Log H-349

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: December 7, 1982

Forwarded to:

To the Governors or Governors-elect of Alaska, Arizona, Arkansas, Colorado, Georgia, Hawaii, Idaho, Indiana, Iowa, Louisiana, Maine, Maryland, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Vermont, Washington, and Wyoming

SAFETY RECOMMENDATION(S)

H-82-59 and -60

The National Transportation Safety Board recommends that you include in your 1983 legislative program a requirement for the mandatory use of child safety seats for the protection of young children riding in motor vehicles and that you adopt a Statewide child passenger safety program. The Safety Board believes, as a result of its findings in accident investigations and its review of the experience of States which have enacted such legislation and undertaken such a program, that these measures can be used effectively to bring about a significant reduction in deaths and injuries to young children involved in motor vehicle accidents.

Motor vehicle accidents are the leading killer and crippler of children in this country. Children from infancy through age 4 are especially vulnerable to death, disability, and disfigurement, even in minor crashes. In the last 2 years, infants and toddlers through age 4 who were riding in motor vehicles were killed in crashes at a rate of 1 every 13 hours. More than 1,300 were killed during these 2 years, and over 10,000 were seriously injured or permanently disabled. The most tragic aspect of these losses is that they are needless; an estimated 90 percent of the fatalities and the great majority of the injuries could have been prevented by the proper use of child safety seats.

As part of a study of child motor vehicle passenger protection, the Safety Board is conducting a concerted program of in-depth investigations of crashes involving children from infancy through age 4. Enclosed for your information are brief summaries of three accidents. These accidents illustrate crash risks to children unprotected by child safety seats, including the risk of ejection, the danger to children riding in the laps of adults and, in one case, the dramatic difference in crash consequences for two children in the same vehicle, one protected by a child safety seat and one unrestrained. We also are investigating four other crashes in which infants between the ages of 3 weeks and 1 year, who were protected by child safety seats, escaped unharmed (or in one case, with minor injury) when adult occupants in the same vehicle were killed or seriously injured. Other investigations in progress include cases in which young children who were unprotected by child safety seats received facial or other injuries in minor accidents where other restrained or unrestrained vehicle occupants were uninjured.

Motor vehicle accidents are now being recognized as a major public health problem and a proper subject of public health policy. A growing number of States have found that just as State health laws are appropriate to require immunization of children against life-threatening and crippling diseases, young children must be "immunized" by legislation against the consequences of crashes—which kill and cripple more children in this country than any major disease. To date, 23 States have enacted child passenger safety laws, and in 19 of these States the laws include provisions requiring use of child safety seats by the general public. While these laws vary to some extent from State to State, they are consistent in their basic philosophy that new and more effective public programs are needed to deal with this serious safety problem.

The best example to illustrate what can be achieved by such a program is the experience of Tennessee, the first State to undertake a broad-scale child passenger safety program including a law requiring the use of child safety seats. The results now being reported are impressive: since Tennessee began implementing its program in 1978, child safety seat usage rates have tripled and crash fatalities of children in the age group affected by the law have been cut by more than 50 percent. Before the 1977 law, fatalities of child passengers averaged 20 to 25 annually. That number was reduced to 10 in 1981, and the number of fatalities reported for the first 9 months of 1982 was 5. The experience reported in Tennessee indicates that this kind of program can significantly reduce child passenger fatalities in crashes. A brief description of some of the activities undertaken in Tennessee, which have been found valuable there and elsewhere, is enclosed for your information.

The Safety Board believes that in addition to enacting a law requiring use of child safety seats, each State should develop a program of activities to encourage compliance and enhance the effectiveness of the law. These activities should include visible and aggressive enforcement; dissemination to the public of information to assure that the requirements are fully understood; education of the public (both adults and children) to explain the problem and the need for crash protection, as well as to emphasize the importance of proper use of child safety seats; sufficient public and/or private child safety seat loan programs or similar activities to assure the availability of seats in the community and to meet the special needs of low-income families (some of them with two or more children in the affected age group), who would otherwise be unable to comply with the law; and ongoing evaluation of such activities to analyze and measure the results and identify the need for action to further improve child passenger safety policies and programs.

