

Policy Statement: School Bus Safety

In 1970, the American Academy of Pediatrics, in a supplement to Pediatrics, reviewed the laws, regulations, and practices in school busing in the United States. This survey was carried out by Physicians for Automotive Safety. The information available at that time (from 46 states) indicated that 14,709,000 students were being transported in a total of 203,994 vehicles. Recent data now indicates that approximately 22 million pupils are transported daily to and from schools in the United States in nearly 400,000 school buses.

Based in part on the recommendations resulting from the 1970 survey, the National Highway Traffic Safety Administration in February 1973 issued the Federal Motor Vehicle Safety Standard (FMVSS-222), which became effective in April 1977. That standard prescribed passive protection for school bus passengers and looked specifically at: 1) the seat and seat anchorage strength; 2) the seat and restraining barrier height and surface area; and 3) padding on surfaces within occupants' head space.

The National Highway Traffic Safety Administration subsequently has denied a petition from Physicians for Automotive Safety that the FMVSS-222 include requirements for anchorage's for seat belts. Seat belts presently are required in vehicles weighing 10,000 or less with a maximum passenger capacity of 16. Seat belts are not required for larger school buses.

The primary reason given for not requiring seat belts in buses weighing more than 10,000 pounds is that the number of "inside bus fatalities" nationally does not justify the expense and maintenance of seat belts. However, in 1982 there were 140 deaths resulting from school bus accidents. Included in this total were 60 pupils, 5 bus drivers and 75 "others". In addition, there were 7,000 reported injuries; 4,200 of those injured were students. Therefore, should the number of deaths alone not justify changes, the potential for a reduction in the number of injuries, and/or in the seriousness of those injuries would seem to make further changes in FMVSS-222 highly desirable.

Unsupported arguments have been presented in an effort to prevent seat belt installation on school buses. Among these are:

1. Children can't handle the buckle adequately. (The American Academy of Pediatrics notes that all children, given their familiarity with seat belts and buckles, should be able to satisfactorily buckle and unbuckle seat belts.)
2. The buckles would entrap children and could leave them dangling from the ceiling in accidents, which the bus is overturned. (This is true, but it is still preferable for children to be strapped in rather than thrown out of the seat or the vehicle at the time of an accident.)
3. Wearing seat belts would produce internal injuries. (With the restraints presently available, and school aged child can safely wear a seat belt.)
4. Children could use the belts as weapons. (Children have much better weapons available, including lunch boxes and books. In addition, the newer, lightweight,

smaller, retractable seat belts now available are unlikely to be effective as weapons.)

Based on a review of the available and extensive data, the American Academy of Pediatrics supports the following changes in School Bus Safety Standards:

1. Seat backs should be elevated to 28 inches. This is four inches above the height now mandated by federal regulations and will support and cushion a child's head and neck.
2. All seat backs and tops should be padded with firm a material that adequately absorbs impact. The padding should completely cover the entire rear of the seat in addition to the top rail. The padding also should be placed on all stanchions and "modesty panels." Seat construction should be designed to eliminate sharp or unyielding objects that could cause or worsen injury.
3. Seat belts should be required on all newly manufactured school buses- regardless of their size and the number of pupils transported.
4. Adequate and appropriate bus driver training should be mandatory in all school districts and should include provision for health screening on a periodic basis, including vision and hearing evaluations.

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References:

Charles S, Shelness A: How Safe is Pupil Transportation? Study of Laws, Regulations, and Practices in School Busing in the United States Carried Out by Physicians for Automotive Safety. Supplement to *Pediatrics* January 1970, Part II, 45:1.

Protection for school Bus Occupants, Issue Paper, U.S. Department of Transportation, September 1981; 83:39-46

National safety Council: School Bus Accidents 1982. Accident Facts, 1983 ed., Chicago, IL. P. 92.