Key Lessons from the Workshop and the Summit, and EMS Safety Foundation
Developments for 2009-2010

Background:

- EMS Safety Foundation has been established to fill a gap in
  - technical knowledge transfer
  - practical interdisciplinary R & D
  - evaluation and implementation of system safety enhancements for EMS and Medical Transport.
- It is a not-for-profit institute

Mission

- This is a team of like-minded innovators across EMS Medical Transport and a number of technical disciplines, who share the common mission of enhancing the safety of EMS delivery for all involved.

In a nutshell

- EMS Safety Foundation is a not-for-profit multidisciplinary virtual think tank and test bed for safety innovation and knowledge transfer
- It is a virtual network integrating the end users and the technical experts
- A tool to enhance the safety of delivery of EMS services

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

- Whiteboard tools
- Raise Hand
- Text messaging
- Type in your name and location

Today’s Webinar is recorded!

The presentation and all comments typed in the text box will be available for viewing via the www.EMSSafetyFoundation.org web site within 72 hours

The EMS Safety Foundation www.EMSSafetyFoundation.org brings this presentation to you
A tragic week…. It does happen

October 25, 2008

NC paramedic killed in ambulance crash

A tragic week…. It does happen

This week

EMS Safety Foundation 2009 in Review

- January Webinar - Transferring Technical Knowledge to Operational Practice, New Developments, and 2009 Program
- March Webinar - Pediatric and Neonatal Transport Safety, International Approaches to Ambulance Design Specifications and Rettmobil Plans
- May Webinar and Workshop - 'Live from Rettmobil'
- June Webinar - Part 1: Rettmobil 2009 Perspectives and Applications
- July Webinar - Part 2: Rettmobil 2009 Perspectives and Applications Follow up and Standards Update
- September Webinar - Converging on Policies, Fleet Safety Economics, You and Detroit, Regulations and Guidelines, the Workshop and Summit
- October Workshop - Design and Operational Aspects of Patient Transport Safety: Vehicles and Stretchers
- November Webinar - Key Lessons from the Workshop and the Summit, and EMS Safety Foundation Developments for 2009-2010

EMS Safety Foundation Ambulance Vehicle & Ergonomics Workshop, October 2009

October 28th Workshop Agenda

13:00 - 13:05 Workshop Introduction - Nadine Levick MD, MPH
13:05 - 13:30 Session 1 - Vehicles
i. Green Lukacs – Vehicle and occupant systems safety
ii. Jeff Rhodes – Occupant protection strategies
iii. Stelinar Black – Vehicle operational and design safety
iv. John Oden – Vehicle Visibility and Compartment
13:30 - 13:50 Afternoon Tea Break
13:50 - 13:55 Session II: An International Approach
1. Perspectives from Norway
2. Sweden: Operational Challenges
13:55 - 14:05 Session III: New [Insert Title]
1. Designing and Improving Ambulance Occupational Tasks
2. Designing and Improving Ambulance Occupational Tasks
Workshop Outline

- Ambulance vehicle occupant protection
- Ergonomics as it applies to EMS
- What are the principles
- How do the different challenges of ergonomics and automotive safety systems integrate
- What technologies are there to assist in getting the best outcome
Automotive engineers addressing EMS Safety Foundation Workshop

VEHICLE DESIGN and SAFETY

Extensive Passenger Car and Light Truck Vehicle Safety Standards apply to vehicles below 10,000 Gross Vehicle Weight (GVW)

VEHICLES over 10,000 GVW have a reduced set of Federal Safety Standards

VEHICLE SELECTION IS CRITICAL

VEHICLE DESIGN and SAFETY

ACTIVE Vehicle SAFETY

PASSIVE Vehicle SAFETY

PASSIVE SAFETY: Crashworthiness

– Vehicle Structural Design
– Front and Rear Compartment Design
– Seating and Restrain Systems
– Occupant Containment
– Impact Friendly Surfaces

Seat Structure and Seat Belts

– Seat structure can be used to maintain occupant position as well as contribute to intrusion resistance in side impacts
– Seat belts are known to be effective in passenger vehicle rollover ejection mitigation as well as preventing excessive interior impacts
– For large compartments, these features can be used to improve occupant protection and have fewer concerns than active airbag systems

AMBIULANCE ACCIDENT REDUCTION OPPORTUNITIES

– AVOID ACCIDENTS
  – Drive Training and Responsibility
  – Operating Rules
  – Improved Ambulance Conspicuity
– Choose Vehicles with Advanced Safety Technology
– Engineer Rear Compartment Interior to be IMPACT FRIENDLY
– Constrain Attendants SAFELY
– Constrain Patients SAFELY
– SECURE all Equipment reliably

ESC: ELECTRONIC STABILITY CONTROL

Electronic stability control systems are second only to seat belts in terms of the potential for saving lives and reducing injuries… is a major step forward for global auto safety.