Given the magnitude of the child passenger safety problem and the number of fatalities and injuries that are being incurred by children not protected by child safety seats in crashes, the Safety Board strongly encourages and supports the adoption of public policies and programs which have been demonstrated to be effective in reducing these tragic losses.

Therefore, the National Transportation Safety Board recommends that the Governors or Governors-elect of Alaska, Arizona, Arkansas, Colorado, Georgia, Hawaii, Idaho, Indiana, Iowa, Louisiana, Maine, Maryland, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, Vermont, Washington, and Wyoming:

Include in your 1983 legislative program, legislation to require use of child safety seats for child passengers from infancy through age 4 to reduce the likelihood of death, disability, or disfigurement in motor vehicle crashes. (Class II. Priority Action) (H-82-59)

Develop a Statewide child passenger safety program including aggressive enforcement of laws requiring use of child safety seats, public information and education programs on their need and proper use, child safety seat loan or similar programs, and ongoing evaluation of such activities. (Class II, Priority Action) (H-82-60)

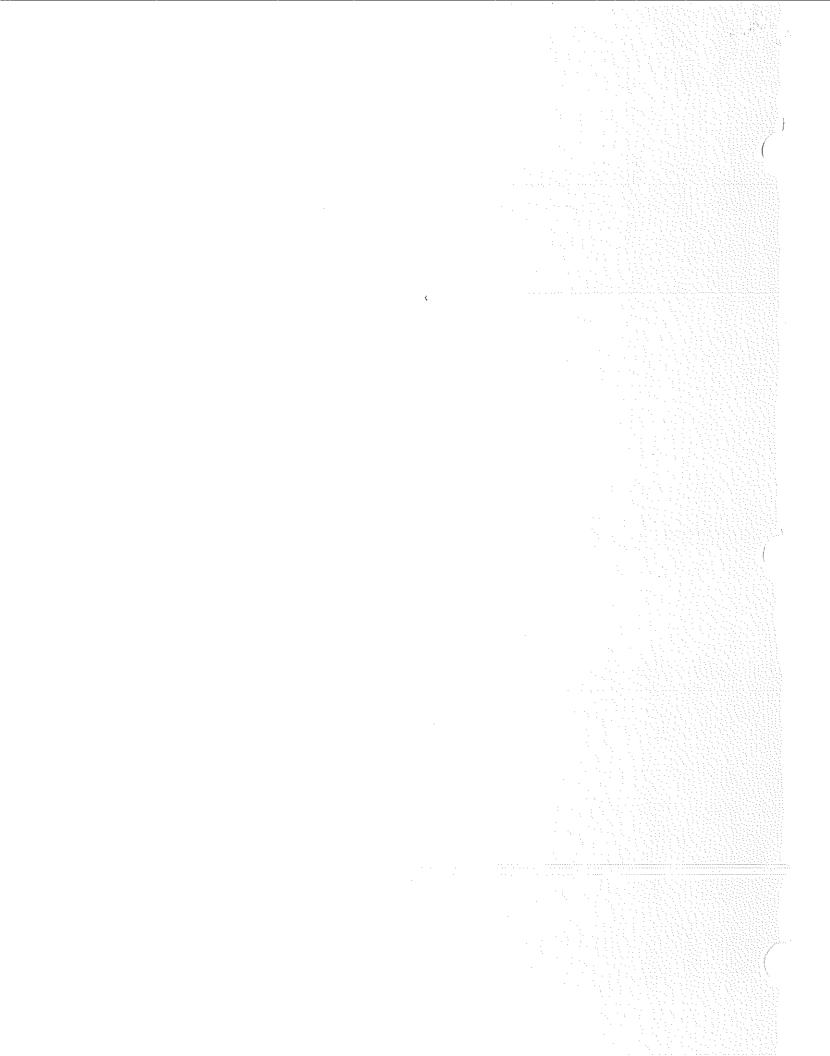
The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "... to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations." (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations. Therefore, we would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in these recommendations.

