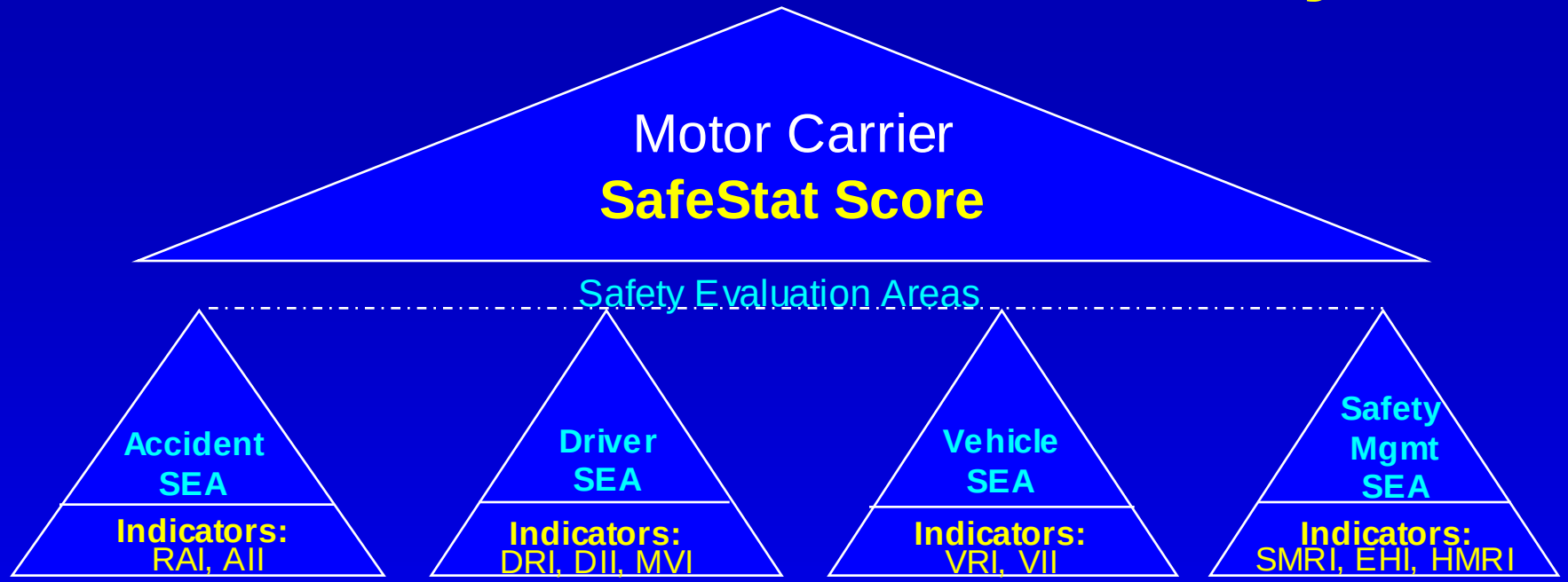
Motor Carrier Management Information System (MCMIS)

- FMCSA operates and maintains the MCMIS
- MCMIS contains information on the safety fitness of commercial motor carriers
- MCMIS is a collection of safety information including state-reported crashes, compliance review and roadside inspections results, enforcement data, and motor carrier census data
- The Crash Profiles use the National Governors' Association (NGA) recommended data elements reported to FMCSA by states through the SAFETYNET computer reporting system

MCMIS - NGA reportable crash

- **Must involve:**
  - a truck (a vehicle designed, used, or maintained primarily for carrying property, with a gross vehicle weight rating or gross combination weight rating of more than 10,000 lbs.) or
  - bus (a vehicle with seats for at least nine people, including the driver)
- **The crash must result in:**
  - at least one fatality
  - one injury where the person injured is taken to a medical facility for immediate medical attention; or
  - one vehicle having been towed from the scene as a result of disabling damage suffered in the crash.

SafeStat Detailed Summary



Safety Data:

State-Reported Crashes

Recordable Crashes (Last CR)

Normalizing Data

Number of Power Units Owned & Term-Leased (MCS-150 Census Data)

Vehicle Miles Traveled (Last CR)

- Accident Involvement Indicator (AII)
- Recordable Accident Indicator (RAI)
- Enforcement History Indicator (EHI)
- Safety Mgmt. Review Indicator (SMRI)
- HM Review Indicator (HMRI)
- Enforcement Severity Measure (ESM)
- Vehicle Inspections Indicator (VII)
- Vehicle Review Indicator (VRI)
- Driver Inspections Indicator (DII)
- Driver Review Indicator (DRI)
- Moving Violation Indicator (MVI)

Safety Data:

Driver Violations (Critical & Acute from last CR)

Driver OOS Violations (Roadside Inspections)

Jumping OOS Orders (Roadside Inspections)

Moving Violations (Roadside Inspections)

Normalizing Data

Number of Driver Roadside Inspections

# of Drivers (MCS-150 Census Data)

Safety Data:

Vehicle Violations (Critical & Acute from last CR)

Vehicle OOS Violations (Roadside Inspections)

Normalizing Data

Number of Vehicle Roadside Inspections

Safety Data:

Safety Mgmt Violations (Critical & Acute from Last CR)

HAZMAT Violations (Critical & Acute from Last CR)

