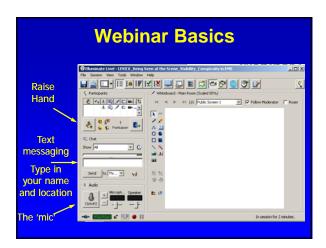
Welcome to the
EMS Transportation Safety
Subcommittee ANB10(5) meeting of
the National Academies –
Transportation Research Board
(TRB)
Being held during the 88th Annual
TRB Symposium in Washington DC

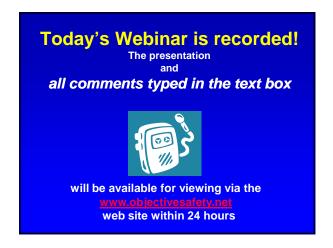
So what is a Webinar?

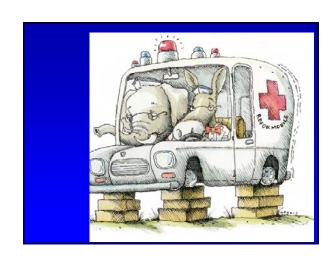
A Webinar is:

- ► 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









Transportation Research Board 88th Annual Meeting,
National Academies Washington, DC, January 13th, 2008
"Transportation, Energy, and Climate Change"

The National Academies Transportation Research Board (TRB) EMS Transport Safety January 2009 Subcommittee Meeting

Nadine Levick, MD MPH Chair, TRB EMS Transport Safety Subcommittee CEO, Research Director, EMS Safety Foundation New York, New York, USA

This afternoon's Webinar

▶ Will cover:

- An overview of the TRB and opportunities for EMS - What is it, what does it do, and what can it do for EMS/Medical Transport?
- Synopsis of EMS Transportation Safety Subcommittee's first year of activity
- Subcommittee organizational structure
- Research funding pathways and processes via the TRB
- Research Agenda Discussion/Workshop

Emergency Medical Services Safety Subcommittee ANB10(5) of the Transportation Research Board Tuesday January 13, 2009 3:45 PM - 5:30 PM also via Webinar, Washington DC

Chair – Nadine Levick MD, MPH
Sponsored by Transportation Safety
Management Committee (ANB10) –

AGENDA

Introduction	- 5 min	
Review of 2008 Minutes –	- 5 min	
Brief overview of the Transportation Research Board and	lits	
importance to EMS Transportation Safety	- 5 min	
Synopsis of EMS Transportation Safety Subcommittee's	is of EMS Transportation Safety Subcommittee's first	
year of activity	- 5 min	
Subcommittee organizational structure	- 10 min	
Ambulance Transport Safety 2009 Summit - October 29	- 5 min	
Research funding pathways and processes via the TRB	- 10 min	
Research Agenda Discussion/Workshop		
(commence at 4.30pm EST)	- 55 min	
Other business	- 5 min	

What is ANB 10 (5)?

- ► Emergency Medical Services
 Safety Subcommittee, ANB 10 (5)
 - Subcommittee of the Transportation Safety Management Committee ANB 10, of the Transportation Research Board of the National Academies

The Transportation Research Board (TRB)

► History

TRB was established in 1920 as the National Advisory Board on Highway Research to provide a mechanism for the exchange of information and research results about highway technology.

TRB MISSION

▶ To provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal.

TRB

- One of 6 major divisions of the National Research Council
- A private, nonprofit institution
- Principal operating agency of the National Academies in providing services to government, public, and scientific and engineering communities.
- The National Research Council is jointly administered by:

 - National Academy of Sciences National Academy of Engineering Institute of Medicine.
- Engages >7,000 engineers, scientists, and other transportation researchers and practitioners from public and private sectors and academia
- Supported by state transportation departments, federal agencies including U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

TRB Goals

- 1. Anticipate future transportation challenges and provide leadership in promoting and conducting research and policy analysis to prepare the United States for meeting those challenges.
- Conduct and promote knowledge creation and dissemination, especially on innovative practices and technologies in the transportation sector.
- Provide timely and informed advice on transportation and transportation-related issues to decision makers and others who are responsible for the nation's multimodal transportation system.
- Act as an effective and impartial forum for the exchange of knowledge and information, including transportation and its relationship with social, economic, environmental, and other issues.

TRB Goals

- Promote collaboration on transportation research, education, and technology transfer at international, national, regional, state, and local levels; across public and private sectors; and with transportation providers, customers, and other stakeholders.
- Contribute to the professional development of individuals currently working in transportation and to the education and enhanced diversity of the pool of individuals who will work in the field in the future.
- Conduct and promote communications efforts to enhance the awareness of transportation research and its contributions to innovation and progress in transportation
- Contribute to the public's understanding of transportation and its significance to the nation.