Statement by Nicole Nason, Administrator, National Highway Traffic Safety Administration, On the Adoption of Electronic Stability Control as a Global Technical Regulation

ACTIVE Vehicle SAFETY

– ESC (Electronic Stability Control)
– ABS (Anti Skid Braking System)
– Advanced Safety Systems

Mitigating Consequences

PASSIVE SAFETY: Crashworthiness

– Vehicle Structural Design
– Front and Rear Compartment Design
– Seating and Restrain Systems
– Occupant Containment
– Impact Friendly Surfaces
Sprinter Features Summary

Market Exclusives
- Available left side sliding door
- Premium CDI turbo Diesel engine with SCR technology to meet the EPA / CARB 2010 emission standards.
- Best in class cargo capacity
- Best in class wall-to-wall turning diameter
- Best in class available payload capability
- Superior safety standard with ABS, ASR, BAS, ESP and 3-point seat belts on all passenger seats
- Most versatile commercial van on the market

Details and Technology (cont.)
- ROM (Roll Over Mitigation) – This system helps to detect rollover tendencies during maneuvers with low road speed and high lateral acceleration.
- RMI (Roll Movement Intervention) – This system helps to detect rollover tendencies in dynamic maneuvers and in high-speed evasive maneuvers with a high lateral acceleration.
- LAC (Load Adaptive Control) – is an adaptive algorithm which calculates the vehicle mass and center of gravity using various parameters such as acceleration, speed and the acceleration of the steering wheel.
- EUC (Enhanced Understeering Control) – provides enhanced stability under heavy under steer, for example when driving quickly through tight-radius corners.

Safety First – Passive Safety

Fold-in ridges on subframe

Safety test module for crash

Free-standing module

Fold-in ridges on subframe

Load adaptive Electronic Stability Program (ESP)

MY 2010 Emissions Features
- DEF tank location on Sprinter Cargo & Bus
  - Tank located under the floor RH side behind B-pillar
  - Tank volume 6.6gal = 25L
  - Tank features drain plug

 EMS Safety Foundation Workshop

After the FEMA study – where to now?

Effective vehicle markings;
3 case studies

John Killeen

Muskoka EMS Canada
Muskoka EMS Canada

- Heavy snow environment in winter
- Muskoka wanted to include corporate logo colors, but also increase visibility
- Orange diagonal design was confusing and provided little conspicuity
- The lower reflective strength of sweeping green & blue do not detract from dominant yellow/green

Improving the vehicle profile with fluorescent colour and contour markings

Muskoka EMS Canada

- Waistline height reflectivity
- Muskoka chose solid yellow for rear
- Blue lettering is key-lined to increase reflectivity
- Different brands of material used to achieve the result
- Consultation was entirely virtual over the internet with a successful result

Perspective from Norway

Ronald Rutten
Adviser
Oslo university hospital - Pre-hospital division / Ambulance department

Geir Vidshammer Engely
Asst. Section leader/Paramedic
Oslo university hospital - Pre-hospital division / Ambulance department

Liv Bråmark
Coordinator, Ambulance group

Stein Erichsrud
Senior Engineer

Principles when purchasing ambulances

- Must fulfill all laws and regulations
- EN 1789 standard as a minimum
- Special requirements from our service:
  - Better internal lights (White halogen)
  - Reduced noise level (65dB A at 60 km/t and 70dB A at 120 km/t)
  - Focus on securing people and equipment
  - Focus on hygiene / easy to keep clean
  - The attendant should reach all basic equipment, communication, light and climate controls without releasing the safety belt.

Basic layout MB Sprinter ambulance

Basic layout Volvo V70 AWD ambulance

“Together for your safety”
National analysis group

- National Health Authority Licensing health professionals
- National Vehicle & Roads Administration Approval and technical control of ambulances
- Paramedics from Oslo university hospital

Ambulance investigation

- Accidents involving an ambulance with injury or death
- Accidents involving an ambulance with major damage to property
- Accidents where equipment inside the ambulance cause injury / danger of injury

Summary

- Safety of the patient and the crew are an important issue
- The use of shoulder straps on a stretcher are mandatory (unless a medical reason)
- The national analysis group can implement reactions against employees and suppliers.
- Can we be better? Absolutely!

