

# Ambulance Transport Safety Summit

## Bridging the gap between what we do and what is known

EMS Subcommittee of the TRB Ambulance Transport Safety Summit

October 29<sup>th</sup>, 2009



## Goal of the Summit

“Enhancing ambulance transport safety through shared knowledge of technical data”



## In Appreciation

- This Summit has been possible thanks to our generous Sponsors:
  - Zoll
  - Ferno
  - Stryker
  - Road Safety International
  - Wolfberg, Page and Associates



## Thank You!

This Summit is possible due to the technology support of the EMS Safety Foundation, the Elluminate Interactive Webinar platform, and the support of the National Academies TRB & Keck Center



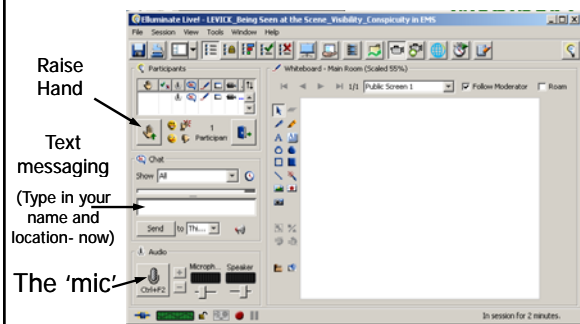
## So what is a Webinar?

A Webinar is:

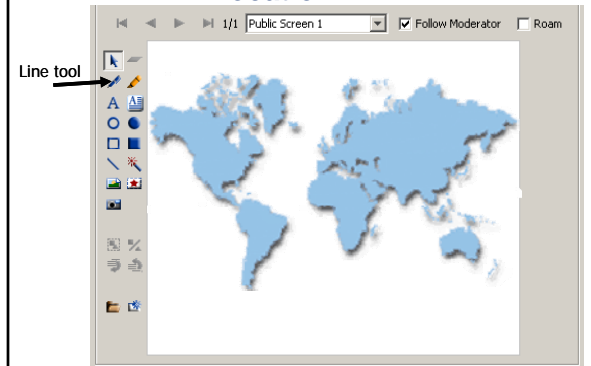
- Real time interactive web technology
- No other hardware is necessary aside from a computer connected to the internet and a microphone- if you choose to speak
- These interactive seminars can also be stored for later asynchronous use



## Webinar Basics



..use white board tools to mark your location.....



## Webinars are recorded!

The presentation and all comments typed in the text box



will be available for viewing via the [www.ObjectiveSafety.net](http://www.ObjectiveSafety.net) web site within 24 hours



## Today's Agenda

- **Introduction and Opening Address – 8.00-8.15am EDT USA**  
Introduction - Rick Pain PhD, Nadine Levick MD, MPH  
Opening address – Mr. Glenn Ludtke - (Introduced by Mr. Jeff Lindsay)
- **Session 1: Burden/Benefit - 8.15-10.00am**  
Safety Data – 8.15-8.50 (35 mins)  
Economics- 8.50 – 9.40 (50 mins)  
Ethics and Risk /Benefit – 9.40 – 10.00 (20 mins) *Break 10.00- 10.30am*  
*\*Webinar attendees - LOG OUT 10am- LOGIN 10.20am\**
- **Session 2: Transport System Management 10.30am – 12.30pm**  
Fleet/Vehicle Operations Safety 10.30- 11.15 (45 mins)  
Operations Management 11.15- 12.30 (75 mins) *Lunch Break 12.30-1.30pm, TRB Meeting*  
*\*Webinar attendees - LOG OUT 12.40pm- LOGIN 1.00pm\**
- **Session 3: Vehicle Safety – Assessment and design 1.30-3.15pm**  
Vehicles 1.30- 3.00 (90 mins)  
Special Populations 3.00-3.15 (15 mins) *Break 3.15- 3.45pm*  
*\* Webinar attendees - LOG OUT 3.15pm- LOGIN 3.35pm\**
- **Session 4: Information Sharing and Policy 3.45 – 5.30pm**  
Knowledge Transfer/Dissemination 3.45 – 4.20pm (35 mins)  
Standards/Specifications/Policy – 4.20 – 4.50pm (30 mins)
- **Session 5: Panel and Research Priorities - 4.50- 5.30pm**  
**Moderator and Wrap up – Prof Art Cooper, MD**  
An international perspective from Oslo, Norway – 5 mins  
Panel Discussion and Research Priorities – 30 mins
- **Closing Address – Nadine Levick MD, MPH - 5 minutes**



