

STATEMENT OF JOAN CLAYBROOK, ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION, BEFORE THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS, HOUSE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE, CONCERNING THE SAFE DESIGN AND USE OF CHILD RESTRAINTS, May 7, 1979.

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before your Subcommittee today to discuss the Department of Transportation's efforts to improve the safety of child restraint systems in automobiles and to encourage their proper use. With me today is Mr. Ralph Hitchcock, the head of our crashworthiness activities.

A recent study by the DOT found that safety belt use among front seat occupants of automobiles has declined to a disturbingly low 14 percent. Even worse, estimates place occupant restraint use among the most vulnerable class of passengers, children under the age of ten, at about half this figure. In spite of the fact that auto accidents have become the leading killer of children in the five to nine year old age group*, an appalling 93 percent of young children ride completely unprotected by any type of occupant restraint device.

NHTSA data indicate that close to 1,000 children under the age of five die in automobile accidents each year, and as many as one-hundred times that number are injured. These statistics are particularly tragic in

*With the exception of the 10-14 age group motor vehicle accidents are the leading cause of death for both males and females from age 5 through age 29.

light of estimates that close to 90 percent of these deaths and 75 percent of these injuries could be prevented by proper use of child restraints. In fact, very few cases are known where properly restrained children have been killed in auto accidents and those fatalities which did occur were in serious high speed crashes.

To understand the particular vulnerability of children in auto accidents, it is important to examine the dynamics of an automobile collision and what happens to passengers during a crash. A leading danger to child passengers is the second collision, the contact between the unrestrained occupant and the vehicle interior. Young children, with their high center of gravity and delicate bone structure, are especially susceptible to injury as a result of this type of impact. To make matters worse, children do not deform the padding and other energy absorbing parts of the vehicle's interior the way adults do resulting in a high peak acceleration during the collision.

Objects such as the windshield, steering wheel, and instrument panel become lethal weapons when a child is hurled against them in even a moderate speed crash. If unrestrained at the time of a crash, children become flying projectiles, violently impacting the vehicle interior or other occupants, often head first.

Our recent significant upgrading of occupant protection Standard Number 208 for automatic restraints is not the solution here, since, while use of an adult lap belt is better than a child being completely unprotected, children, particularly infants, cannot be sufficiently restrained by an occupant protection system designed for adults. However, child restraint systems are now commercially available which have been proven effective in crashes at barrier equivalent velocities exceeding 30 miles per hour.

A variety of effective designs are available, including harness-type devices, infant carriers, and child seating systems. With Mr. Hitchcock's assistance, I would like to show you a couple of the designs which we have tested.

(Show examples)

Systems such as these give us the capability to significantly reduce the loss of young lives in auto accidents.

However, when children travel in child restraint systems, it has been estimated that as many as half of them are not properly protected due to misuse of the restraint equipment. Typically, the misuse involves failure to adequately attach a child restraint to the car or failure to properly secure the child in the restraint. Child seats requiring the use of top tether straps and those requiring the child to be buckled into a harness, while providing some

of the best protection available when used properly, are at the same time the most susceptible to misuse.

Our priorities now are to assure that all child restraint devices which are sold to the public are capable of protecting children in a dynamic crash environment, and to see that available systems are in fact used and used properly.

We have outstanding a proposal to make a number of improvements in Standard 213, the Federal safety standard governing child restraint systems. These modifications, which were proposed last year, would replace the existing static test criteria with a dynamic test more closely approximating real world conditions. Use of an anthropomorphic child test dummy is an important improvement proposed for this testing.

To demonstrate the need for dynamic testing, I have with me an example of a child seat which complied with the static test requirements of Safety Standard 213. (Show example) When this device was subjected to a dynamic crash test the level of protection provided quite clearly proved to be inadequate.

Under the proposal, the standard would be made applicable to all types of child restraint devices designed for use in motor vehicles, including car beds and infant carriers, which are not presently covered by the regulations.

In addition, the proposal would promote effective use of child restraint systems by ensuring that adequate labels and instructions are provided.

We recognize that in upgrading child restraint performance requirements a means must be found to keep costs of restraint systems at a level which will assure their practical availability to all parents. While many systems already meet the dynamic test requirements, improving some restraint systems to meet the proposed standard could result in price increases of up to \$14 per unit. For this reason, NHTSA is encouraging money saving measures such as loan-a-seat programs. An example of cooperation from the private sector in this area came recently from the League General Insurance Company which has initiated a program to provide infant car seats to insured parents free of charge upon the birth of a new child.

