



SEATED, SAFE & SECURE



100
years
OF SERVICE

Keeping Kids Seated, Safe & Secure

AAA Public Affairs

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January 2002



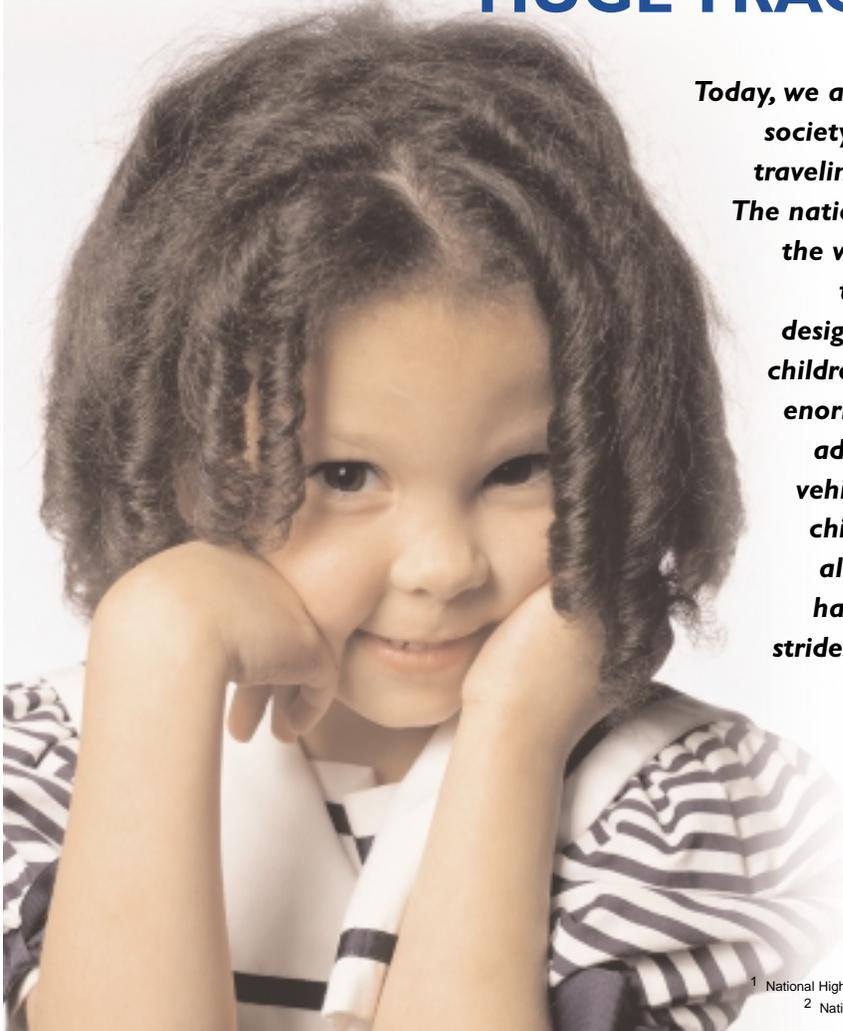
SEATED, SAFE & SECURE

A GUIDE TO
**Child
Passenger
Safety**



Motor vehicle crashes killed a staggering total of 2,343 children 14 years of age and under in 2000, and injured nearly 300,000 others¹. That's an average of six children killed and nearly 800 injured each day — enough to rank motor vehicle crashes as the number one killer of children in the United States². Tragically, many of these deaths and injuries could have been prevented. In fact, the National Transportation Safety Board estimates the number of deaths and injuries could be reduced by half each year if every child passenger was properly restrained in a motor vehicle.

Small Passengers: HUGE TRAGEDIES



Today, we are a highly mobile society, and children are traveling more than ever. The nation's roadways and the vehicles that travel them were neither designed nor built with children in mind. It's an enormous challenge to adapt roadways and vehicles to ensure our children's safety, and although the nation has made significant strides in child passenger safety during the past 25 years, improvements still need to be made.