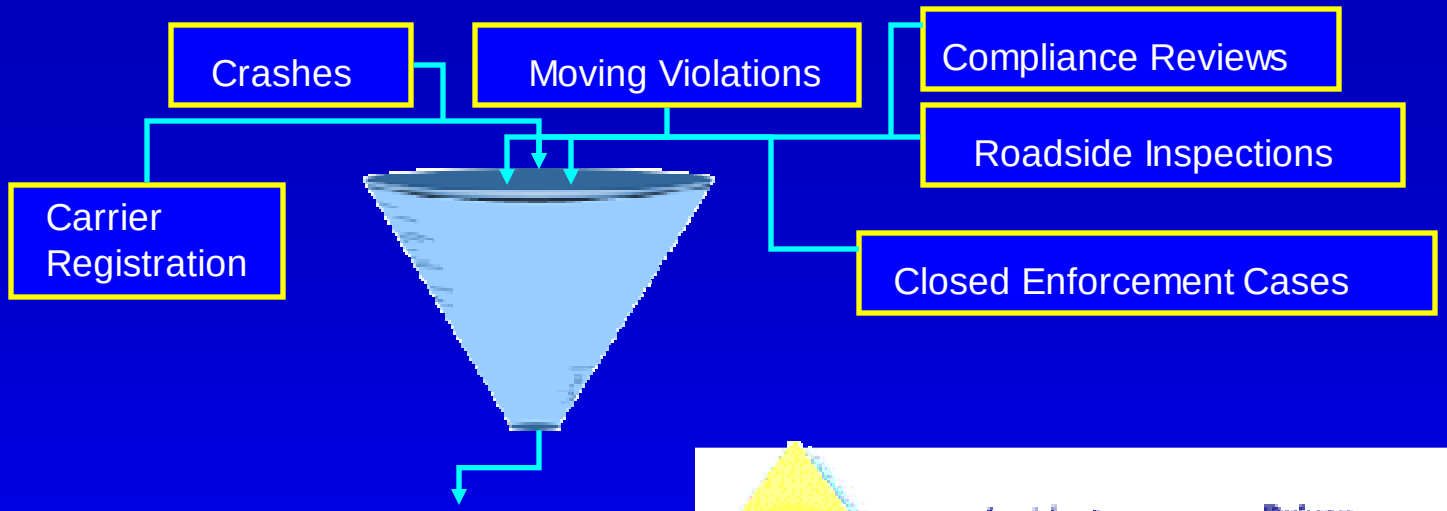
Enforcement History Closed Cases (Enforcement Database)

HAZMAT OOS Violations* (Roadside Inspections)

* Pending HM inspection normalizing data

How are SafeStat scores calculated?

1. Motor Carrier Safety Data



2. Algorithm Calculates Safety Status of Carrier

SafeStat Score	= 2x Accident SEA Value	+ 1.5 x Driver SEA Value	+ Vehicle SEA Value	+ Safety Management SEA Value
487.47	90.06	89.81	77.2	95.44

3. Access SafeStat results for individual carriers via A&I Online.

FMCSA - Hours of Service Regulations

Summary of the New Hours-of-Service Regulations Effective October 1, 2005

HOURS-OF-SERVICE RULES	
2003 Rule Property-Carrying CMV Drivers Compliance Through 09/30/05	2005 Rule Property-Carrying CMV Drivers Compliance On & After 10/01/05
May drive a maximum of 11 hours after 10 consecutive hours off duty.	NO CHANGE
May not drive beyond the 14th hour after coming on duty, following 10 consecutive hours off duty.	NO CHANGE
May not drive after 60/70 hours on duty in 7/8 consecutive days. • A driver may restart a 7/8 consecutive day period after taking 34 or more consecutive hours off duty.	NO CHANGE
Commercial Motor Vehicle (CMV) drivers using a sleeper berth must take 10 hours off duty, but may split sleeper-berth time into two periods provided neither is less than 2 hours.	CMV drivers using the sleeper berth provision must take at least 8 consecutive hours in the sleeper berth, plus 2 consecutive hours either in the sleeper berth, off duty, or any combination of the two.
Passenger-carrying carriers/drivers are not subject to the new hours-of-service rules. These operations must continue to comply with the hours-of-service limitations specified in **49 CFR 395.5**.	

New Short-Haul Provision

Drivers of property-carrying CMVs which do not require a Commercial Driver's License for operation and who operate within a 150 air-mile radius of their normal work reporting location:

- May drive a maximum of 11 hours after coming on duty following 10 or more consecutive hours off duty.
- Are not required to keep records-of-duty status (RODS).
- May not drive after the 14th hour after coming on duty 5 days a week or after the 16th hour after coming on duty 2 days a week.

Employer must:

- Maintain and retain accurate time records for a period of 6 months showing the time the duty period began, ended, and total hours on duty each day in place of RODS.

Drivers who use the above-described short-haul provision are **not** eligible to use **100 air-mile provision 395.1(e)** or the current **16-hour exception in 395.1(o)**.

FMCSA HOS – detailed info

FMCSA – Safety and Fitness Electronic Records System

SAFER
Safety and Fitness
Electronic Records System

WELCOME TO SAFER

The FMCSA Safety and Fitness Electronic Records (SAFER) System offers company safety data and related services to industry and the public over the Internet. Users can search FMCSA databases, register for a USDOT number, pay fines online, order company safety profiles, challenge FMCSA data using the DataQs system, access the Hazardous Material Route registry, obtain National Crash and Out of Service rates for Hazmat Permit Registration, get printable registration forms and find information about other FMCSA Information Systems.

Notice

Due to a system problem, FMCSA Registration and Fine Payments may be unavailable or responding slowly. Work is underway to restore full functionality of these services as soon as possible. We regret any inconvenience that this may be causing.

Effective March 8th, 2007, the following changes for MC/FF/MX numbers can no longer be made to the Licensing and Insurance web site: (1) Operating Authority Name changes, (2) Operating Authority Address changes, (3) Operating Authority Transfers, and (4) Operating Authority Voluntary Revocations.

Announcement

SAFER is now an E-gov Federation member as part of the Federal E-Authentication Initiative. A limited group of authorized Law Enforcement personnel have begun participation in this program. Please visit the Federal E-Authentication website at http://www.cio.gov/eauthentication/index.htm for more information about this initiative.

