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## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: February 1, 1979

Forwarded to: Honorable Joan Claybrook Administrator National Highway Traffic Safety Administration Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

H-79-1 and 2

About 3:30 p.m. on August 22, 1978, an ambulance responding to an emergency call and traveling at an estimated speed of 90 mph failed to negotiate a curve on New Hampshire State Route 116 north of Littleton, New Hampshire, and rolled over. Two persons in the ambulance were killed and the driver was injured.

The Safety Board's continuing investigation of the accident has revealed that the driver lacked an understanding of the principles of high-speed driving techniques. The driver said she entered the curve too wide and turned the steering wheel to the left, turning the ambulance toward the inside of the curve, and lost control. In an attempt to regain control, the driver steered to the right. She overcorrected and subsequent steering efforts by the driver aggravated the loss of control until the vehicle rolled over.

The Safety Board believes that the driver's inexperience and lack of familiarity with the high-speed handling characteristics of this vehicle was a factor in the accident. There are many factors which contribute to handling characteristics, including suspension design, tire design, tire pressures, weight, center of gravity location, speed, and acceleration.

The Safety Board believes that even with adverse handling characteristics, the vehicle was capable of negotiating the curve; however, lacking experience, the driver was unable to properly steer to maintain control of the vehicle. Since ambulance drivers are authorized to exceed posted speed limits, they should be competent and qualified to operate such vehicles at high speeds.

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ambulance company for about 6 months. She was hired as a medical technician and had been driving the ambulance for only about 1 month. She held a valid New Hampshire operator's license with a corrective lense restriction. She was wearing contact lenses at the time of the accident. She had received driver training before obtaining her original license, but had not received specific training for driving an emergency vehicle at high speeds and had not received defensive driver training.

The National Highway Traffic Safety Administration (NHTSA) Highway Safety Program Standard (HSPS) No. 11, "Emergency Medical Services," suggests that States require an 81-hour course developed by the U.S. Department of Transportation (DOT) or a DOT-approved equivalent course for training emergency medical technicians, and rescue and dispatch personnel. The NHTSA has developed a model "Training Program for Operation of Emergency Vehicles" for the use of States that observe HSPS No. 11. This program provides guidelines for setting up an emergency driver training course, an instructor's manual, lesson plans, and a trainee study guide. The course is designed to provide additional training in the techniques of driving emergency vehicles for drivers who have passed a defensive driving course.

Neither the HSPS No. 11 nor the training course, however, include provisions for behind-the-wheel training in high-speed driving techniques and principles, or a final examination -- both written and behind-thewheel to demonstrate and provide a record of the student's aptitude and/or proficiency. The licensing criteria of HSPS No. 11 and the model program should include a requirement that all licensees successfully complete a final examination. This would be beneficial to employers who are evaluating applicants for positions as emergency vehicle drivers.

A study of accidents in Connecticut involving emergency vehicles found that 14 percent of the accidents in 1975 and 1976 involved ambulances. 1/ The study noted that in 1975 the State had 343 emergency vehicle accidents in which 6 persons were killed and 298 persons were injured. In 1976 there were 344 emergency vehicle accidents in the State in which 10 persons were killed and 321 persons were injured. The study recommended a statewide, coordinated, special training and licensing program for all operators of emergency vehicles.

Therefore, the National Transportation Safety Board recommends that the National Highway Traffic Safety Administration:

<sup>1/</sup> Connecticut Safety Commission, "The Use of Emergency Vehicles in Connecticut," March 1, 1978, pp. 7,11,26,27.

Modify Highway Safety Program Standard No. 11, "Emergency Medical Services," and the NHTSA "Training Program for Operation of Emergency Vehicles " to provide for behind-the-wheel training in the principles and techniques of high-speed driving, and to require that a student successfully complete both a written and a behind-the-wheel examination before he is licensed. (Class I, Urgent Action) (H-79-1).

Urge the States to maintain and make available, through the State driver licensing agency, the records of all licensed emergency vehicle operators so that employers can determine if an applicant for an emergency vehicle driver position is licensed for the operation of emergency vehicles. (Class II, Priority Action) (H-79-2).

KING, Chairman, DRIVER, Vice Chairman, McADAMS and HOGUE, Members, concurred in the above recommendations.

ames B. Chairman

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