EMS, the NAS & US Military Medicine

1862: Dr. Jonathan Letterman introduces “flying ambulances” to the Army of the Potomac

1862: Dr. William Hammond orders collection of “morbid anatomy” for research

1863: President Lincoln signs charter for National Academy of Sciences

1864: Congress passes “An Act to Establish a Uniform System of Ambulances in the Armies of the United States”
Accidental Death and Disability: The Neglected Disease of Modern Society

Emergency Medical Services at the Crossroads
NHTSA & EMS: The beginning

The Highway Safety act of 1966 gave DOT authority to improve emergency medical services.
NHTSA & EMS: The early years

The Haddon Matrix

- First presented at DOT seminar
- Provides a conceptual framework for injury control
- Defines EMS as a key component of comprehensive injury control strategies

<table>
<thead>
<tr>
<th>EVENTS</th>
<th>FACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Event</td>
<td>Drunk driver Alpine accuracies</td>
</tr>
<tr>
<td>(Before the crash occurs)</td>
<td>Drunk driver Alpine accuracies</td>
</tr>
<tr>
<td>Event</td>
<td>Spread out energy in time and space with slow</td>
</tr>
<tr>
<td>(During the crash)</td>
<td>Safety distance</td>
</tr>
<tr>
<td>Post-Event</td>
<td>Crash victims overall</td>
</tr>
<tr>
<td>(After the crash)</td>
<td>Crash victims overall</td>
</tr>
</tbody>
</table>
NHTSA & EMS: The Star of Life

Registered certification mark of NHTSA

International symbol of EMS

Six bars represent the continuum of emergency medical care:
1) Detection
2) Reporting
3) Response
4) On-scene care
5) Care in transit
6) Transfer to definitive care
NHTSA’s National EMS Priorities

A System’s Approach

Improve Emergency Health Outcomes

Expand and Monitor EMS System Capacity

Coordinated Federal Support of Local, State and Tribal EMS Systems

Promote a Prepared, Credentialed and Healthy Workforce

Partnerships and Collaboration
Federal Interagency Committee on EMS
Objective 4.4: Apply lessons learned from military and civilian incidents to the EMS community

Objective 6.3: Work with State EMS Offices to support the transition of military EMS providers to civilian practice
NHTSA & EMS: Leadership & Publications

- EMS Agenda for the Future
- Trauma Systems Agenda for the Future
- Education Agenda for the Future
- Workforce Agenda for the Future
NHTSA & EMS: Improving Outcomes & Monitoring System Performance

National EMS Information System (NEMSIS)

Evidence-based Guidelines & Model Clinical Guidelines
EMS Personnel

Emergency Medical Responder (EMR)  
(Simple skills; does not transport)

Emergency Medical Technician (EMT)  
(Performs noninvasive procedures; transports patients)

Advanced EMT  
(Performs basic, invasive procedures and can administer some medications; transports patients)

Paramedic  
(Advanced life support; highest EMS scope of practice level; significant knowledge in basic and applied sciences)
NHTSA & DoD

Federal EMS Military Licensing and Credentialing Working Group

FICEMS Position Statement
EMS: Military to Civilian Transition

Grant to NASEMSO to support military to civilian transition and licensure

Interagency Agreement with DoD’s National Center for Disaster Medicine & Public Health (NCDMPH)
Lessons Learned and Lessons Lost

Improved trauma care
- Sanitation
- Wound care
- Ambulance transport
Trauma Care: Important to Highway Safety

- 33,718 people died on our roadways - 2014
  - the single leading cause of death for people aged 11 to 27

- 2.4 Million persons were injured - 2014

- 950,000 credentialed EMS workers (all levels)
  - How will they learn from military - systematically & expeditiously?
NHTSA’s Charge

• Identify and describe the key aspects of the military’s prehospital trauma care system that can be most effectively adapted to civilian use

• Examine and understand mechanisms to systematize and institutionalize the transfer of knowledge

• Identify ways to integrate lessons learned into EMS systems using existing resources.

• Select case studies that will reflect the diverse needs of civilian care systems, including prehospital care systems, rural trauma care systems, and special populations
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