FMCSA Services | **FMCSA Searches** | **Other FMCSA Web Sites**

FMCSA - Crash Statistics

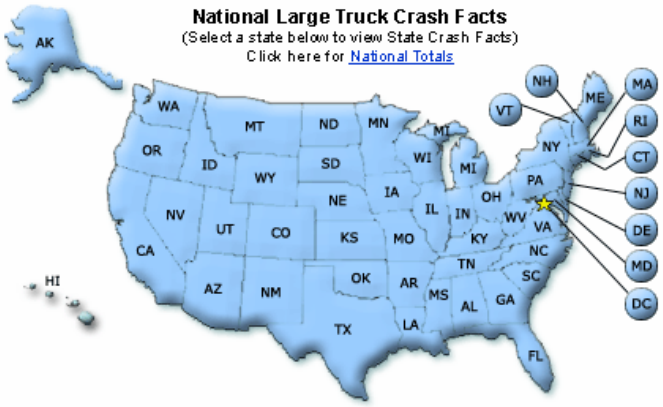
▸A&I Home ▸What's New! ▸Contacts ▸Site Guide ▸A&I Data ▸Feedback A&I User Login

Crash Statistics

About Stats | State Profiles | National Profiles

Crash Statistics are summarized crash statistics for large trucks and buses involved in fatal and non-fatal crashes that occurred in the United States. These statistics are derived from two sources: the Fatality Analysis Reporting System (FARS) and the Motor Carrier Management Information System (MCMIS). Crash Statistics contain information that can be used to identify safety problems in specific geographical areas or to compare state statistics to the national crash figures.

National Large Truck Crash Facts
(Select a state below to view State Crash Facts)
Click here for National Totals



2006 Preliminary National Large Truck Crash Facts

- 129,494 Large Trucks Involved in Non-Fatal Crashes
- 54,104 Large Trucks Involved in Injury Crashes
- 81,312 Injuries in Crashes Involving Large Trucks
- 75,390 Large Trucks Involved in Towaway Crashes
- 2,125 Large Trucks Involved in Hazmat (HM) Placard Crashes

View National Summary Report Click here for 2005 Crash Facts

Data Source:
- Fatality Analysis Reporting System (FARS).
- Motor Carrier Management Information System (MCMIS).
- Fatality Analysis Reporting System (FARS) & Motor Carrier Management Information System (MCMIS).

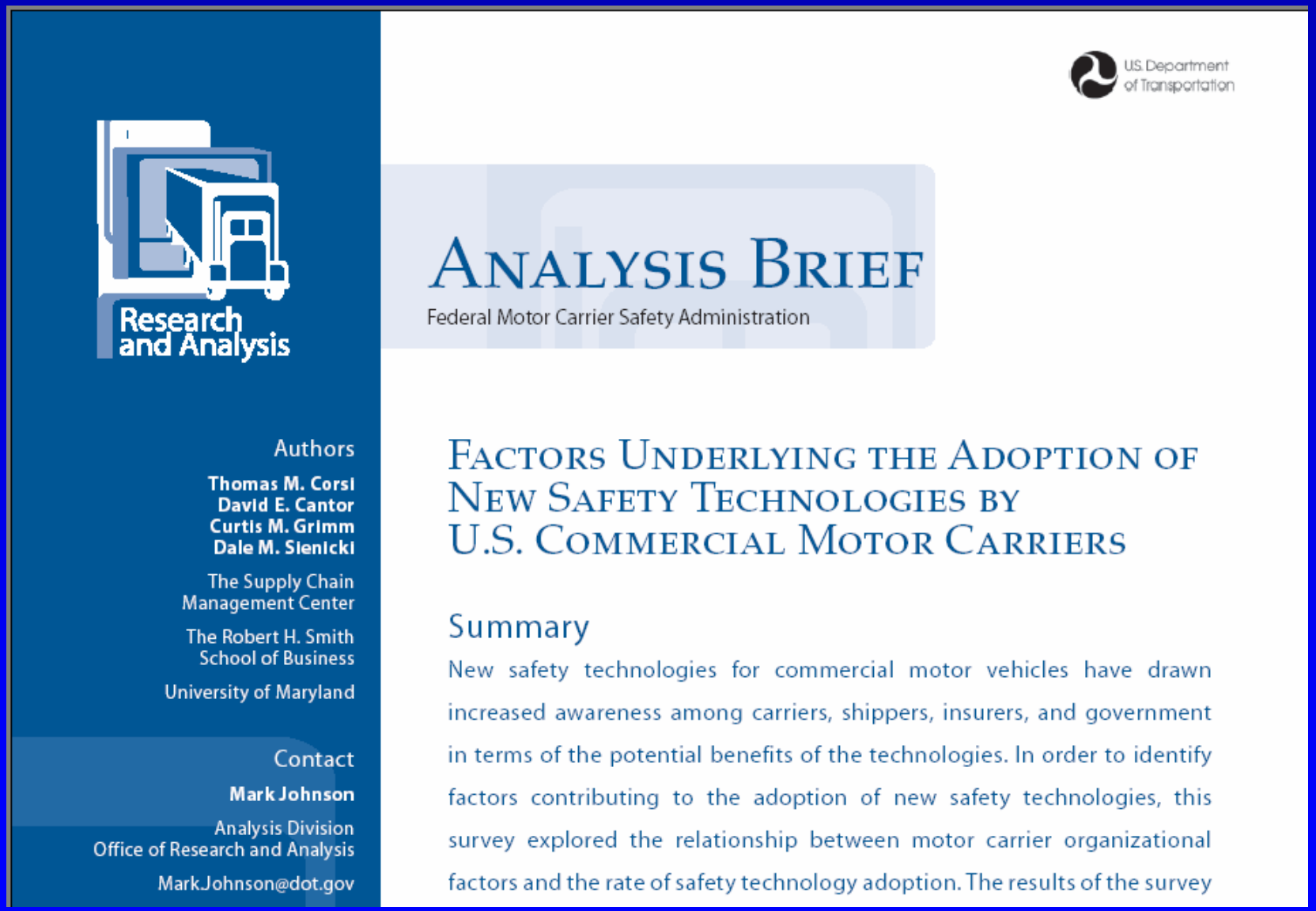
Featured Crash Information

The Large Truck Crash Causation Study (LTCCS)
is based on a three-year data collection project conducted by the Federal Motor Carrier Safety Administration (FMCSA) and the National Highway Traffic Safety Administration (NHTSA). LTCCS is the first-ever national study to attempt to determine the critical events and associated factors that contribute to serious truck crashes.

Safety Plan Crash Data

Updated Safety Plan Crash Data
Quarterly Release (June 22, 2007) 2001 - 2007 MCMIS and 2001 - 2005 FARS data. These crash data are available to FMCSA and State Enforcement users and are updated quarterly.