By: Jim Burnett Chairman

Enclosures:

- 1. NTSB Investigations
- 2. Programs in Tennessee



NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C. 20594

Investigations of Accidents Resulting in Death To Unrestrained Children From Infancy through Age Four

NTSB Investigation No. NYC82HCR02

About 1 p.m. on June 28, 1982, a Volkswagen sedan that was traveling on Columbia Street in Rensselaer, New York, began a left turn into the parking lot of a restaurant and was struck on the right side by a motorcycle. The Volkswagen was occupied by two children in the rear seat, both about 2 years old, and their mothers in the front. One mother (the driver) was uninjured, and the other received a small cut on the right arm. One child, who was riding in a child safety seat, received minor lacerations from flying glass. The child riding next to her who was not protected by a child safety seat died of multiple injuries including a broken neck. The investigation resulted in a preliminary finding that if that child also had been protected by a child safety seat, he probably also would have survived.

NTSB Investigation No. NYC82HCR03

About 12:30 a.m. on July 26, 1982, near Maddox, Maryland, a Chevrolet sedan was traveling on State Route 238 when the vehicle failed to negotiate a curve and went off the side of the road. The vehicle sideswiped a utility pole, went down a shallow embankment and overturned in a soybean field. The vehicle was occupied by a young married couple and their 2-year old daughter, who were returning home after a visit to the child's grandmother. The parents, although not restrained by seatbelts, received only minor injuries in the accident and were not hospitalized. The 2-year-old girl, however, who was sleeping in the rear seat and was not protected by a child safety seat, was thrown from the vehicle and died of massive skull injuries. The investigation resulted in a preliminary finding that the child probably would have survived if she had been protected by proper use of a child safety seat.

NTSB Investigation No. NYC82HCR05

About 5:15 p.m. on July 27, 1982, a Dodge sedan traveling on State Route 417 near Addison, New York, crossed the yellow centerline and collided head-on with a Ford sedan. The Dodge was occupied by three adults and two infants, all of whom were in the front seat unrestrained by either seatbelts or child safety seats. The infants, ages 5 months and 15 months, were each riding in the lap of one of their parents. They were crushed into the dashboard by the weight of their parents' bodies and died of massive skull injuries. The parents and the driver of the Dodge survived with minor injuries. The investigation resulted in a preliminary finding that the two infants probably also would have survived if they had been protected by proper use of child safety seats.

Examples of Child Passenger Safety Activities in Tennessee

When Tennessee enacted a law in 1977 requiring the use of child safety seats, a variety of means were used to encourage compliance with the law. 1/ The University of Tennessee was awarded a grant to develop and implement a 3-year program of public information, education, and evaluation which included use of 750,000 brochures, highway billboards, television and radio public service announcements, articles and features in some 200 newspapers, in-service training programs for police, seed dollars for child safety seat loan programs, and periodic statewide surveys to monitor usage rates.

Innovative, positive enforcement initiatives by the Tennessee Department of Safety have included the placement of child safety seats in all 800 trooper cruisers to be loaned to ticketed violators of the law with the understanding that if a parent provides proof of purchase of a child safety seat, the trooper will petition the court to suspend the fine and court costs. This innovative enforcement program creates a positive public perception of the officer issuing a citation and is considered one of the most effective public relations programs conducted by the Tennessee Highway Patrol. In addition, by 1982 child safety seat loan programs had been established in 75 County Health Departments.

As a result of Tennessee's successful experience, the same or similar kinds of activities are being undertaken by 22 other States to require or encourage proper protection for young children against death and injury in crashes.

^{1/} Dr. Robert S. Sanders, M.D., "Legislative Approach to Auto Safety: the Tennessee Experience," in Ross Roundtable, Ross Laboratories, Columbus, Ohio, January 1982.