

Selecting and Using the Most Appropriate Car Safety Seats for Growing Children: Guidelines for Counseling Parents

Committee on Injury and Poison Prevention

ABSTRACT. Despite the existence of laws in all 50 states requiring the use of car safety seats or child restraint devices for young children, many children continue to be killed each year while riding in motor vehicles. Pediatricians and other health care professionals need to provide up-to-date, appropriate information for parents regarding their car safety seat choices and use. This policy statement discusses current recommendations based on the latest research and the factors parents should consider before selecting and using a car seat.¹

In 1994, 673 children younger than 5 years of age died while riding in motor vehicles; 362 were unrestrained, and many more were restrained improperly.² Many parents want to know which car safety seat is best for their child. An appropriate car safety seat is the one that is easy for parents to use, fits their vehicles' seats and seat belt system, and is the right size for the child.

MAJOR NEW AMERICAN ACADEMY OF PEDIATRICS RECOMMENDATIONS

1. Children should face the rear of the vehicle until they are at least 20 lb and 1 year of age to reduce the risk of cervical spine injury in the event of a crash. Infants who weigh 20 lb before 1 year of age should ride rear facing in a convertible seat or infant seat approved for higher weights until 1 year of age.³

2. A rear-facing car safety seat must not be placed in the front passenger seat of any vehicle equipped with a passenger-side front air bag. This practice would prevent the risk of death or serious injury from impact of the air bag against the safety seat.⁴

3. Premature and small infants should not be placed in car safety seats with shields, abdominal pads, or arm rests that could directly contact an infant's face and neck during an impact.⁵

4. In rear-facing car safety seats for infants, shoulder straps must be in the lowest slots until the infant's shoulders are above the slots; the harness must be snug; and the car safety seat's retainer clip should be positioned at the midpoint of the infant's chest, not on the abdomen or in the neck area.

5. If the vehicle seat slopes so that the infant's head flops forward, the car safety seat should be reclined halfway back, at a 45° tilt. Until engineering modifications can be implemented to prevent this problem,

a firm roll of cloth or newspaper can be wedged under the car safety seat below the infant's feet to achieve this angle.⁶

6. A convertible safety seat, which is positioned reclined and rear facing for a child until 1 year of age and 20 lb and semiupright and forward facing for a child older than 1 year of age who weighs 20 to 40 lb, should be used as long as the child fits well (eg, ears below the top of the back of the seat and shoulders below the seat strap slots).⁷

7. A booster seat should be used when the child has outgrown a convertible safety seat but is too small to fit properly in a vehicle safety belt.⁸

8. There are two types of booster seats. A belt-positioning booster seat that uses a combination lap/shoulder belt, if that type of belt is available, is preferable to a booster seat with a small shield, which can be used when only a lap belt is available.⁹

Companies across the United States have responded to the problem of incompatibility of older children and seat belts by designing after-market add-on devices that attempt to make the shoulder portion of the safety belt fit correctly, thereby giving better protection to passengers who are not tall, notably children and some adults. These products vary in design, yet all claim to solve the problem of poorly fitting shoulder harnesses. However, some of these products actually seem to interfere with proper lap and shoulder harness fit by positioning the lap belt too high on the abdomen and the shoulder harness too low across the shoulder and by allowing too much slack in the shoulder harness. Although in some cases these products may help shoulder harnesses fit as they were designed, the add-on products are usually tested only by their manufacturers, which allows manufacturers to make claims that cannot be substantiated by independent means.

9. Many new vehicles are equipped with integrated child safety seats that are designed for children who weigh at least 20 lb and are at least 1 year of age. All infants younger than 1 year of age or who weigh less than 20 lb should be positioned rear facing in separate child safety seats.

10. Instruct parents to read the vehicle owner's manual and child restraint device instructions carefully and to test the car safety seat for a safe, snug fit in the vehicle to avoid potentially life-threatening incompatibility problems between the design of the car safety seat, vehicle seat, and seat belt system.

11. Advise parents that the rear vehicle seat is

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the safest place for children of any age to ride. Any front-seat, front-facing passengers should ride properly restrained and positioned as far back as possible from the passenger-side front air bag.¹⁰ An infant should never be left unattended in a car safety seat.

SUMMARY

Existing products provide effective restraint during car crashes and minimize injury, if used appropriately. Parents look to pediatricians for up-to-date, accurate information on selecting and using car safety seats. The use of the American Academy of Pediatrics publications "The Family Shopping Guide to Car Seats" and the "One Minute Car Seat Safety Check Up" can assist the physician in providing specific advice for patients. The Figure that accompanies this statement also will aid in selecting the appropriate type of restraint. This knowledge helps parents assure that their children are transported as safely as possible. The Academy's speaker's and resource kit, "Child Restraint Systems: Getting It Right," also provides useful technical information on this topic.¹¹

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