Analysis Briefs - July 2007 Report



U.S. Department of Transportation

Research and Analysis

ANALYSIS BRIEF

Federal Motor Carrier Safety Administration

Authors

Thomas M. Corsi
David E. Cantor
Curtis M. Grimm
Dale M. Sienicki

The Supply Chain Management Center

The Robert H. Smith School of Business

University of Maryland

Contact

Mark Johnson

Analysis Division
Office of Research and Analysis

MarkJohnson@dot.gov

FACTORS UNDERLYING THE ADOPTION OF NEW SAFETY TECHNOLOGIES BY U.S. COMMERCIAL MOTOR CARRIERS

Summary

New safety technologies for commercial motor vehicles have drawn increased awareness among carriers, shippers, insurers, and government in terms of the potential benefits of the technologies. In order to identify factors contributing to the adoption of new safety technologies, this survey explored the relationship between motor carrier organizational factors and the rate of safety technology adoption. The results of the survey

The National Transportation Safety Board (NTSB)

About the NTSB

History and Mission

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in the other modes of transportation -- railroad, highway, marine and pipeline -- and issuing safety recommendations aimed at preventing future accidents. The Safety Board determines the probable cause of:

- all U.S. civil aviation accidents and certain public-use aircraft accidents;
- selected highway accidents;
- railroad accidents involving passenger trains or any train accident that results in at least one fatality or major property damage;
- major marine accidents and any marine accident involving a public and a nonpublic vessel;
- pipeline accidents involving a fatality or substantial property damage;
- releases of hazardous materials in all forms of transportation; and
- selected transportation accidents that involve problems of a recurring nature.

The Board derives its authority from Title 49 of the United States Code, Chapter 11. The rules of the Board are located in Chapter VIII, Title 49 of the Code of Federal Regulations.

The NTSB is responsible for maintaining the government's database of civil aviation accidents and also conducts special studies of transportation safety issues of national significance. The NTSB provides investigators to serve as U.S. Accredited Representatives as

EMS ground transport safety data

- NTSB – one investigation – 1979, no system wide data capture (unlike aviation EMS)
- Some states (PA, MO, NY) have fatality reporting systems – but data incomplete
- NHTSA
  - FARS – incomplete mortality data
  - GES/NASS/CDS – sample of low #
- NEMS Memorial – incomplete – voluntary – verified
- EMSClosecalls.com, EMSNetwork.org – voluntary, anecdote
- No denominator data
- No monitoring system in place
- No transport management oversight

NTSB 1979 Accident Report

Publications

HIGHWAY ACCIDENT REPORT

Adopted: May 3, 1979

ROSS AMBULANCE SERVICE
AMBULANCE OVERTURN
STATE ROUTE 116
LITTLETON, NEW HAMPSHIRE
AUGUST 22, 1978

NTSB Number: HAR-79/04
NTIS Number: PB-296889/AS

SYNOPSIS

About 3:30 p.m., on August 22, 1978, an ambulance transporting a cardiac patient to a hospital and traveling at a calculated speed of 90 to 95 mph failed to negotiate a curve on New Hampshire State Route 116 east of Littleton, New Hampshire, and rolled over. The attendants in the ambulance were killed and the driver was injured. The patient had died before the accident.

The National Transportation Safety Board determines that the probable cause of this accident was loss of control of the ambulance which had oversteer characteristics, by an unskilled driver at a high rate of speed. Contributing to the cause of the accident was the driver's lack of training in the operation of the ambulance at high speeds.

RECOMMENDATIONS

During its investigation, the National Transportation Safety Board recommended on February 1, 1979, that the National Highway Traffic Safety Administration:

"Modify Highway Safety Program Standard No. 11, 'Emergency Medical Services,' and the NHTSA Training Program for Operation of Emergency Vehicles to provide for behind-the-wheel training in the principles and techniques of high-speed driving, and to require that a student successfully complete both a written and a behind-the-wheel examination before he is licensed. (Class I, Urgent Action)(H-79-1)

"Urge the States to maintain and make available, through the State driver licensing agency, the records of all licensed emergency vehicle operators so that employers can determine if an applicant for an emergency vehicle driver position is licensed for the operation of emergency vehicles. (Class II, Priority Action)(H-79-2)"

30 years later, ~ 1,600 fatalities and still the same problem

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: May 17, 1979

The interior of the ambulance body was severely damaged. The flooring, oxygen bottles, litter, cabinets, and bench were either destroyed or ejected from the ambulance. Because the plywood flooring was not secured to the floor or chassis, everything attached to or resting on it came loose when the ambulance rolled over. All body structures were deformed downward and to the right.

A review of the Federal Motor Vehicle Safety Standards (FMVSS) revealed that there are no standards or specifications which assure that the total design and construction of ambulances as modified by the after-market installers are of sufficient structural strength and stability to withstand impact forces similar to requirements imposed on the original vehicle manufacturer. FMVSS 208, "Occupant Crash Protection in Passenger Cars, Multipurpose Passenger Vehicles, Trucks and Buses," applied to the 1974 Chevrolet Suburban Custom 10 Van as manufactured. However, this protection was not extended to the patient(s) or medical personnel occupying the body of the ambulance since it did not apply to the modifications made after the vehicle was sold by the manufacturer.

There are no performance requirements for the after-market modifications to vehicle structural integrity, crashworthiness, interior occupant protection, and the anchorage of items such as litters, benches, cabinets, oxygen bottles, or flooring. The only guidance concerning these safety