TRB divisions

- ► Technical Activities supports standing committees and task forces.
- ▶ Studies and Special Programs convenes specially appointed expert committees to conduct policy studies and program reviews, maintains the TRIS database, provides library services, prepares synthesis reports on behalf of the Cooperative Research Programs, and manages the Innovations Deserving **Exploratory Analysis (IDEA) programs.**

TRB research programs

- **Cooperative Research Programs manages**
 - National Cooperative Highway Research Program NCHRP
- Transit Cooperative Research Program TCRP
- Airport Cooperative Research Program ACRP National Cooperative Freight Research Program NCFRP Hazardous Materials Cooperative Research Program. -HMCRP
- ► Strategic Highway Research Program 2 (SHRP-2)
 - rategic frightway research Frogram 2 (Grinz 2)
 manages a targeted, short-term, results-oriented program of
 contract research designed to advance highway performance safety for U.S. highway users.
- Administration and Finance provides financial, information technology, and other administrative support, including financial oversight of the contracts and grants that support the work of TRB, administration of publications sales and distribution, and maintenance of benefits and services for sponsor and affiliate organizations.

Transportation Research Board is an excellent resource... we should be using it!! NCHRP NCHRP REPORT SOO Volume 19 Vol

In Summary TRB Services

- ► A resource to the nation and to the transportation community worldwide
 - Opportunities for information exchange on current transportation research and practice
 - Management of cooperative research and other research programs
 - Analyses of national transportation policy issues and guidance on federal and other research programs
 - Publications and access to research information from around the world.

Special role for EMS at TRB

- ▶ One of the Key 4 E's
 - Engineering
 - Education
 - Enforcement
 - Emergency Medical Services

SAFETEA-LU

Safe, Accountable, Flexible, Efficient
Transportation Equity Act: A Legacy for Users

- ► Highway Improvement Program (HIP)
- ▶ Strategic Highway Safety Plans (SHSP)

State Strategic Highway Safety Plans

- ▶ Required as part of the SAFETEA-LU legislation
- ► Effective October 1st 2007
- Focus is the 4 'E's
- ▶ EMS is a core theme







Who is attending the general TRB meeting

How do TRB Subcommittees work?

EMS Safety Subcommittee ANB10(5)

- ► Supported by Transportation Safety Management ANB10
- ► Established July 2007
- ► First Subcommittee meeting Jan 2008
- ► Chair, Nadine Levick MD, MPH
- ▶ Co-Chair, Eileen Frazer, RN
- ► Scope Medical Transport Safety

This is what was covered at Inaugural Subcommittee meeting, Jan 2008

- ▶ Brief introduction re: the TRB
- **▶** Presentations:
 - Automotive safety perspectives Prof Raphael Grzebieta, Chair of Road Safety UNSW
 - Achievements and milestones of aviation medical transport safety – Eileen Frazer, CAMTS
 - Overview of EMS transport safety issues and research Nadine Levick MD, MPH – Chair ANB10(5)
 - Safety perspectives from an EMS Medical Director John Russell MD CCPA
- ► Policy perspectives
- ► An update on some research underway
- Discussion and workshop on research perspectives and needs

Recording link – www.objectivesafety.net sidebar



- ► Encompassing all aspects of transportation
- The expertise that EMS needs to address its transportation safety challenges includes:
 - Systems design
 - **Transport systems safety**
 - Human factors
 - Vehicles
 - **Vehicle operations**
 - Air medical transport safety
 - Impaired operators
 - Highway and operational hazards





EMERGENCY MEDICAL SERVICES: A UNIQUE TRANSPORTATION SAFETY CHALLENGE

ABSTRACT

Emergency Medical Service (EMS) is an essential and transportation based emergency service, and now key component of the new SAFETEA-LU required State Strategic Highway Safety Plans, Ground EMS responds to approximately 30 million emergency medical injuncy calls annually. In contrast to other commercial transport vehicles, annualnace transport safety is not currently encompassed by the Federal Motor Carmer Safety Administration (FMCSA), nor formally by any other overseeing body and hence the safety oversight of this transport system is fragmented and targely devoid of current technical transportation safety injunt.

This is of serious concern, particularly when the crash fatality rate for these EMS vehicles per mile travoled is estimated to be in excess of 10 fold higher than that for heavy trucks. Additionally there are ambulance "wake effect" crashes, with rates in excess of five fold of the identified ambulance crash rates.

of the identified ambulance crash rates.

