



National Association of State EMS Officials

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January 24, 2011

O. Kevin Vincent, Chief Counsel
National Highway Traffic Safety Administration
NCC-110
1200 New Jersey Ave. SE
Washington, D.C. 20590

Dear Mr. Vincent:

On behalf of the National Association of State Emergency Medical Services Officials (NASEMSO), I am writing to request your opinion on a matter that is of increasing concern to our members. NASEMSO is comprised of individuals from EMS offices in all the states and U.S. territories. Our members are engaged in ensuring the safety and effectiveness of EMS systems in their respective jurisdictions. Not only do we oversee the training and licensing of individual EMS practitioners, but the overwhelming majority of our members are also responsible for the licensing and oversight of the EMS agencies, including most of the ambulances on our nation's roadways.

The concern we would like to bring to your attention is related to the safety of EMS personnel and patients who are being transported in ambulances. We know that data indicate that the greatest safety risk for EMS personnel is ambulance crashes. EMS personnel in the United States have an estimated fatality rate of 12.7 per 100,000 workers, more than twice the national average. In fact, they have twice the fatality rate of police or firefighters and 74% of those are transportation related (Maguire, 2002). Our members, as well as the EMS community at large, have frequently heard at national and state seminars and read in EMS journals that most ambulances are exempt from the U.S.D.O.T. Federal Motor Vehicle Safety Standards (FMVSS), or that the patient compartment or "box" on the back of the ambulance is exempt from the FMVSS occupant protection standards.

The amount of scientific and technical articles making this claim are too numerous to reference herein, but a sampling includes the following: 1) [*Crash Protection for Children in Ambulances*](#), MJ Bull, K Weber, J Talty, 2001; 2) *EMS, First Responders and Crash Injury*, C. Kahn, Emerg Med, Vol 28, No. 1, pp. 68-74, 2006; 3) *Ambulance Vehicle Crashworthiness and Passive Safety Design: A Comparative Evaluation*, NR Levick, R Grzebieta R, SAE International, 2008; and 4) *Safety First*, J Goodwin, Best Pract Emerg Serv, Vol. 13, No. 6, June 2010.

A review of the literature also indicates that as far back as 1979, following a fatal ambulance crash, the National Transportation Safety Board issued recommendations H-79-27 and 28 to NHTSA, noting that the patient compartment, which is added following the manufacture of the chassis, is not subject to the same occupant protection standards as the basic vehicle. The NTSB reasoned:

Federal standards should also include regulations on general body construction and ambulance body structure that insures the patients and medical technicians riding in the ambulance body have the safe protection as the driver. The completed ambulance should be capable of withstanding reasonable impact forces. The current FMVSS are applicable only to the basic vehicle before modification, rather than the completed after-market product.

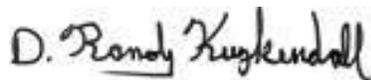
As a result of the assertions that occupant protection standards fall short of protecting the patient and workers riding in the back, some of our members and staff have examined the regulations trying to ascertain the veracity of these statements. It appears that that these claims, particularly in regard to occupant protection in the patient compartment, are accurate. However, we would like your interpretation. We have prepared the following questions in an attempt to provide answers to our members.

- 1) To what extent do the Federal Motor Vehicle Safety Standards (FMVSS) apply to ground ambulances?
- 2) More specifically, is the patient compartment of ground ambulances exempt from the occupant and/or side impact protections of the FMVSS?

While not meant to be an exhaustive review of the federal regulations, included with this letter are various excerpted sections of the FMVSS that would indicate that ambulances (or at least the patient compartments of ambulances) are exempt from occupant protection/side impact standards.

We look to you for further guidance on this important issue.

Sincerely,



Randy Kuykendall, President
National Association of State EMS Officials

C: Drew Dawson, NHTSA Office of EMS
Dia Gainor, Chair, NASEMSO Highway and Traffic Systems Committee
Chair, National EMS Advisory Committee