Pennsylvania Code

Commonwealth of Pennsylvania

Pennsylvania Code

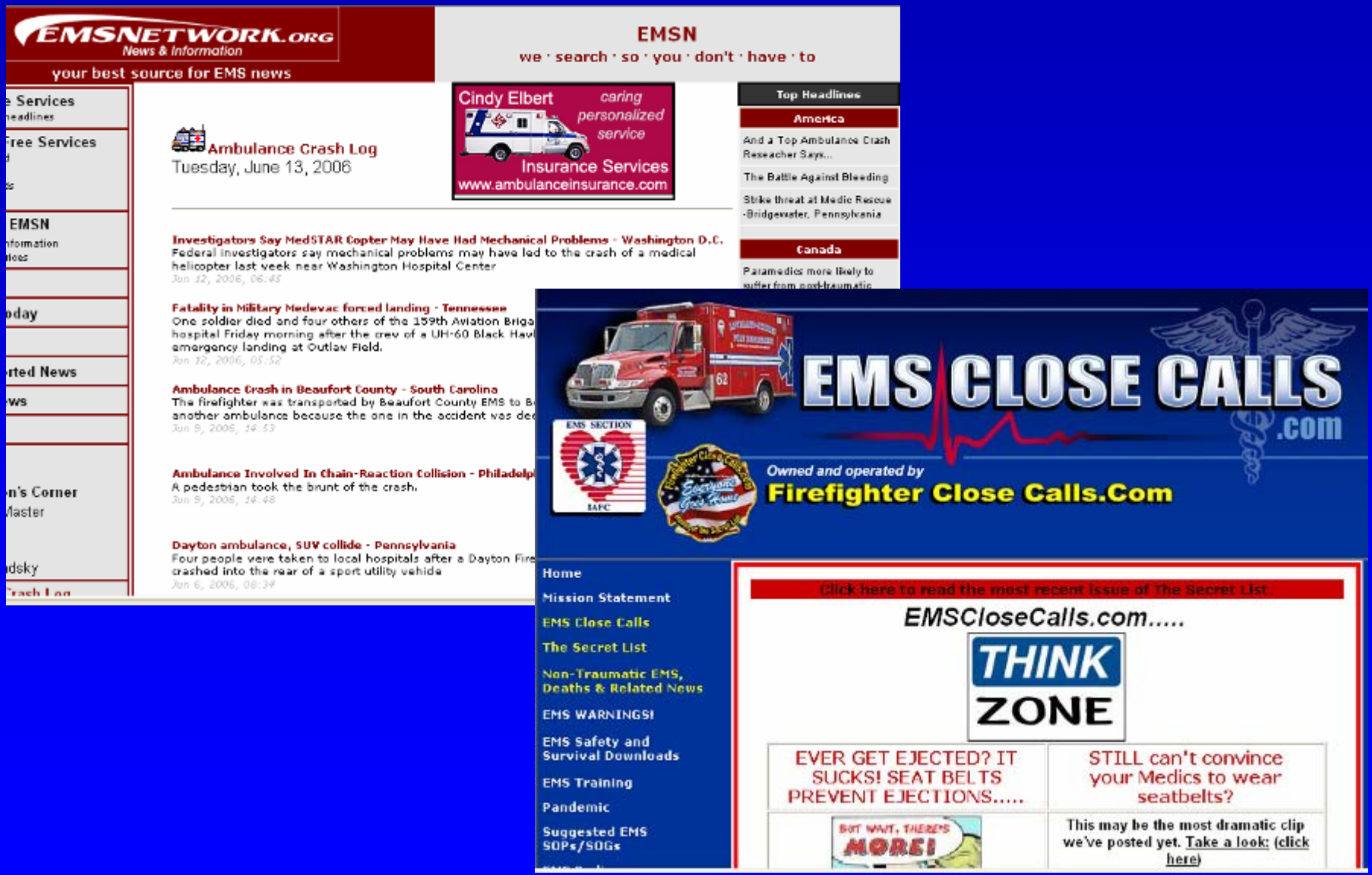
Title 28. Health and Safety
Chapters 1001 -- 1015