¹ National Highway Traffic Safety Administration, 2001.

² National Transportation Safety Board, 2000.

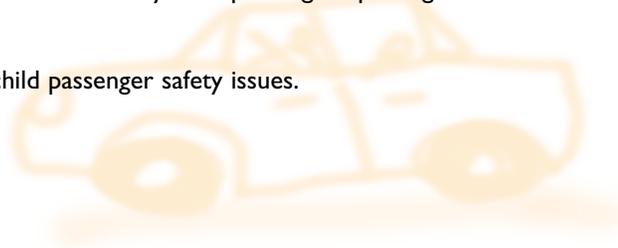
A A A ' S R O L E

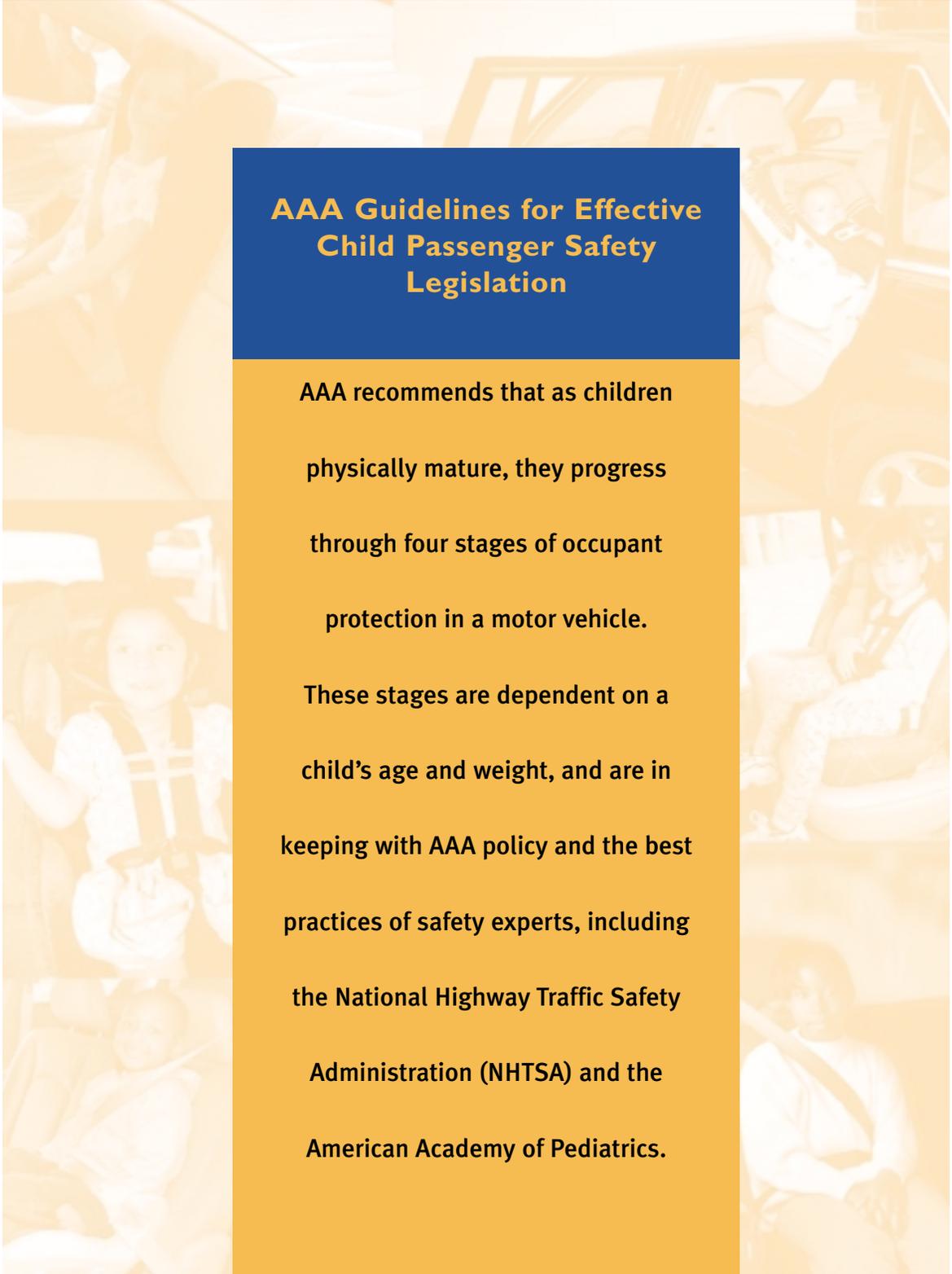
F O R A C E N T U R Y , AAA has worked to promote a safe environment for travelers through education, research and advocacy. From the beginning, AAA has been a leader in developing, implementing and supporting driver and traffic safety programs for motorists, pedestrians, cyclists and children. So it's appropriate that as AAA enters our second century of public service, we focus on the nation's most precious commodity: our children.

