

Log H-313

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

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Forwarded to:

Mr. Norman Darwick
Executive Director
International Association of Chiefs of Police
11 Firstfield Road
Gaithersburg, Maryland 20760

SAFETY RECOMMENDATION(S)

H-82-62 and -63

On September 7, 1983, the National Transportation Safety Board completed a safety study of child motor vehicle passenger protection. ^{1/} For the purpose of the study, the Safety Board conducted 3 regional public hearings and investigated 53 accidents involving infants and small children, restrained and unrestrained, in 19 States. The study highlighted the dangers to unrestrained children in accidents and noncrash incidents, such as sudden stops, and underscored the lifesaving and injury-prevention potential of child safety seats. As a result of the study, the Safety Board concluded that misuse of child safety seats is a significant problem which requires considerably increased emphasis.

Widespread misuse of safety seats was found in the accidents investigated. Only 6 of the 34 child safety seats in which children were riding when the accident occurred were being used properly. The remaining 28 safety seats involved in the accidents were being misused. Although the accidents investigated were not selected to provide a statistically representative sample, the widespread incidence of misuse in the accidents investigated is generally consistent with the extensive incidence of misuse identified by Physicians for Automotive Safety in observational surveys of child safety seats in normal everyday use.

In the accidents involving the 28 safety seats that were misused, the misuse conditions, the accident circumstances, and the impact severity varied. Nineteen safety seats provided sufficient protection under certain misuse conditions to prevent or minimize injury to 19 children under the circumstances of the accidents in which they were involved. However, the remaining nine safety seats that were misused did not provide sufficient protection; eight of those accidents resulted in five children being killed and three being injured. In six of the eight accidents, proper use of safety seats probably would have prevented the deaths or prevented or minimized the injuries to the children.

The most common usage error in the accidents investigated was nonuse or misuse of a tether strap when its use was required. In 12 cases, the required tether strap was not used at all, and in 2 cases, the tether strap was misused (either tied to a vehicle seatback or to a door latch). Surveys by the Physicians for Automotive Safety have found that the incidence of nonuse of a required tether is between 70 and 80 percent, and with misuse (incorrect tether attachment) included, this figure rises to between 80 and 90 percent.

^{1/} For more detailed information, see Safety Study--"Child Passenger Protection Against Death, Disability, and Disfigurement in Motor Vehicle Accidents" (NTSB/SS-83/01).

Failure to fasten the safety harness around the child and failure to secure the safety seat to the vehicle had the most critical effect in degrading safety seat performance in the accidents investigated. In three of the nine cases in which a safety seat did not provide protection under misuse conditions, it was evident that the safety seat was being used only as a place for the child to sit, and not for protection. In the three cases, either the safety harness was not fastened around the child (and there was no armrest or shield in front of the child), or the safety seat was not secured by a safety belt, or both.

Fortunately, safety seats are "forgiving" in the sense that, in many accidents, a safety seat will still provide protection against death or injury under some misuse conditions and, in some cases, will provide partial protection although some injury may occur. However, unless effective ways are found to combat the misuse problem, accidents involving needless fatalities and injuries to children riding in safety seats that are misused can be expected to increase. To combat and reduce the misuse problem, improvements are needed in many areas, including the public education and the safety seat loan components of child passenger safety programs, police training, traffic accident data systems, and safety seat design, instructions, and labeling.

In some States, law enforcement agencies are not conducting an active enforcement campaign. While much of the focus of child passenger safety efforts has been concentrated on the passage of legislation and the development of public information and education programs, there is a growing recognition that the implementation of the laws, and especially their enforcement, have not received sufficient attention. An increasing number of jurisdictions are finding that the passage of a child passenger protection law is just the beginning, and that a considerable amount of effort is required for effective planning and coordination of its implementation.

A critical element of implementation is the training and education of law enforcement officers in the positive role that they have in enforcing a child passenger protection law. It cannot be assumed that individual officers and their supervisors at all levels will automatically be supportive and committed to enforcing a child passenger protection law in the absence of such training and of a written enforcement plan.

For both law enforcement and accident investigation purposes, police need sufficient general familiarity with safety seat use to recognize the most common or obvious usage errors and to use manufacturers' instructions to determine whether or not safety seats involved in crashes were used properly. The incorporation of safety seat use/misuse data in accident investigation reports and the statewide traffic accident data compiled from investigative reports also is needed to identify the kinds of problems that are occurring.

In the course of normal law enforcement activities, law enforcement officers have significant opportunities to identify usage errors, to provide the user with information on how misuse errors can degrade safety seat performance, and to encourage corrective action. Data on safety seat use and misuse in actual crashes, which could be collected in police traffic accident reports and could be included in a State's traffic accident data system, are needed to identify the kinds of problems that are occurring, as a basis for adjusting child passenger safety programs to combat those problems more effectively. Some jurisdictions have conducted training for police on safety seat use and an increasing number of jurisdictions have attempted to improve the occupant restraint data collected in accident investigations and to ensure that child safety seat data are reported to the traffic accident data system. Generally, however, these kinds of activities have been limited. In virtually all of the Safety Board investigated accidents which involved safety seat misuse, the misuse was not identified in the police report of the accident.

Another reason for police training to identify safety seat misuse is that, in some cases, news reports relying on police-reported information will report that a child was killed in an accident while riding in a safety seat without reporting, for example, that the safety harness was not fastened around the child and that the child was, in effect, unrestrained. One accident investigated by the Safety Board in North Carolina was originally reported as involving an infant killed in a safety seat. The investigation established that the safety seat was being carried loose and unused in the rear of the car when the accident occurred. The prompt identification of safety seat misuse (or nonuse) in accidents can help to avoid unintentionally misleading media reporting which may undermine the public child passenger safety education efforts undertaken by State and local jurisdictions.

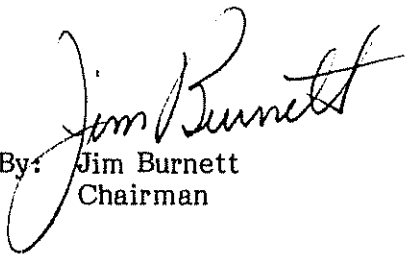
Therefore, as a result of its Safety Study of Child Passenger Protection Against Death, Disability, and Disfigurement in Motor Vehicle Accidents, the National Transportation Safety Board recommends that the International Association of Chiefs of Police:

Coordinate and promote the development of training programs for State and local law enforcement officers on the use and misuse of child safety seats and safety belts for law enforcement and accident investigation purposes. (Class II, Priority Action) (H-83-62)

Promote the use of statewide traffic accident data systems to collect and analyze specific data identifying the use and misuse of child safety seats and safety belts in motor vehicles involved in accidents and the consequences of such use and misuse. (Class II, Priority Action) (H-83-63)

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