PART VII. EMERGENCY MEDICAL SERVICES

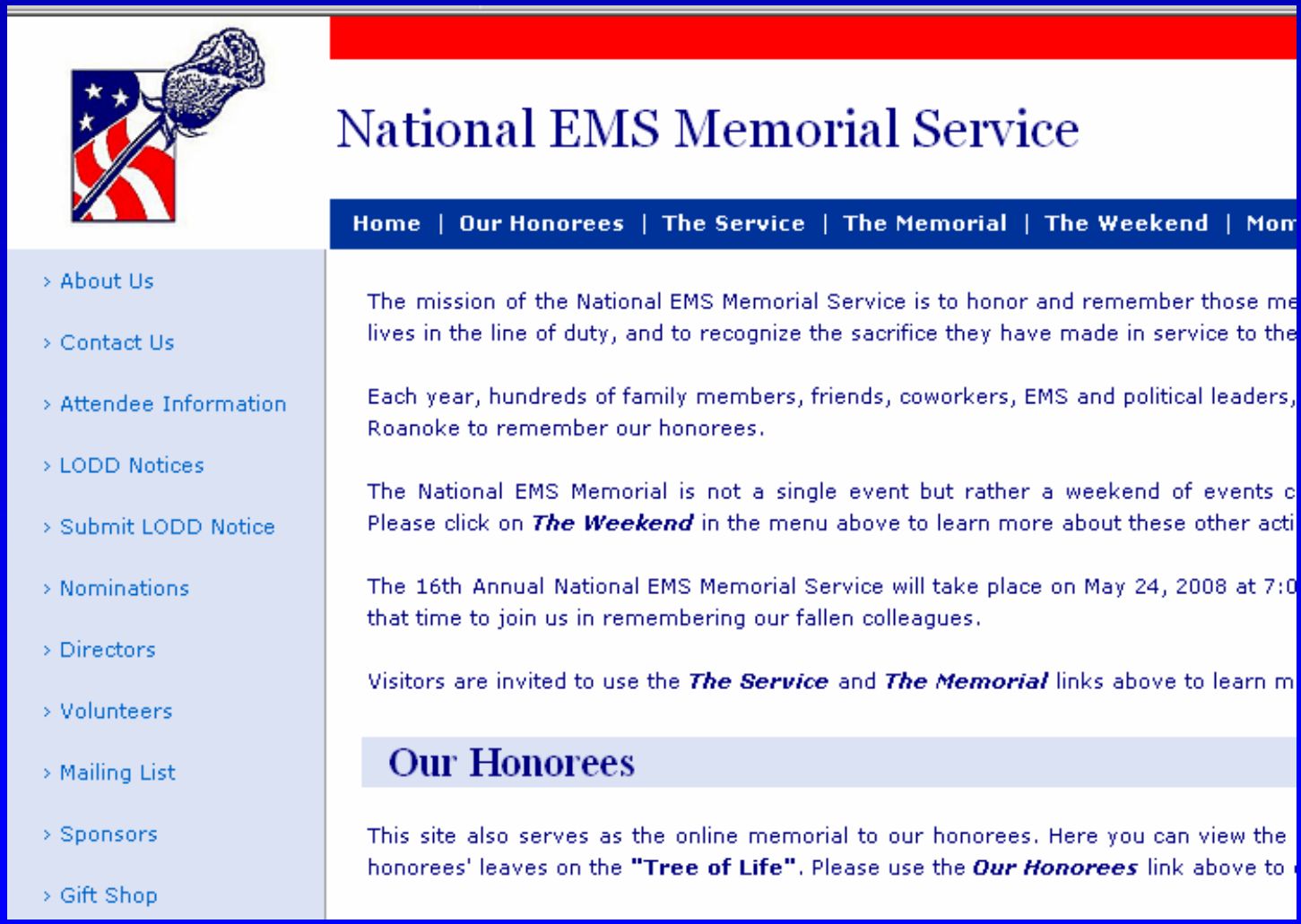
Chapter

(i) *Accident, injury and fatality reporting.* An ambulance service shall report to the appropriate regional EMS council, in a form or manner prescribed by the Department, an ambulance vehicle accident that is reportable under 75 Pa.C.S., and an accident or injury to an individual that occurs in the line of duty of the ambulance service that results in a fatality, or medical treatment at a facility. The report shall be made within 24 hours after the accident or injury. The report of a fatality shall be made within 8 hours after the fatality.

Voluntary, ? anecdote ...



Voluntary, verified …



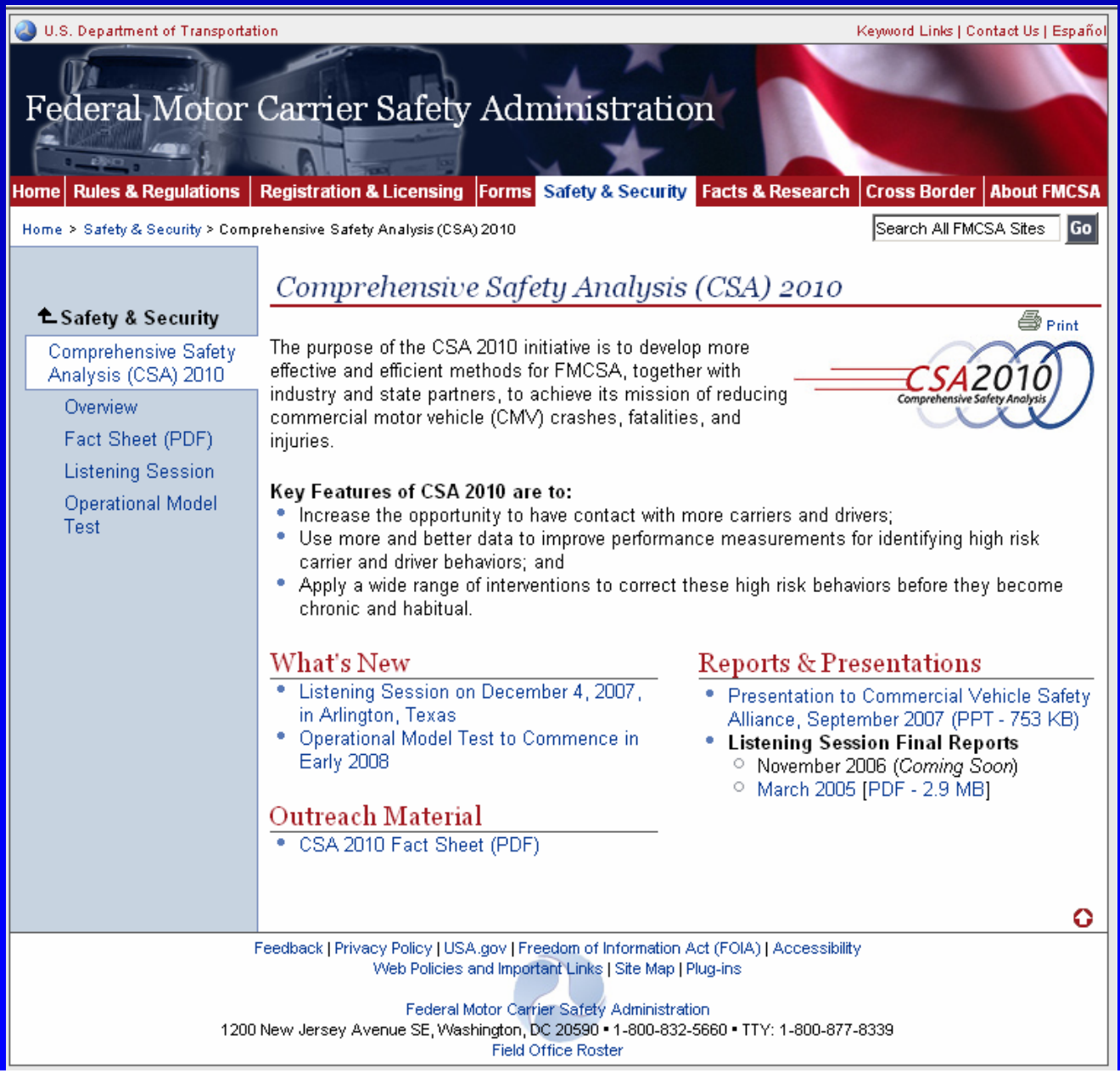
Results:

- Estimates for ambulance fatality per mile traveled are 3 to 50 fold the rate of large truck fatal crashes
  - Large trucks - 2.2 fatal crashes per 100 million miles traveled in 2005
  - Ambulance - general estimates of 7.7 to 109 fatal crashes per 100 million ambulance miles traveled.
- Estimates of 37 truck crash 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 vehicle occupant crash fatality percentage is double that for large trucks.