AAA is committed to public service and has a long history of teaching children about important traffic safety principles. Through sponsorship of the *AAA School Safety Patrol Program*, the national school safety poster program and providing educational materials for teachers, AAA clubs around the country are committed to improving the safety of children in and around motor vehicles.

AAA believes educating the public about the proper use of safety seats and restraints for all children, and closing loopholes that exist in virtually all state laws, are key to preventing child passenger injuries and deaths. Studies have shown that neither of these "fixes," when used independently of the other, is as successful as a combination of the two. AAA will mark our 100-year anniversary in 2002 by launching a new nationwide public service campaign — *Seated, Safe & Secure* — to do just that. The campaign will focus on:

1. Changing behavior by increasing public awareness through education.
2. Passing laws in every state and the District of Columbia by 2005 to close loopholes in occupant protection laws and ensure that every child passenger up to age 18 is properly restrained.
3. Serving as a national resource for child passenger safety issues.



A collage of four images showing children in various stages of car seat use: a baby in a car seat, a young child in a booster seat, a child in a car seat, and a child in a car seat.

AAA Guidelines for Effective Child Passenger Safety Legislation

AAA recommends that as children physically mature, they progress through four stages of occupant protection in a motor vehicle.

These stages are dependent on a child's age and weight, and are in keeping with AAA policy and the best practices of safety experts, including the National Highway Traffic Safety Administration (NHTSA) and the American Academy of Pediatrics.

S t a g e

REAR-FACING CHILD SAFETY SEAT

CHILDREN UP TO THE AGE OF ONE and who weigh up to 20 pounds should always be restrained in a federally approved, properly installed and used, rear-facing child safety seat.

However, they can remain rear-facing beyond these parameters to the upper limit of the child safety seat. While age is the most important factor due to developmental issues, both age and weight requirements should be met before a child is moved to a forward-facing seat. The rear-facing position supports the child's head, neck and back, and helps reduce stress to the neck and spinal cord in a crash.



S t a g e

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FORWARD-FACING CHILD SAFETY SEAT



CHILDREN OLDER THAN ONE and who weigh more than 20 pounds should be restrained in a federally approved, properly installed forward-facing child safety seat until they reach 40 pounds (which is usually around four years of age). These seats include an internal harness system which keeps a child properly restrained and snug straps which limit the forward motion of a child, providing greater “ride down.” The forward-facing position provides for the even distribution of physical forces over a child’s body in the event of a crash.



S t a g e



Elective Use of Booster Seats

THE BEST PRACTICE
suggested by safety

experts calls for children between

four and eight years of age who weigh over 40 pounds and are under 4 ft. 9 in. to be restrained in booster seats. Research shows that poorly fitting adult seat belts can injure children and that booster seats help ensure proper seat belt placement. However, specific guidelines as to who should use booster seats and performance specifications for booster seats — in the form of federal motor vehicle safety standards — are lacking for children who weigh more than 50 pounds. Consequently, no standards exist against which manufacturers can test their seats. While booster seats provide adequate protection for children weighing less than 50 pounds, it is unclear how long children should remain in them. The federal government is currently studying booster seats and more information is expected in the future. AAA supports additional research with the goal of accumulating more specific data and injury criteria.