Ergonomist Chris Fitzgerald addressing the Workshop

EMS Safety Foundation Ambulance Transport Innovation Workshop
Design and operational aspects of X Frame Stretchers
Chris Fitzgerald - Ergonomist
October 28th, 2009

Stretcher lifting & loading

Stretcher Load - # 1 (CNLOAD01)

Stretcher Load - # 2 (CNLOAD02)

Stretcher Unload - # 2 (CNUNLD02)
Solutions

Reduce levels of force exertion via,

- Greater recruitment strategies for lifting, lowering, loading & unloading
- Mechanisation / Design based
  - Use lower ambulance floors
  - Use other stretcher systems such as those with independent front & rear leg system – these collapse as they are loaded

TRB Summit Focus

'Bridging the gap between what we do and what is known - Enhancing ambulance transport safety through shared knowledge of technical data'.

Thank you to the EMS Safety Foundation Speakers and Moderators who assisted with the TRB Summit

- Matt Crossman
- Sandy Beers
- Charriere Cobb
- Comilla Sasson
- Ken Beers
- Wayne Ziegler
- Mike Reid
- Martha Florey
- Art Cooper
- Dan Garstang
- Gene Lukianor
- Chris Fitzgerald
- Jeff Wilch
- Eileen Frazer
- Jim Rossman
- Jim Love
- Kevin Peters
- Dick Geimer
Session 1: Burden & Benefit
- Introduction and Opening Address – 8.00-8.15am EDT USA
  • Opening address - Mr. Glenn Ludtke  - (Introduced by Mr. Jeff Lindsay)
- Session 1: Burden/Benefit – 8.15-10.00am
  • Safety Data – 8.15-8.50
  • Economics- 8.50 – 9.40
  • Ethics and Risk/Benefit – 9.40 – 10.00
- Break 10.00- 10.30am
*Webinar attendees - LOG OUT 10am - LOGIN 10.20am USA EDT*
FARS – A National Data Set?
Small numbers – but NO data captured from 20% of the nation in 10 years
Total Fatalities Per 100 Million Population 1996-2008

Fatalities among EMTs and paramedics, 2003-2008
- 36% Assaults and violent acts
- 14%其他 transportation
- 9% Struck by vehicle
- 9% Highway incidents
- 9% Aircraft incidents
- 8% Other transportation
- 7% Aircraft incidents
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Survey of Occupational Injuries and Illnesses (SOII)—Nonfatal data
- Data obtained from an establishment survey based on OSHA recordkeeping logs.
- National data prior to 2008:
  - Cover private wage and salary workers only
  - Exclude volunteers unless compensated
- Data for 2008 and beyond:
  - Include State and local government workers
  - Case and demographic characteristics:
    - Available for cases with days away from work only

Upcoming releases:
2008 data
- National data for nonfatal injuries in the public sector:
  - Summary industry data: October 29
  - Case and demographic data (i.e. data for EMTs): Early 2010
- Final fatality data: April 2010

IF SAFETY FOR THE SAKE OF SAFETY WASN'T ENOUGH:
A WORD ON LAWSUITS AND LIABILITY
Michele R. Kendus
Goodell, DeVries, Leach & Dann, LLP

Cases with days away from work among EMTs and paramedics, private sector, 2007
- 24% In lifting
- 15% Other overexertion
- 51% Overexertion
- 8% Contacts with objects or equipment
- 8% Transportation incidents
- 8% falls on the same level

Number of days away from work among EMTs and paramedics, private sector, 2007
- 31 or more days away: 25%
- 21-30 days: 12%
- 11-20 days: 9%
- 6-10 days: 8%
- 3-5 days: 7%
- 2 days: 6%
- 1 day: 16%

Number of days away from work among EMTs and paramedics, private sector, 2007
- 2 days: 20%
- 3-5 days: 20%
- 6-10 days: 11%
- 11-20 days: 9%
- 21-30 days: 5%
- 31 or more days away: 31%

Number of days away from work among EMTs and paramedics, private sector, 2007
- 1 day: 13%
- 2 days: 13%
- 3-5 days: 8%
- 6-10 days: 13%
- 11-20 days: 20%
- 21-30 days: 5%
- 31 or more days away: 31%