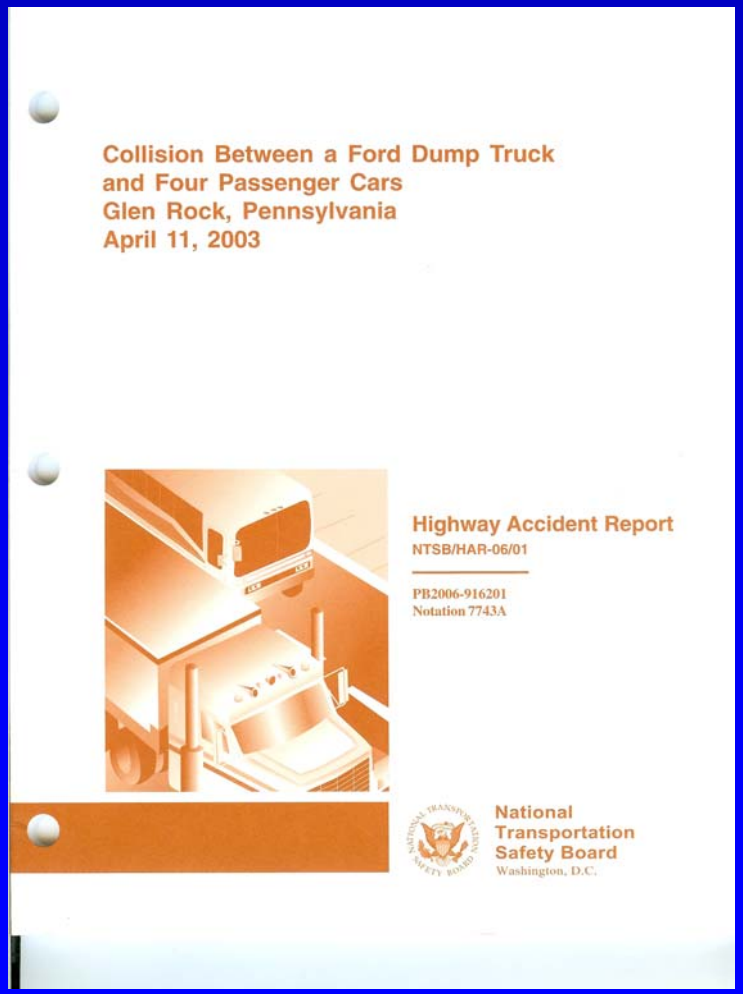
Results:

- FMCSA (EMS exempt)
  - extensive data on both numerator and denominator aspects of truck travel safety – for companies, vehicles and drivers (including hours of service)
  - Safety performance monitoring and targeted safety guidance
- NHTSA (re: EMS)
  - minimal with incomplete numerator data for both morbidity and mortality and virtually non- existent denominator data
  - No safety monitoring nor any targeted safety guidance
- NTSB (re: Ground EMS)
  - One crash report, 1979
  - No safety monitoring, no recommendations since 1979

Valuable information… EMS exempt



Major crash investigation - NTSB comprehensive analysis for commercial vehicles



Law enforcement and Fire data

Department of Justice
Federal Bureau of Investigation

Contact Us | Appendix | UCR Homepage | FBI Homepage

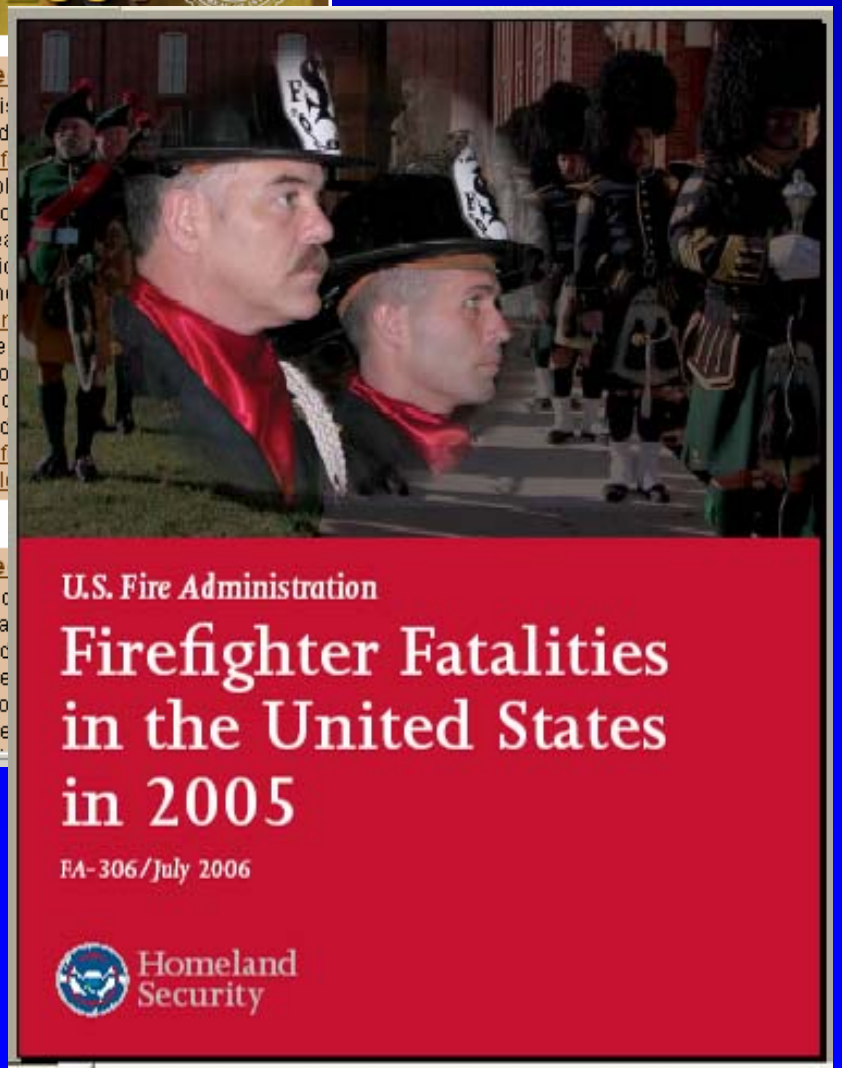
Law Enforcement
OFFICERS Killed & Assaulted 2004

Report Summary

The FBI publishes *Law Enforcement Officers Killed and Assaulted (LEOKA)* each year to provide information about the officers who were killed, feloniously or accidentally, and those officers who were assaulted while performing their duties. Before reviewing the tables, charts, and narrative summaries presented in this publication, readers should be aware of certain features of the LEOKA data collection process that could affect their interpretation of the information. First, the data in the tables and charts reflect the number of victim officers, not the number of incidents or weapons used. Second, the Uniform Crime Reporting (UCR) Program considers any part of the body that can be used as weapons (such as hands, fists, or feet) to be personal weapons and designates them as such in its data. Readers should also be aware that law enforcement agencies use different methodologies for collecting and reporting data about officers who were killed and those who were assaulted. As a result, the two databases, and therefore the tables derived from them, are not comparable. Finally, because the information in the tables of this book are updated each year, the FBI cautions readers against making comparisons between the data in this publication and those in prior editions of the publication.