S t a g e



4

LAP AND SHOULDER BELT

CHILDREN UNDER 13 YEARS OF AGE should be properly restrained in the back seat. Studies show that a child's risk of being killed

in a crash decreases by one-third when he/she is properly restrained in the back seat of a motor vehicle. Teenagers should wear lap and shoulder belts in every seating position in a motor vehicle.



WHAT GAPS EXIST IN STATE LAWS?

While all 50 states and the District of Columbia have laws that require the use of child safety seats, many gaps and inconsistencies exist. Most states only require children to be in a restraint system up to age four, giving parents the false impression that after this age children are safe when restrained in an adult lap/shoulder belt. Since seat belts are designed to restrain adults, children using ill-fitting adult belts are at greater risk of injury or death. Even the most safety-conscious parents are often unaware of the dangers of placing their children in adult lap/shoulder belts that fit improperly.

All state child passenger safety laws must be examined to identify and eliminate exemptions that expose children to injury and death. For example, in some states children are permitted to ride unrestrained in pick-up truck beds and in the cargo areas of station wagons and sport utility vehicles. These areas are designed to carry cargo — not people — and do not provide protection in a crash. Children can be tossed around in truck beds and easily ejected from vehicles. The good news is that more than half the states and the District of Columbia have laws that prohibit passengers in cargo beds, although few provide comprehensive protection for all children under age 16.

In nearly half the states, children can ride unsecured if all seat belts are in use. Similarly, in some states, parents are permitted to attend to the personal needs of their children (i.e., changing diapers and nursing), thus encouraging them to carry children on their laps. And in many states, securing children in a seat belt or child restraint is not required if the vehicle or driver is from another state. These loopholes endanger children and must be closed.

HOW EFFECTIVE ARE CHILD RESTRAINTS?

Research by NHTSA shows that seat belts are the single most effective safety device in preventing serious injuries and reducing fatalities in motor vehicle crashes. Seat belts have been shown to reduce the risk of fatal injury by 45 percent and the risk of serious injury by 50 percent. Child safety seats have been shown to reduce fatal injuries to infants by 71 percent, and children 1 to 4 years of age by 54 percent — yet not all states require their use for children up to age four.



ARE CHILDREN SAFER IN THE BACK SEAT OF A MOTOR VEHICLE?

The back seat is safer for everyone — especially children under age 13. Research by the Insurance Institute for Highway Safety determined that properly restraining a child in the back seat can reduce the risk of death by 35 percent in vehicles without passenger-side airbags and 53 percent in vehicles with passenger-side airbags. Currently, ten times as many children ride in the front seat than is necessary, i.e., the vehicle has no back seat.

DO PARENTS BELIEVE THEIR STATE LAW ADEQUATELY PROTECTS THEIR CHILDREN?

A recent study conducted by NHTSA and DaimlerChrysler Corporation found that nine out of ten parents believe that if they adhere to their state's current child passenger safety laws, they are taking the steps necessary to protect their children. In reality, by following their state's laws, many parents are under a false sense of security and are unknowingly endangering their children.

ARE THESE LAWS ENFORCEABLE?

Yes, to the extent that any law is enforceable. To be successful, virtually all laws require voluntary compliance on the part of the people affected by them. Child passenger protection laws need to be written clearly so that violations can be detected easily.

One of the problems with these laws is that they can be difficult to enforce. In order to be effective, they need to be written so they are enforceable by law enforcement. Police officers prefer laws that have an age requirement because they are easier to enforce. Age is a convenient reference because officers do not carry a scale or a tape measure with them to determine the height and weight of a child. Many parents do not even know how tall their child is or how much he/she weighs. However, parents usually know the age of their children, and most children themselves, know their age.

IS LEGISLATION ENOUGH?