## Session1: Burden & Benefit

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*Break 10.00- 10.30am*

*\*Webinar attendees - LOG OUT 10am- LOGIN 10.20am USA EDT\**



## Session 1:

- **Safety Data:**
  - Intro
  - NHTSA
  - NTSB
  - BLS
  - FHWA/FMCSA



## What Does the Data Really Say



## What data resources are there?

## What are the strengths and weaknesses of each?

## How are we counting these events?

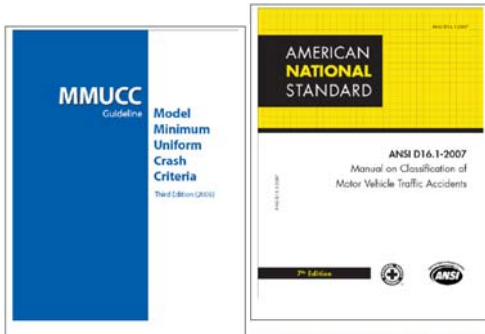
What/Where are the relevant data bases?

- FARS
- NASS/CDS
- GES
- State Traffic Records
- FMCSA
- BLS
- NEMSIS
- Other

## and what is an EMS crash?

- Definition of an EMS crash
- Definition of Emergency Response Mode

## MMUCC (2008) & ANSI D16.1 (2007)



## MMUCC-Definitions Ambulance

MMUCC		Attribute Detail: Police, Ambulance	
Main Menu		<p>Police (from the FARS Coding Manual): refers to a vehicle which is owned by any local, county, state or federal police agency. The vehicles are presumed to be in special police use at all times. Personal vehicles (not owned by the agency) that are used by officers or agents (e.g., replacement) are excluded.</p>	
<p>1. Special Function of Motor Vehicle in Transport</p> <p>2. Element Definition and Rationale</p> <p>3. Element Ambulance</p> <p>4. Ambulance Detail: Taxi, Vehicle Used as School Bus</p> <p>5. Ambulance Detail: Vehicle Used as Other Bus</p> <p>6. Ambulance Detail: Police, Ambulance</p> <p>7. Ambulance Detail: Fire Truck, Military</p>		<p>Ambulance (from a State Police Instruction and FARS Manual): refers to vehicles: (1) whose sole purpose is to provide ambulance service and which is always presumed to be in special ambulance use at all times, or (2) vehicles carrying dual purposes such as a hearse used for both funeral and emergency purposes, which is only coded when used for the latter purpose. This includes both publicly and privately owned vehicles.</p>	
		Element V10	

## A hearse?



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## MMUCC-Definitions Fire Truck

<b>MMUCC</b> MANUAL ON UNIFORM CRASH MODIFICATION	
<b>Attribute Detail: Fire Truck, Military</b>	
<p><b>Main Message</b></p> <ol style="list-style-type: none"> <li>1. Special Function of Motor Vehicle in Transport</li> <li>2. Element Definition and Rationale</li> <li>3. Element Attributes</li> <li>4. Attribute Detail: Taxi, Vehicle Used as School Bus</li> <li>5. Attribute Detail: Vehicle Used as Other Bus</li> <li>6. Attribute Detail: Police, Ambulance</li> <li>7. <b>Attribute Detail: Fire Truck, Military</b></li> </ol>	<p><b>Fire Truck (From the FARS Coding Manual)</b> refers to a vehicle which is used by any local, county, state or fire protection agency. This vehicle are processed as to be in special use at all times. Personal vehicles (not owned by the agency) that are used by officers or agents are excluded.</p> <p><b>Military (From a State Police Instruction and FARS Manual)</b> refers to a vehicle which is owned by any of the Armed Forces. These vehicles are processed to be in special military use at all times. This includes all military vehicles even if they are police, ambulance, or fire trucks.</p>
Element V19	