Upcoming releases:
2008 data
• National data for nonfatal injuries in the public sector:
  - Summary industry data: October 29
  - Case and demographic data (i.e. data for EMTs): Early 2010
• Final fatality data: April 2010
Causes of Action:
- Bodily Injury
- Wrongful Death
- Loss of Services
- Property Damage
- Workers' Compensation

Usability – Human Factors

Chris Fitzgerald
(Ergonomist)

EMS Subcommittee of the TRB Ambulance Transport Safety Summit
October 29th, 2009

Outline
Presentation overview
- Framework to consider human factors.
- Defining your population of users.
- Designing for operational paramedic tasks.
- Understanding how paramedics access, use & restow equipment.
- Balancing item accessibility with prevention of strike hazards.
- Design challenges.

Ambulance Fleet Economics
- Fleet Costs
- Accident Costs
- Driver Training

Fleet Safety Management Systems
- Fleet Management
  - Leadership
  - Driver Selection Standards
  - Driver Performance Monitors
  - Incident/Event Reporting, Investigation, Maintenance
  - Accident Reporting and Analysis
  - Program Evaluation
- EMS Practice/Policy
  - Safe Drive Policy
  - Seat belt use for all occupants
  - Equipment secured
  - Intersection policy
  - EVCOC – Emergency Vehicle operators course
  - Equipment secured
  - Cell phones / texting
  - In-vehicle communication

Total Cost of Risk
- Corporate Cost of Risk
  - Cost of risk
    - Typically represents 1 to 3 percent of total organization for small companies may be higher.
    - Usually the highest cost are found in workers’ compensation and liability depending on the type of company
      - EMS may have high WC cost due to patient handling or vehicle crashes
      - EMS may have high GL costs due to vehicle crashes and impact to general public or patients involved in crash
    - Is affected by retention levels and losses

Direct Costs of Vehicle Crash
- Cargo Damage
- Vehicle Damage
- Indemnity (payroll) Costs of Injured EMS Personnel
- Medical Costs
- Loss of Revenue
- Administrative Costs
- Police Report
- Possible Effect on Cost of Insurance
- Possible Effect on Cost of Workmen’s Compensation Insurance
- App. ‘aq Costs
- Stora of Damaged Vehicle
EMS Specific issues

- Negative impact on EMS response times
- Negative impact on regional EMS resources
- Consequences of decrease of emergency care response capacity
- Negative impact on service morale and ability to recruit
- Loss of other skilled EMS personnel due to concerns regarding safety issues

Indirect Costs of Crashes

- Lost Clients/Customers
- Meetings Missed
- Salaries Paid to Employees in Accident
- Lost Time at Work
- Cost to Hire/Train Replacement Employees
- Supervisor's Time
- Loss of Personal Property
- Replacement Vehicle Rental
- Damaged Equipment
- Downtime
- Accelerated Depreciation of Equipment
- Accident Reporting
- Medical Costs Paid by Company
- Poor Public Relations/Publicity
- Increased Public Relations Costs
- Government Agency Costs
- Lost clients/customers
- Meetings missed
- Salaries paid to employees in accident
- Lost time at work
- Cost to hire/train replacement employees
- Supervisor's time
- Loss of personal property
- Replacement vehicle rental
- Damaged equipment
downtime
accelerated depreciation of equipment
accident reporting
medical costs paid by company
Poor public relations/publicity
increased public relations costs
Government agency costs

Costs of Motor Vehicle Crashes Worksheet

<table>
<thead>
<tr>
<th>Item Costs to the Organization</th>
<th>Amount</th>
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<tr>
<td>Workers' compensation/disability</td>
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<td>Property damage and loss</td>
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<td>Loss of earnings and lost wages and benefits</td>
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<tr>
<td>Repair and replacement costs</td>
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<tr>
<td>Group health insurance, dependent benefits</td>
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<tr>
<td>Property damage, equipment, etc.</td>
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<tr>
<td>Reimbursements for employee's injuries</td>
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<tr>
<td>EMS costs (production, maintenance, etc.)</td>
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<tr>
<td>Rental, repair, replacement cost of equipment</td>
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<td>Reimbursement for employee's injuries</td>
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<tr>
<td>Loss of personal property</td>
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<td>Replacement vehicle rental</td>
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<td>Direct Total</td>
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Clinical Decision Priorities in Out-of-Hospital Cardiac Arrest

Camilla Sasson, MD, MS
Robert Wood Johnson Clinical Scholar
University of Michigan
Department of Emergency Medicine
October 29th, 2009