While strengthening state laws is an important and necessary first step to improving child passenger safety,

a change in behavior cannot be achieved if tough laws are not paired with enforcement and education. Law enforcement officers must understand and enforce laws with consistency. Consequently, the enactment of any new child passenger safety law must be accompanied by an outreach and education campaign geared not only to parents and caregivers, but also to the law enforcement community as well. In spite of good intentions, even police may be confused by the existing laws, and therefore may not enforce them properly.



AREN'T THESE LAWS JUST MORE GOVERNMENT INTERFERENCE IN OUR PRIVATE LIVES?

Absolutely not. States maintain and patrol roads in this country, and set rules and regulations for everyone's safety. Motor vehicle crashes are the leading cause of death for people under age 35. Each year, on average, nearly 1,800 children 14 and under die in motor vehicle crashes, and more than 274,000 children are injured. In 2000, there were 529 passenger vehicle fatalities among children under 5 years of age — 47 percent of these children were totally unrestrained.

States have a vested interest in keeping citizens, especially children, safe. States also have many laws that address the best interests of a child — including requiring children to attend school until they are 18 years old.

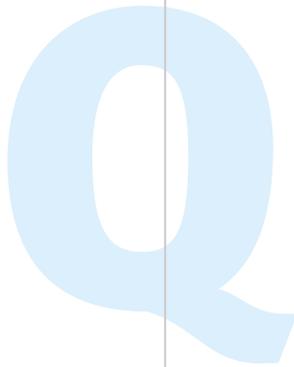
HOW DO SEAT BELT LAWS FOR ADULTS AFFECT CHILDREN?

Studies show that parents who wear their seat belts are more likely to properly restrain their children and that seat belt use is significantly higher in states with primary enforcement laws that allow law enforcement to pull drivers over for a seat belt violation. NHTSA recently conducted the *National Occupant Protection Use Survey*, which found that seat belt use in states with primary enforcement seat belt laws was 77 percent, compared with 64 percent in states that do not require the use of seat belts. NHTSA estimates that drivers who buckle up do the same for children riding with them 87 percent of the time. This percentage decreases to 76 percent when drivers are not buckled.

IS THE MISUSE AND IMPROPER INSTALLATION OF CHILD RESTRAINTS A MAJOR PROBLEM?

Misuse and non-use of child restraints are widespread problems that must be addressed to reduce injuries and deaths of children in motor vehicle crashes. NHTSA estimates that as many as 68 deaths could be prevented each year by addressing the misuse/non-use problem. In a 1996 study on the misuse of child safety seats, NHTSA discovered that 80 percent are used incorrectly, and anecdotal evidence indicates this number is even higher. Misuse includes: child safety seats that are incompatible with the vehicles they are used in; complicated installation instructions; and placing children in safety seats inappropriate for their age and weight. People in all educational and socioeconomic groups use safety seats incorrectly. This is partly attributable to the variety and combinations of child restraints and vehicle belt systems available and in use.

What is clear is that even well-intentioned parents and caregivers who do not properly restrain their children place them in



grave danger of death or injury in a motor vehicle crash.

According to NHTSA, approximately 60 percent of children killed in motor vehicle crashes each year are completely unrestrained.

In 2000, 27 percent of children killed in motor vehicle crashes were four years old and younger; 36 percent were between five and nine years of age; and 44 percent were between 10 and 14 years old.

Misuse and non-use are major factors in the death and injury of children because parents and caregivers lack education on the dangers children face when they are improperly restrained in a motor vehicle. Severe injury or death of a child is an unacceptable price to pay for inadequate knowledge.

HOW DO I KNOW WHEN AN ADULT SEAT BELT FITS MY CHILD?

Seat belts properly fit children when they can sit with their backs straight against the vehicle seat back cushion and their knees can bend over the seat edge without forcing the child to slouch. The seat belt should fit the child low across the hips and thighs, and across the shoulder and chest. It should not cut into the child's abdominal area, neck or face.