History

Beginning in 1937, the FBI's UCR Program collected and published statistics on law enforcement officers killed in the line of duty in its annual publication, *Crime in the United States*. Statistics regarding assaults on officers were added in 1960. In June 1971, the law enforcement conference, "Prevention of Police Killings," resulted in a Presidential directive to increase the FBI's involvement in preventing and



Discussion

- Existing data point clearly to ground EMS transport as being hazardous
- Exemptions from FMCSA oversight
- Scant data capture by NHTSA
- Lack of attention by NTSB
- No formal oversight, rather voluntary (even anecdote), absent of structured accepted transport systems safety data capture remains

Why isn't EMS ground transport data captured by FMCSA?

Truck and Bus Crashes Reportable to FMCSA

REPORT A TRAFFIC CRASH IF IT INVOLVES...

Any truck that has a gross vehicle weight rating (GVWR) of more than 10,000 pounds or a gross combination weight rating (GCWR) of more than 10,000 pounds used on public highways

OR

Any motor vehicle with seating to transport nine (9) or more people, including the driver's seat

OR

Any motor vehicle displaying a hazardous materials placard (regardless of weight)

...AND RESULTS IN

A fatality: any person(s) killed in or outside of any vehicle (truck, bus, car, etc.) involved in the crash or who dies within 30 days of the crash as a result of an injury sustained in the crash

OR

An injury: any person(s) injured as a result of the crash who immediately receives medical treatment away from the crash scene

OR

A tow-away: any motor vehicle (truck, bus, car, etc.) disabled as a result of the crash and transported away from the scene by a tow truck or other vehicle

Revised 06/05

Federal Motor Carrier Safety Administration

U.S. Department of Transportation
www.fmcsa.dot.gov

Crashes involving commercial motor vehicles and some non-commercial motor vehicles must be reported on a State's crash report and to the FMCSA. A commercial motor vehicle is any motor vehicle that is used on a trafficway for the transportation of goods, property, or people in interstate or intrastate commerce.

INCLUDED:

Here are some examples of commercial and non-commercial operations that, when involved in a crash, should be included if they meet the criteria on the front of this card.

Examples:

1. A trucking company or individual owner/operator hauling the goods of a business for a fee.
2. A manufacturing company hauling its own products to retail stores, or a retail store delivering products to its buyers.
3. A farm hauling its produce to market.
4. A motorcoach, airport shuttle, or hotel-owned shuttle bus or limousine service transporting passengers.
5. A government-owned truck or bus.
6. A school bus transporting students to/from school or school-related activities.
7. A rented or leased truck used to transport either commercial or personal goods.
8. A truck or truck tractor owned and operated for commerce being used for a personal trip or to transport personal goods.

EXCLUDED:

Here are some examples of non-commercial operations that, when involved in a crash, should not be included.

Examples:

1. A non-commercial horse owner transporting hay bales from his pasture on one side of the road to his stables on the other side of the road in a truck with a GVWR greater than 10,000 pounds.
2. A homeowner carrying recyclables to a drop-off point in a personally owned pickup truck with a GVWR greater than 10,000 pounds.
3. A family of 10 persons taking a trip in the family's 12-person van.
4. A personally owned pickup truck hauling a boat, horse or utility trailer with a GCWR greater than 10,000 pounds not operating in commerce or as part of a business.
5. A family operating a personally owned and registered recreational vehicle or motor home.

Why ISN'T EMS on the NTSB's "Most Wanted List"??

NTSB

MOST WANTE

Transportation Safety Improven

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Critical changes needed to redu transportation accidents and save

Actions needed by Federal Agencies

HIGHWAY

The Federal Motor Carrier Safety Administration should act to:

Improve the Safety of Motor Carrier Operations

- Prevent motor carriers from operating if they put vehicles with mechanical problems on the road or unqualified drivers behind the wheel.

Prevent Medically-Unqualified Drivers from Operating Commercial Vehicles

- Establish a comprehensive medical oversight program for interstate commercial drivers.
- Ensure that examiners are qualified and know what to look for.
- Track all medical certificate applications.
- Enhance oversight and enforcement of invalid certificates.
- Provide mechanisms for reporting medical conditions.

The National Highway Traffic Safety Administration and U.S. DOT should act to:

Enhance Protection for Bus Passengers

- Redesign motor coach window emergency exits so passengers can easily open them.
- Issue standards for stronger bus roofs and require them in new motor coaches.
- Devise new standards to protect motor coach passengers from being thrown out of their seats or ejected when a bus sustains a front, side, or rear impact or rolls over.
- Develop standard definitions and classifications for each of the different bus body types.

Conclusion:

- There appears to be wide disparity in transportation safety between EMS and commercial transport per mile traveled, with a safety record for EMS ground transport per mile traveled, at least an order of magnitude worse than trucks
- The FMCSA database provides extensive detail on many aspects of truck transport safety - similar national data do not exist for EMS transport
- FMCSA provides monitoring, oversight and safety guidance to non-EMS transport
- There is no comprehensive monitoring or safety performance oversight for EMS transport
- NTSB provides crash investigation and safety recommendations for commercial vehicles and monitoring for aviation EMS – but not for ground EMS since 1979

Breaking News!!
National Academies
TRB EMS/Medical Transport Safety Subcommittee – Jan 16, 2008