

## Child Passenger Safety

### Five New AAP Recommendations

All infants and toddlers should ride in a rear-facing seat until they are two years of age or until they reach the highest weight or height allowed by the manufacturer of their car seat.

Infants younger than 2 years have relatively large heads and several structural features of their neck and spine that place them at particularly high risk of head and spine injuries in motor vehicle crashes. Rear-facing car seats provide optimal support to the head and spine in the event of a crash, and evidence indicates that this benefit extends to children up to 2 years of age or longer.

**Infant-only seats:** usually have a handle for carrying and can be snapped in and out of a bar that is installed in the vehicle. They can only be used rear-facing.

**Convertible seats:** can be used either forward or rear-facing.

When children using infant-only seats reach the highest weight for their seat, they should continue to ride rear-facing in a convertible seat for as long as possible. Most currently available convertible seats can be used rear-facing to at least 35 lb.

All children 2 years or older, or those younger than 2 years who have outgrown the rear-facing weight or height limit for their car seat, should use a forward facing car seat with a harness for as long as possible, up to the highest weight or height allowed by the manufacturer of their car seat.

**Combination car seats:** are seats that can be used forward-facing with a harness system and then, when the child exceeds the height or weight limit for the harness, as a booster seat with the harness removed.

Several models of convertible and combination car seats can accommodate children up to 65 or 80 lb when used forward-facing. The lowest maximum weight limit for currently available forward-facing car seats is 40 lb.

There is a safety advantage for young children to remain in car seats with a harness for as long as possible before transitioning to booster seats.

All children whose weight or height is above the forward-facing limit for their car seat should use a belt-positioning booster seat until the vehicle lap-and-shoulder seat belt fits properly, typically when they have reached 4 feet, 9 inches in height and are between 8 and 12 years of age.

Most children 2 to 8 years of age are not large enough to fit properly in the vehicle seat belt and will require a car seat or booster seat for optimal restraint. A belt-positioning booster seat positions a child so that the lap and shoulder portions of the seat belt fit properly: the lap portion low across the hips and pelvis and the shoulder portion across the middle of the shoulder and chest.

When children are old enough and large enough to use the vehicle seat belt alone, they should always use lap-and-shoulder seat belts for optimal protection.

Most children shorter than 4 feet 9 inches in height will not fit properly in vehicle lap-and-shoulder seat belts.

If you answer no to any of these questions, the child should remain in a booster seat:

- Is the child tall enough to sit against the vehicle seat back with his or her knees bent at the edge of the vehicle seat without slouching and stay in this position comfortably throughout the trip?
- Does the shoulder belt lie across the middle of the chest and shoulder, not against the neck or face?
- Is the lap belt low and snug across the upper thighs, not the abdomen?

All children younger than 13 years should be restrained in the rear seats of vehicles for optimal protection.

## Safety Statistics

- ♦Children under age 2 are 75% safer rear-facing than forward -facing.
- ♦Children in the second year of life are five times less likely to die or be seriously injured in a crash if rear facing than forward facing.
- ♦Only approximately 1 in 1,000 children who are rear-facing will suffer a lower extremity injury. That rate is much higher for forward facing children.
- ♦The back seat is the safest place for all children to ride.

## Resources

- ♦*2011 Car Safety Seats: A Guide for Families* includes data on products, prices and height/weight limits:  
[www.healthychildren.org/carseatlist](http://www.healthychildren.org/carseatlist) ( login or click visitor)
- ♦*Car Safety Seats: A Guide for Families 2011* (HE50275-11), a 32 page brochure, and the single-page *Car Safety Seat Checkup* (HE0276) can be ordered at [www.aap.org/bookstore](http://www.aap.org/bookstore)
- ♦The National Child Passenger Safety Certification program offers a searchable link to local technicians and inspection sites:  
<http://cert.safekids.org>
- ♦Technicians trained to fit safety seats for children with special health care needs can be found at the Riley Hospital for Children Automotive Safety Program Web Site:  
[www.preventinjury.org/SNTtrainedPpl.asp](http://www.preventinjury.org/SNTtrainedPpl.asp).