These deficiencies in EMS transportation safety process range in spectrum from safety

http://ntlsearch.bts.gov/tris/index.do

Ambulance Transportation Safety (ATS) Task Force

- Ad Hoc Committee from across **EMS/Medical Transport practice and** operations
- **Appealing to the NTSB:**
 - To investigate the July 20th 2007 Antwerp Ohio
 - To investigate serious ambulance crashes
- Collaboration with ANB10(5) to set up **Ambulance Transport Safety Summit**









TRB Ambulance Transport Safety Summit Conceptual Outline

- ► Systems Safety Engineering
- ► Transport safety, Biomechanics, Ergonomics, Clinical care and Outcomes
- ▶ Patient, Provider and Public safety focus
- ► Low hanging fruit
- ► Transfer knowledge into practice
- ▶ Path forwards

Key Elements to Ambulance Transport Safety

- ▶ Data capture
- ► Vehicle fleet operations and the transport environment
- ▶ Vehicle biomechanics and crashworthiness
- ▶ Ergonomics, human factors and biohazards
- ► Standards and Policy
- Ongoing safety management evaluation and analysis

Ambulance Transport Safety Summit

November 7, 2008, 1pm- 5pm Agenda

Welcome and Opening Address:

Mr. Rick Pain
Dr. James Augustine

Technical Sessions:

- I. Data (25 minutes with 10 minutes Q&A)
- II. Vehicle Operations (50 minutes with 10 minutes Q&A)
- III. Vehicles (40 minutes with 5 minutes Q&A)
- IV. Ergonomics and Human Factors (30 minutes with
- V. Standards (20 minutes with 5 minutes Q&A)
- VI. Summary of the Sessions (20 minutes with Q&A)

Path Forwards

- Disseminate technical information
- Enhance understanding of technical transportation issues
- Facilitate sharing of information as standards are developed
- Interdisciplinary Collaboration
- Support the formulation of a transportation focused research agenda

TRB ANB10(5) 2008 Summit and Archived recording and handouts

- ► Subcommittee Meetings
 http://www.objectivesafety.net/TRBSubcommittee.htm
 - Jan 2008: Recording, Minutes and Handouts
 - Nov 2008: Agenda, Minutes
- ► Nov 2008 EMS Transport Safety Summit http://www.objectivesafety.net/TRBSummit2008.htm
 - Agenda, Speaker Biosketches, Recording and Handouts

Next ANB10(5) Ambulance Transport Safety Summit October 29th, 2009

- ▶ Full Day Summit
- ► Held at the National Academies Keck Center, Washington DC
- ► Including virtual Webinar platform
- ▶ Develop and advance the issues covered in 2008 Summit

Who is here in this EMS Subcommittee meeting this year

Subcommittee structure

- **▶** Chair
- **▶** Co-Chair
- **▶** Administrator
- **▶** Secretary
- ► Project Manager
- **▶** Technical Sections
- **▶**Liaisons

TRB Structured Transportation Research Programs, Agendas and Resources



Transportation Research Information Services (TRIS)

- ► Online Research Information
- ► TRB produces and maintains the Transportation Research Information Services (TRIS), the world's largest and most comprehensive online bibliographic database of published and ongoing transportation research.
- ▶ Through a cooperative agreement with the Bureau of Transportation Statistics, the TRIS Database is available on the Internet through the website of the National Transportation Library. This service, TRIS Online, can be accessed through the TRB homepage at www.TRB.org. TRIS is also available through two fee-based services, Dialog and Silverplatter's TRANSPORT CD-ROM.

Other TRB Online Resources

- ▶ Research in Progress (RiP) Database
- ▶ RiP provides access to more than 9,500 descriptions of current or recently completed transportation research projects from federal and state transportation agencies, universities, and international organizations
- ► The TRB Publications Index is a searchable index of the Board's papers and reports.

Synthesis Program

- ▶ Reports on current knowledge and practice
- Synthesize fragmented, scattered, and unevaluated existing information
- ▶ Initiation of ~ 12 syntheses per year
- Selection process for synthesis topics:
 - widespread enough to generate broad interest
 - timely and critical for expediting delivery, improving the quality, or lowering the cost of transportation programs
 - current practice is non-uniform or inconsistent from agency to agency or if the validity of some practices appears to be questionable
 - a need to organize and compress that which has already been learned and written on the topic
 - ongoing research or other activities in progress should not render the synthesis obsolete shortly after completion

http://www.trb.org/Studies/Synthesis/SynthesesNCHRP.asp

National Cooperative Highway Research Program (NCHRP) Synthesis

► New NCHRP Synthesis topics submissions due February 13, 2009

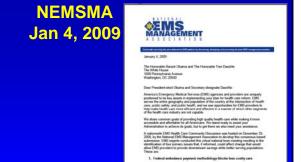


Strategic Highway Research Program (SHRP 2)

- Congress established the second strategic highway research program (SHRP 2) in 2006 to investigate the underlying causes of highway crashes and congestion in a short-term program of focused research. Focus areas:
 - Safety, Significantly improve highway safety by understanding driving behavior in a study of unprecedented scale
 - Renewal: Develop design and construction methods that cause minimal disruption and produce long-lived facilities to renew the aging highway infrastructure
 - Reliability: Reduce congestion and improve travel time reliability through incident management, response, and mitigation
 - Capacity: Integrate mobility, economic, environmental, and community needs into the planning and design of new transportation capacity







Research Approaches Submission avenues: Synthesis topic - NCHRP SHARP 2 - Safety Research questions other