Guiding EMS Practice for OHCA

- Current EMS Practice for the Termination of Resuscitation (TOR) of Unsuccessful Efforts
- Evidence-based Recommendations
- Barriers to Implementing National Guidelines
- Next Steps

Operational Issues

Facilitators to Knowledge Transfer

- Improve Communication between EMS/Medical Directors and OLMC
  - Strengthen current AHA/ILCOR Guidelines on Resuscitation
- Standardize Educational Requirements
- Increase Coordination of Local Services
- Streamline Body Aftercare and Family Support System
**What We Need to Know**
There are several groups that are actively working to answer the many questions that have presented.

**More Users, More Needs**
- Send the Unfocused to the emergency system
- Complicated, multisystem disease patients
- More needing transport assistance
- Example: Changing nature of ACS patients

**Session 4: Information Sharing and Policy**

**State and Federal EMS Transport Safety Knowledge Transfer Platforms**
EMS Subcommittee of the TRB Ambulance Transport Safety Summit
October 29th, 2009

**State Initiatives Related to Crashing Ambulances**
- Mandatory crash reporting:
  - PA, annual report generated
  - ND, but #s low
- Other programs:
  - CO, conference
  - Grant programs for equipment

**Federal Initiatives**
- National EMS Advisory Council -- Safety Committee
- Federal Interagency Committee on EMS -- Technical Working Group Safety Committee
- Transportation Safety Advancement Group -- US DOT/RITA ITS Joint Program Office

**What’s Missing from this List?**
- Railroads
- Commercial Trucks
- Aviation
- Passenger cars
- Marine
- Transit
  - ...
Summary - Feds
- Federal authority and interest lacking
- EMS transport safety is subordinate
- Committees and research are not enough
- EMS is the “missing mode”

Non-Government
- Organization
  - TRB, ATS Ad Hoc, EMS Safety Foundation,
  - Web based
    - Respondersafe.com, Closecall.com, EMSnetwork.org, GlobalEMS Forum,
    - Trade Journals
      - Foundation
        - FARE / Vi z
  - Association
    - NAEMT, NAEMSMA, NASEMSO, NAEMSP
  - Accreditation
    - CAMTS, CAAS
  - Coalition
    - Advocates for EMS – Kurt Krumperman

SESSION 4: Information Sharing and Policy
Challenges – Knowledge Transfer/Dissemination
Kevin Roche
Phoenix Fire Department, Arizona

Challenges – Knowledge Transfer/Dissemination
- Size of the Fire and EMS Services
- Variety of Service Delivery Models
- Variety of Organizational Models
- Lack of Standardization
- Culture
- Tradition

Fire Service Culture and Tradition
- Pride in Service to the Community
- History
- Tradition
- Change
- Risk-Takers Invincibility

How To Get Through:
- Focused Message
- Consistent Message
- Involvement in the Standards Process
- Involvement in the Regulatory Process
- Good Research
  Conveyed in a way that can be understood

The National Academies
Transportation Research Board
EMS Safety Subcommittee
EMS Safety Summit
Washington, District of Columbia
October 29, 2009
Summary
Arthur Cooper, MD, MS
Columbia University/Harlem Hospital

EMS Safety Summit Wrap Up
- Burden/Benefit
  - Safety Data
    - Multiple datasets – not interoperable, huge holes
    - Inconsistent definitions, incomplete collection
  - Economics
    - Vehicles: small fortune; crashes: many fortunes
    - Data-driven business and insurance case is strong
    - Ethics and Risk/Benefit
    - Decision rules, crashes, but few use them
    - Technology also in, but crash and not few have it

EMS Safety Summit Wrap Up
- Transport System Management
  - Fleet/Vehicle Operations Safety
    - Safety program/culture – crashes ↓ 60%
    - “Trust, but verify” – vehicle “black boxes”
    - Align rewards with safety, not profit
  - Operations Management
    - EMS ↓ hot responses, hence crashes
    - ITS: great promise in ↓ crashes
    - Dynamic deployment, visual systems ↓ crashes
EMS Safety Summit Wrap Up

- Vehicle Safety – Assessment and Design
  - Our engineering colleagues are way ahead of us
  - Special Populations – Pediatric to Bariatric
- Special populations → illustrative solutions
- Information Sharing and Research Priorities
  - Knowledge Transfer/Dissemination
  - The world is large… our “worlds” are small, and insular
  - Standards/Specifications/Policy
  - For vehicles, not patients or providers… must change!