WHAT TYPES OF INJURIES COULD A CHILD SUSTAIN IF HE/SHE IS GRADUATED TO A SEAT BELT TOO EARLY?

On a small child, an adult lap belt rides up over the stomach and the shoulder belt cuts across the neck. In a crash, this situation could cause "lap belt syndrome" — a serious or even fatal injury. Out-of-position lap belts place forces on areas of the abdomen that can cause serious injuries to the liver, spleen or



bowel. Additionally, as the child's upper body jack-knives over the high-riding lap belt, the spine may pivot at a point that can cause lumbar fractures or paralysis. The shoulder portion of the belt should never be placed behind the child's back to adjust for improper fit.

WHAT PURPOSE DOES A BOOSTER SEAT SERVE?

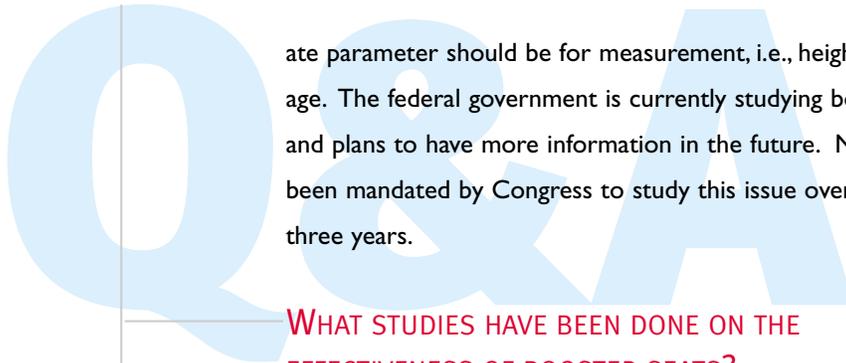
Booster seats are designed to elevate a child so the shoulder belt fits properly across the collarbone and the lap belt fits across the pelvis. Research shows that poorly-fitting adult belts



can injure children and that booster seats help ensure proper belt placement. Seat belts in vehicles are manufactured to fit adults, so it's no surprise they don't fit young children properly.

WHAT ARE THE FEDERAL STANDARDS RELATING TO BOOSTER SEATS?

The federal government currently does not have performance standards for booster seats for children who weigh more than 50 pounds. Consequently, no standards exist against which manufacturers can test their seats. While booster seats provide adequate protection for children under 50 pounds, it is unclear how long children should remain in them or what the appropri-



ate parameter should be for measurement, i.e., height, weight or age. The federal government is currently studying booster seats and plans to have more information in the future. NHTSA has been mandated by Congress to study this issue over the next three years.

WHAT STUDIES HAVE BEEN DONE ON THE EFFECTIVENESS OF BOOSTER SEATS?

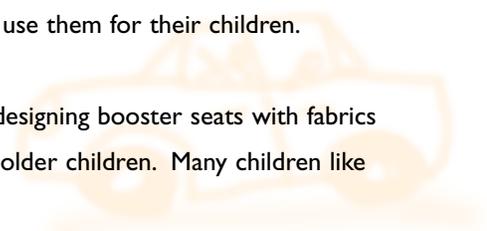
Although preliminary results of a study conducted by the Children’s Hospital of Philadelphia and State Farm Insurance suggest that booster seats are effective at reducing injuries, the study does not provide evidence on how long children should stay in booster seats.

What we do know is that restrained children are less likely to be injured in a crash than unrestrained children and that a proper fitting seat belt is an important factor in injury prevention during a crash. We also know that booster seats, when properly used, help ensure the proper fit of the seat belt.

HOW ARE WE GOING TO CONVINC PARENTS AND CHILDREN TO USE BOOSTER SEATS?

Education is the key to convincing parents and children to use booster seats. A recent study by Wirthlin Worldwide found that although 88 percent of parents and caregivers are aware of booster seats, only 23 percent use them for their children.