Before we can proceed to amend the regulations, injury criteria and other test requirements must be refined and issues relating to the provision of proper anchorages must be resolved. Another area of significant public interest is our proposal that restraints relying on tethers be tested with the tethers unattached to assure that the system will perform adequately even when installed improperly. We plan to find answers to these questions and issue

a final rule later this year. Improvements in the child restraints regulations should become effective in the Spring of 1980.

We are also studying the potential of built-in interior padding and child restraint devices and other means of making the vehicle rear seat a safe child transportation environment. These ideas may provide the basis for future rulemaking.

In addition, we are writing to manufacturers to encourage them to supply built-in top tether anchorages in their vehicles. We plan ultimately to initiate rulemaking to require the provision of these anchorages. We are also planning to deal with the frustrating problem created by seat belts that are not long enough to easily accommodate larger child restraint systems.

While we can and will assure that safe and affordable child restraint systems are available to the public, we must do more than this to protect children from the dangers of automobile collisions. The best child restraint system cannot save a child's life sitting on a store shelf, in a car trunk, or if improperly installed or used. As a vital supplement to the rulemaking activities I have outlined, NHTSA is actively involved in an effort to increase public familiarity with and use of child restraints.

One means of increasing child restraint usage is through state mandatory use laws. The State of Tennessee has become the first state in the nation to pass legislation requiring parents and guardians of children under four years of age to provide for the safety of their children while riding in automobiles. Despite an unfortunate and dangerous last-minute amendment permitting children to be held in the arms of an adult passenger, the Tennessee law has led to a significant increase in child restraint usage.

As the Tennessee experience has shown, mandatory-use laws can work as a means of reducing death and serious injury to children. However, public interest and support for child passenger safety on a voluntary basis is essential for the success of any initiative in this area.

The States are also initiating voluntary child restraint use programs. For example, the Michigan Office of Highway Safety Planning operates the Michigan Motor Vehicle Occupant Protection Program, a comprehensive educational effort designed to encourage drivers and passengers to protect themselves with suitable occupant restraints. For expectant parents and parents of young children this program offers a short filmstrip, a pamphlet, a poster, a list of approved crash-tested child restraint devices, information

on setting up a loaner program, and suggestions for effective use of these materials. I am very encouraged that the 1978 Highway Safety Act's 2-percent set-aside of 402 funds for belt use programs has been resourcefully applied by the States in such useful ways as promoting child restraint use.

NHTSA plans to encourage voluntary occupant restraint use through two series of workshops; one with state officials to encourage use of restraints generally and the other with volunteer citizen groups, PTA's, medical auxiliary organizations, pediatricians and highway safety officials targeted to child restraint use. NHTSA's series of ten child restraints workshops is being conducted from April through June with community groups across the country. Sites for these workshops, which include Boston, Kansas City, San Antonio, and San Francisco, were selected to provide a national base of support for NHTSA's efforts in this area. These workshops are designed to increase the level of activity and effectiveness of grass roots community organizations in educating parents on the use of child restraints.

NHTSA hopes, through the workshops, to establish channels for distribution to the public of audio-visual and print materials on child restraints. The Insurance Institute film which we viewed today is being used in these

workshops. We have also developed an information booklet that will assist hospital clinics, and civic and church groups in setting up loan or rental programs and otherwise encouraging the use of child restraints. Materials furnished by Action for Child Transportation Safety, in connection with its participation in our Standard 213 proceeding proved to be very helpful in this area, as did the assistance of Physicians for Automotive Safety.

In addition to the workshops, we are organizing a national public information campaign on passenger restraints using pamphlets, brochures, radio and television announcements, and educational films to make people aware of the life saving potential of all restraint systems. A focal point of our activity will be a National Child Passenger Safety Conference to be held here in Washington in December to promote and coordinate child restraint activities throughout the country.

The United Nations has designated 1979 as the International Year of the Child and has encouraged all nations to carry out special child advocacy activities. I can't think of a better way of doing this than through a program to protect children from the killing and crippling effects of auto accidents.

I thank the Subcommittee for providing an opportunity

to discuss this important subject and for its continued strong support for child transportation safety.

This completes my statement. I would be pleased to answer any questions you might have.