EMS Safety Foundation - Executive Summary

Summary: The EMS Safety Foundation’s mission is to increase the safety of pre-hospital care operations and transport for the patient, the provider and the public. The Foundation’s emphasis is on international knowledge transfer from disciplines such as transportation systems engineering, fleet management, vehicle design, human factors and operational ergonomics, to enhance practice and policies. To accomplish this mission the Foundation identifies safe practices, conducts research into improving the safety of this unique transport system, and disseminates this information broadly. Funding for the Foundation comes from Corporate, Philanthropic grants and individual sponsors and largely membership.

Overview: Considerable effort has been given, both nationally and internationally, to the clinical aspects of pre-hospital care and medical transport, but there has been minimal attention from an integrated patient, provider or public’s perspective on the non-clinical dimensions. For example, preliminary data show the areas of both highest risk and least available scientific information in the pre-hospital safety field to be the transportation aspects of pre-hospital care, and patient handling in the EMS environment. Furthermore, relative to other commercial or passenger transport modes, EMS and medical transport have unique safety risks that are beyond any other transportation modes. Few other transport modes require active work, of any type, let alone of a critical nature, in the back of a moving vehicle. Patient handling challenges are similarly unique.

The EMS Safety Foundation, a not for profit foundation, was formed to address these issues in 2008. The Foundation bridges EMS and medical transport practice and policy with transport systems engineering, automotive safety engineering and crashworthiness, human factors, ergonomics, new technology, systems engineering, public health and epidemiology. These diverse disciplines have limited history of collaboration. Historically, once advances have been made in these fields, the pre-hospital care field has limited awareness of, or access to this information, nor the specialized technical background to effectively interpret the information to make informed decisions.

The Foundation is overseen by a Management Board and composed of an interdisciplinary Advisory Board, Technical Expert Panel and an Innovation Consortium. The Technical Expert Panel provides the technical knowledge required to consider issues related to transport systems engineering, fleet management technologies, vehicle design and safety, (crashworthiness and human interface technologies for crash prevention), human factors and ergonomics of providing effective patient care, public health perspectives, data capture and approaches that address the safety of EMS vehicles in the transport system and public safety, and innovation in equipment to augment the safety of the patient, the provider and the public. The Innovation Consortium provides both the practical experience that balances the technical expertise of the Technical Expert Panel, in addition to being a test bed for innovation and information dissemination. Members of the Innovation Consortium come from a broad cross section of EMS practitioners from volunteer, municipal, private, not-for-profit and public safety and fire service organizations. The membership of the Panel and the Consortium is by invitation with specific criteria met for membership to be established and maintained. This Panel and the Consortium membership provides also for secure access to participation in electronic interdisciplinary forums and applied workshops. Integration of the information generated by the Panel and Consortium is accomplished by the EMS Safety Foundation system integration team, to facilitate the transfer of the technical knowledge into practice in the field. Corporate Partnership is offered to select industries. An additional limited participation category is Affiliate Subscription, open to anyone interested in pre-hospital care safety and provided occasional bulletins via the EMS Safety Foundation listserv.

The EMS Safety Foundation has fostered relationships with interested organizations nationally and globally, including EMS services, industries, Transportation Research Centers and the National Academy’s Transportation Research Board.