Solutions?

- National Incident Management System
  - Unified ICS (potential partnership with DHS)
- Together Everyone Achieves More
  - TeamSTEPPS (AHRQ/TriCare) may help
- Government can’t (and shouldn’t) do it alone
  - Interdisciplinary professional collaboration needed
- We all know what needs to be done
  - TRB White Paper → interdisciplinary NAs panel

Thoughts To Ponder

- Public Health Answering Points
  - Health advice for patients at home
- No substitute for the human touch
  - Mid level providers/advanced practice medics
- PC based telemedicine in rural areas
  - Skype™ has shown us how to do it
- Fossil fuels will be prohibitively expensive
  - Medical transport only a last resort

Safety in the Back? Ergonomic and Automotive Safety Challenges

What are the practices, technologies and challenges of ambulance safety design – in a spectrum of countries, a real world perspective

Introduction:
Mr. Darren Walter FRCS(Ed) FCEM – Emergency Medicine Physician, South Manchester, UK
- A Systems and Interdisciplinary Perspective
- Automotive Safety and Engineering Challenges:
  - Gene Lukianov, Automotive Safety Engineer, Michigan Detroit, USA
- Operational Ergonomics – Key Issues
  - Chris Fitzgerald CPE, EMS Ergonomist, Risk and Injury Management Services, Melbourne, Australia
- Overview – Q & A

Safety in the Back?- IS a system

COMBINATIONS OF ALL SCENARIOS MUST BE CONSIDERED

ROAD ACCIDENT SCENARIOS
- Frontal impacts
- Side impacts
- Roadway Departures and Rollovers

ATTENDENT POSITION SCENARIOS
- Seated (in position), belted in Designated Seating
- “Out of Position”, unbelted and/or ambulant

PATIENT SCENARIOS
- Pediatric to Bariatric size and weight
- Various levels of injury and medical need

Safety in the Back?

SO WHAT’S THE CHALLENGE?

- Occupant Protection is a systems issue
- Avoid crashes with Driver Training, Operating Policies, Safety monitoring and feedback technologies, Ambulance Conspicuity and Vehicle crashworthiness specifications
- Constrain Attendants SAFELY, ideally forward and rear facing
- Constrain Patients SAFELY, with shoulder belts
- Secure all equipment effectively
- Engineer Compartment Interior to be IMPACT FRIENDLY

EMS Operational Ergonomics

Presentation overview

- Defining the framework for consideration of human factors.
- Defining your population of users.
- Designing for tasks paramedics perform “in the back”.
- Understanding how paramedics access, use & store equipment.
- Balancing item accessibility with prevention of strike hazards.
- Design challenges.
User Population
Who will use the ambulance
• Female participation rates of up to 30 to 40%.
• Height difference between a 5th percentile female & 95th percentile male is approximately 400 mm.
• User size needs to be accommodated in design for comfort & access to the patient & equipment.
• Need to balancing head & shoulder clearance with reach distance.
• What is the height, weight and “size” range of patients that are to be restrained on the stretcher.

Standards Update
• NFPA – forthcoming meeting in December
• SAE – x2 standards underdevelopment
  • General vehicle crashworthiness and occupant safety standard
  • Specific equipment and occupant restraint standard
• ISO - ISO/AWI 39001 - Road-traffic Safety management systems
  • Recent update meeting in Canada

ISO – 39001
Road-traffic Safety management systems

SAE development

Vehicles Update
• As of January 1, 2010
  • USA the Sprinter will be distributed by Mercedes and Freightliner
  • Canada the Sprinter will be solely distributed by Mercedes
• State policy developments
• EMS Safety Foundation Innovation Consortium new vehicle and fleet purchases

Planning for 2010 EMS Safety Foundation Rettmobil Delegation??
May 5-7, 2010

Rettmobil 2010 Delegation
Registration of Interest

Time line
November 2009 – June 2010
• TRB Subcommittee meeting Jan 13, 2010
• January 14th EMS Safety Foundation Webinar
• Rettmobil Delegation 2010, May 5-7th, 2010
• Workshop May 4th, 5th and 7th, Germany
• ICEM 9-12th June, Singapore
• Global EMS Forum Webinar June, 2010

Thank you!
Any Questions??
an electronic recording and a .pdf handout of this presentation awaits EMS Safety Foundation Members online
www.EMSSafetyFoundation.org