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## Definition Emergency Response mode

<b>MMUCC</b> MANUAL ON UNIFORM CRASH MODIFICATION	
<b>Element Definition and Rationale</b>	
<p><b>Main Message</b></p> <ol style="list-style-type: none"> <li>1. Emergency Motor Vehicle Use</li> <li>2. <b>Element Definition and Rationale</b></li> <li>3. Element Attributes</li> </ol>	<p><b>Definition:</b> Indicates official motor vehicles that are involved in a crash while on an emergency response. Emergency refers to an official motor vehicle that is usually associated with physical emergency signals such as sirens, flashing red and blue lights, siren sounding, etc. Vehicles "run" only if the motor vehicle was on an emergency response, regardless of whether the emergency equipment was activated.</p> <p><b>Rationale:</b> Important for determining the total emergency motor vehicles involved in an emergency response at the time of a motor vehicle crash.</p>
Element V11	
<b>MMUCC</b> MANUAL ON UNIFORM CRASH MODIFICATION	
<b>Element Attributes</b>	
<p><b>Main Message</b></p> <ol style="list-style-type: none"> <li>1. Emergency Motor Vehicle Use</li> <li>2. Element Definition and Rationale</li> <li>3. <b>Element Attributes</b></li> </ol>	<ul style="list-style-type: none"> <li>• No - in case of the motor vehicle was not on an emergency response.</li> <li>• Yes - in case of the motor vehicle was on an emergency response, regardless of whether the emergency equipment was activated.</li> <li>• Unknown - in case it cannot be determined that the vehicle was responding to an emergency at the time of the accident.</li> </ul>
Element V11	

## ANSI D.16

- ANSI D16.1-2007
  - no reference to 'ambulance vehicles', or to 'fire trucks',
  - 4 references to 'police vehicles', and 11 references to 'police' activities
  - 2 references to 'emergency vehicles'
  - There were specifics for other transport 'vehicles' (Burro carrying a load of firewood, Army tank, Balloon, Dirigible and Spacecraft).
  - Emergency vehicles were exempt from being a 'working vehicle' 2.2.7.2,
  - Not exempt from being a 'commercial vehicle' 2.2.7.3 when services were being remunerated

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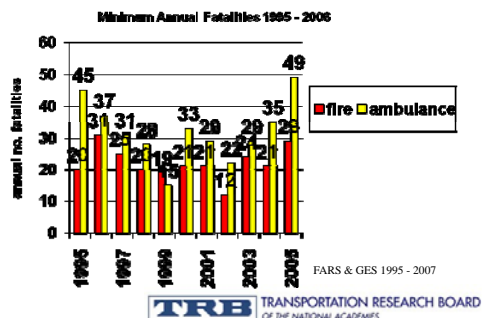


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## FARS – A National Data Set for this environment?

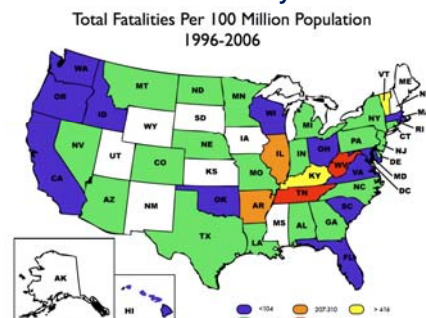
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## USA Emergency Vehicles (ground)



## FARS – A National Data Set?

Small numbers – but NO data captured from 20% of the nation in 10 years



## Safety Exemptions

- Federal Motor Carrier Safety Administration FMCSA

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## Other Data bases

- EMS
  - NEMSIS
- Other Sources and Models
  - Fire Service national data
  - Law Enforcement – LEOKA
  - Insurance data

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## Questions??

- Please raise your hand
- or type in the message box
- or send your questions via this link
  - <http://www.emssafetyfoundation.org/TRB2009SummitQuestions.htm>

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