Manufacturers are currently designing booster seats with fabrics and accessories that appeal to older children. Many children like



booster seats: the seat belt fits them more comfortably and they are able to see out vehicle windows more easily.

Parents must be educated to understand that booster seats are an important tool in properly restraining their child and that an improperly fitting seat belt could result in serious injuries.

WHAT ABOUT LOW-INCOME FAMILIES WHO CAN'T AFFORD CAR SEATS OR BOOSTER SEATS?

Several automobile manufacturers have outreach programs dedicated to making car and booster seats available for low-income families:

- General Motors has partnered with the National Association for the Advancement of Colored People, the National Council of La Raza, Safe Kids and America's Promise to provide car seats to low-income families.

- DaimlerChrysler has launched a million-dollar child safety seat initiative in minority communities. This campaign is in partnership with flagship hospitals in several United



States cities to provide educational tools to Hispanic, African-American and other minority families. DaimlerChrysler will also distribute child safety seats to low-income families in these cities.

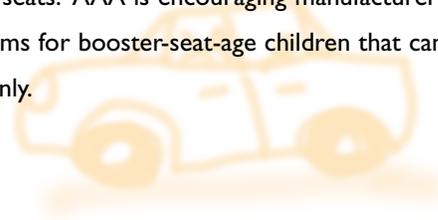
• Ford Motor Company and 23 leading national organizations, including AAA, created Boost America!, a highway safety campaign designed to encourage parents and children that booster seats are a safe and fun way to ride in a vehicle. Ford has pledged to donate one million booster seats — half of which are to be distributed to low-income families.

Federal grant programs in existence in many states allow for child safety seat distributions. Many community organizations, including some AAA clubs, also give away child seats and booster seats to low-income families.

WHAT ABOUT FAMILIES WHO HAVE PICK-UP TRUCKS AND/OR LAP BELTS ONLY?

Since 1996, pick-up trucks that have a passenger-side airbag and a back seat too small for a child safety seat have been required to be equipped with an airbag deactivation mechanism. However, passenger-side airbags were placed in older model trucks with small back seats for many years before 1996, which poses a problem for transporting children, especially infants that should be restrained rear-facing. An after-market on/off switch for the airbag is available and should always be used in these older model vehicles.

Vehicles that have lap-only belts pose a problem when restraining children over the age of four. Retrofitting the motor vehicle for a lap and shoulder belt is the best option for children who need to ride in booster seats. AAA is encouraging manufacturers to create restraint systems for booster-seat-age children that can be used with lap belts only.



WHAT IS AAA DOING TO ADDRESS CHILD PASSENGER SAFETY?

AAA is committed to reducing the number of children killed or injured in motor vehicle crashes. AAA clubs across the country will be working over the next several years to close the loopholes in child passenger safety laws. To address the gaps in state laws, AAA is calling on states to review and, if necessary, amend existing occupant protection laws to ensure that all children under the age of 18 are protected in all seats by primary enforcement laws. AAA also recognizes that compliance with all occupant protection laws requires continuing enforcement, education and public support. The infractions associated with these laws must be stringent enough to deter violations.

Essential in the effort to protect children are information and education programs that increase public understanding of the installation and correct use of child safety seats, booster seats and seat belts. In addition to advocating for stronger laws, AAA clubs will continue to focus attention on the misuse and non-use of child safety seats. Clubs will continue to educate members and the public about the importance of properly restraining children in motor vehicles. AAA is the national certifying agency for child passenger safety technicians in all 50 states and has certified over 20,000 people as instructors and technicians.

To help educate the public, AAA has produced several brochures. “Buying a Safer Car for Child Passengers,” is produced jointly with NHTSA to help families with their vehicle purchasing decisions. *Safe Passage*, produced in conjunction with Evenflo, provides information on choosing the proper child seat and installing it correctly. *Fragile, Transport Safely* is a AAA guide to child safety seats. AAA child passenger safety information is also included in the *AAA Auto Guide*. For more information about child passenger safety, visit www.aasafejourney.org, or contact your local AAA club.