National Highway Traffic Safety Administration Guideline for the Safe Transportation of Pre-school Age Children in School Buses

February 1999

Introduction

School age children transported in school buses are safer than children transported in motor vehicles of any other type. Large school buses provide protection because of their size and weight. Further, they must meet minimum Federal motor vehicle safety standards (FMVSSs) mandating compartmentalized seating, improved emergency exits, stronger roof structures and fuel systems, and better bus body joint strength.

As more pre-school age children are transported to school programs, often in school buses, the public is increasingly asking the National Highway Traffic Safety Administration (NHTSA) about how to safely transport them. To help answer these questions, NHTSA conducted crash testing of pre-school age size dummies in school bus seats. The test results showed that pre-school age children in school buses are safest when transported in child safety restraint systems (CSRSs) that meets FMVSS 213, Child Restraint Systems, and are correctly attached to the seats.

Based on its research, NHTSA recommends pre-school age children transported in school buses always be transported in properly secured CSRSs. In partial response to questions from school (and child care) transportation offices, this Guideline seeks to assist school and other transportation managers in developing and implementing policies and procedures for the transportation of pre-school age children in school buses.

Note: The proper installation of CSRSs necessitates that a school bus seat have safety belts or other means of securing the CSRS to the seat. NHTSA recommends that lap belts or anchorages designed to meet FMVSS 225, Tether Anchorages and Child Restraint Anchorage Systems, be voluntarily installed to secure CSRSs in large school buses.

RECOMMENDATIONS FOR THE TRANSPORTATION OF PRE-SCHOOL AGE CHILDREN IN SCHOOL BUSES

When pre-school age children are transported in a school bus, NHTSA recommends these guidelines be followed:

(1) Each child should be transported in a Child Safety Restraint System (suitable for the child's weight and age) that meets applicable Federal Motor Vehicle Safety Standards (FMVSSs).

(2) Each child should be properly secured in the Child Safety Restraint System.

(3) The Child Safety Restraint System should be properly secured to the school bus seat, using anchorages that meet FMVSSs. Guideline For The Safe Transportation Of Pre-School Age Children In School Buses

Child Safety Restraint System Defined

A Child Safety Restraint System is any device (except a passenger system lap seat belt or lap/shoulder seat belt), designed for use in a motor vehicle to restrain, seat, or position a child who weighs less than 50 pounds.

Child Safety Restraint Systems Guideline

1. Child Safety Restraint System Specifications

The provider of the CSRS should ensure:

Each pre-school age child to be transported has a CSRS appropriate for the child=s weight, height, and age.

Each CSRS meets all applicable FMVSSs (look for the manufacturer=s certification on the label attached to the system).

Each CSRS has been registered with the CSRS's manufacturer to facilitate any recalls the manufacturer might conduct.

If the CSRS is the subject of a recall, any necessary repairs or modifications have been made to the manufacturer's specifications.

Each CSRS is maintained as recommended by its manufacturer, including disposal of any CSRS that has been involved in a crash.

2. Proper Securement

The transportation provider should ensure:

The CSRS is used and secured correctly in the school bus.

Each child is secured in CSRSs according to manufacturer=s instructions.

All CSRS attachment hardware and anchorage systems meet FMVSS 210, Seat Belt Assembly Anchorages or FMVSS 225, Tether Anchorages and Child Restraint Anchorage Systems. School bus seats designated for CSRSs meet FMVSS 225, or include lap belts that meet FMVSS 209, Seat Belt Assemblies, and anchors that meet FMVSS 210 (designed to secure adult passengers or CSRS).

Personnel responsible for securing CSRSs onto school bus seats and children into CSRSs are properly trained and all personnel involved with CSRSs are provided up to-date information and training.

When transported in the school bus, pre-school age children are supervised according to their developmental and functioning level.

3. School Bus Seats Designated for Child Safety Restraint Systems

The transportation provider should ensure:

School-bus seats designated for CSRSs are located starting at the front of the vehicle to provide drivers with quick access to and a clear view of the CSRS occupants.

CSRS anchorages on school bus seats should meet all applicable FMVSSs.

When ordering new school buses, the maximum spacing specified under FMVSS No. 222, School Bus Passenger Seating and Crash Protection, (within 24 inches from the seating reference point) is recommended for seats designated for CSRSs to provide adequate space for the CSRSs.

The combined width of CSRS and/or other passengers on a single seat does not exceed the width of the seat.

If other students share seats with the CSRSs, the CSRSs are placed in window seating position.

4. Retrofitting School Buses

The transportation provider should ensure:

Existing school bus seats should only be retrofitted with lap belts or child restraint anchorages as instructed by the school bus manufacturer.

When a school bus is retrofitted with a seat to allow for proper securement of a CSRS, instructions obtained from the school bus or seat manufacturer on how to install the seat and restraint systems should be followed.

When a school bus is retrofitted, the bus owner should ensure that seat spacing is sufficient for the CSRS to be used.

5. Evacuation

The transportation provider should ensure:

The establishment of a written plan on evacuating pre-school age children and other passengers in CSRSs in the event of an emergency. This written plan should be provided to drivers, monitors, and emergency response personnel. The plan should explicitly state how children (both in and out of the CSRS) should be evacuated from the school bus.

Evacuation drills are practiced on a scheduled basis, at least as often as that required for the school system=s school-aged children.

All personnel involved in transporting children are trained in evacuation and emergency procedures, including those in the written school bus evacuation plan.

All school buses carrying children in CSRSs carry safety belt cutters that are accessible only to the driver and any monitors.

CSRSs are not placed in school bus seats adjacent to emergency exits.

Local emergency response teams are provided copies of the written school bus evacuation plan, including evacuation of pre-school age children. Emergency response personnel should be invited to participate in evacuation drills.

6. Other Recommendations

The school transportation provider should establish a policy on whether they or the child=s guardian must supply a CSRS to be used on a school bus. School bus purchases should be based on the needs of a projected student population, taking into consideration projected ages, sizes, and other characteristics of the students, including any special needs, and whether pre-school age children or medically fragile students will be transported.

Specified procedures should be established for loading and unloading children in CSRSs.

Procedures should be established for the periodic maintenance, cleaning, and inspection for damage of CSRSs. Procedures should be established to train personnel involved in direct service delivery of infants, toddlers, and pre-school children on the physical day-to day handling of these young children and means to handle potential exposure to contagious and communicable diseases.

When school bus procedures are established, it should be noted that some children in CSRSs may have special needs, including medical fragility, that must be addressed on a child-by-child basis. Guideline For