## FACTS ABOUT INJURIES TO CHILD OCCUPANTS IN MOTOR VEHICLE CRASHES



- In 2003, 1,591 child occupants ages 14 and under died in motor vehicle crashes. The motor vehicle occupant death rate among children ages 14 and under declined 25 percent from 1987 to 2002.
- In 2003, an estimated 220,000 children ages 14 and under were injured as occupants in motor vehicle-related crashes.
- In addition to physical trauma, motor vehicle injuries can have long-lasting psychological effects. One study showed that 25 percent of children who suffered from traffic injuries, and 15 percent of their parents, were later diagnosed with post-traumatic stress disorder.
- As of January 1, 2004, 141 children have been killed by passenger air bags. Approximately 92 percent of these deaths were among children either unrestrained or improperly restrained at the time of the crash, including 23 infants in rear-facing car seats in front of passenger air bags.
- The total annual cost of motor vehicle occupant-related death and injury exceeds $\$ 17.8$ billion for all children ages 14 and under.


## Certain groups of children are at higher risk for motor vehicle occupant injury.

- American Indian and Alaska Native children ages 14 and under have a motor vehicle occupant death rate nearly one and a half times that of white children. The motor vehicle occupant death rate for Hispanic children ages 4 and under is one and a half times that for non-Hispanic children.
- Rural areas have higher motor vehicle crash incidence rates and death rates than urban areas. In addition, crashes in rural areas tend to be more severe.
- Of children killed in alcohol-related crashes in 2003, nearly half were passengers in vehicles with drunk drivers. Child restraint use decreases as both the age of the child and the blood alcohol level of the driver increase.
- It is estimated that children ages 12 and under are 36 percent less likely to die in a crash if seated in the rear of a passenger vehicle than if seated in the front seat. It is estimated that one-third of children ride in the front passenger seat. Children traveling with unbelted drivers, children who are sole passengers and children ages 6 and over are more likely to be seated in front.


## Car seats and seat belts, when installed and used correctly, can prevent injuries and save lives.

- Approximately 14 percent of children ages 14 and under ride unrestrained. Riding unrestrained is the greatest risk factor for death and injury among child occupants of motor vehicles. Among children ages 14 and under killed as occupants in motor vehicle crashes in 2003, 53 percent were not using safety restraints at the time of the collision.
- Driver seat belt use is positively associated with child restraint use. In a recent study, nearly 40 percent of children riding with unbelted drivers were completely unrestrained, compared with only 5 percent of children riding with belted drivers.
- Car seats are extremely effective when correctly installed and used. They can reduce the risk of death by 71 percent for infants and 54 percent for children ages 1 to 4 .
- Although 96 percent of parents believe they install and use their car seats correctly, nearly 73 percent of car seats are misused in at least one way critical enough to compromise their effectiveness. The most common critical misuses are loose harness straps securing the child to the safety seat and loose seat belts securing the car seat to the vehicle.
- Inappropriately restrained children are nearly three and a half times more likely to be seriously injured in a crash than their appropriately restrained counterparts.
- The use of belt-positioning booster seats lowers the risk of injury to children in crashes by 59 percent compared to the use of adult seat belts. The distribution of free seats accompanied by educational training can dramatically increase the use of booster seats among children ages 4 to 6 .
- Although belt-positioning booster seats are the best way to protect them, only 19 percent of children who should be restrained in booster seats use them. According to a recent survey, 56 percent of parents whose children were not using booster seats believed their child was too big for a car seat.
- Restraint use is lower in rural areas and low-income communities. Lack of access to affordable car seats contributes to a lower usage rate among low-income families. However, 95 percent of low-income families who own a car seat use it.

Deaths and injuries to children in motor vehicle crashes can be reduced by all children ages 12 and under being properly restrained in the back seat on every ride.

- From 1975 through 2003, the lives of an estimated 7,020 children were saved by the use of car seats or adult seat belts. If all child passengers ages 14 and under were restrained properly, an estimated 182,000 serious injuries could be prevented annually.
- Every $\$ 45$ car seat generates $\$ 1,800$ in benefits to society. Every $\$ 30$ booster seat generates $\$ 2,000$ in benefits to society.


## Numerous safety laws and regulations protect child motor vehicle occupants from injury hazards.

- All 50 states and the District of Columbia have child occupant protection laws, which vary widely in their age requirements, exemptions, enforcement procedures and penalties. Thirty-one states and the District of Columbia have improved their laws to require some older children to ride in booster seats. Fifteen states require children of certain ages to ride in the rear seat of a motor vehicle.
- Only 21 states and the District of Columbia have primary (standard) enforcement of seat belt laws. One study has found that child restraint use increased from 45 percent to 82 percent in the two years following the passage of that state's primary enforcement law for adult seat belts.

