ADVOCATES FOR HIGHWAY & AUTO SAFETY

Child Passenger Safety

Motor vehicle crashes are among the leading causes of death for American children ages 1 to 14.[1] In 2018, 1,038 children aged 14 and younger were killed and an estimated 190,000 were injured in motor vehicle crashes; 255 children aged four through seven were killed and an estimated 48,000 were injured; 221 children aged 2 and younger were killed and an estimated 27,000 were injured. This would equate to nearly 3 children being killed and another 520 being injured each day.[2] The best way to protect children from risks posed by air bags is to place them in the back seat, restrained by a child safety seat, booster seat or safety belt, as appropriate. Child passenger safety laws should include provisions to ensure infants and toddlers remain rear facing minimally through age two, to support relatively large heads on weak neck musculature, and to require booster seats until the child is at least age eight. States are also urged to mandate that all children be secured by a booster seat until they can be appropriately restrained by a safety belt, at least age eight and 57 inches in height, as recommended by the Centers for Disease Control (CDC) and others.[3]

Booster seats are intended to provide a platform that lifts the child up off the vehicle seat in order to improve the fit of the child in a three-point adult safety belt. An improper fit of an adult safety belt can cause the lap belt to ride up over the stomach and the shoulder belt to cut across the neck, potentially exposing the child to serious abdominal and neck injury. When children are properly restrained in a child safety seat, booster seat or safety belt, as appropriate for their age and size, their chance of being killed or seriously injured in a car crash is greatly reduced.

To date, 15 states (CA, CT, IL, LA, ME, NE, NJ, NY, OK, OR, PA, RI, SC, VA, WA) and Washington, DC have enacted laws to require infants and toddlers remain rear facing through age two. Forty-seven states and DC have enacted primary enforcement booster seat laws. However, only 16 of those states have laws that provide protection for children until at least age eight and 57 inches in height, as recommended by Advocates and other child safety advocacy organizations. Thirty-six states have a booster seat law that does not cover children until they reach 57 inches tall and at least age eight. SD has yet to adopt any booster seat law. OH law only permits secondary enforcement.[4]

Child Passenger Safety Facts

- When used properly, child safety seats reduce fatal injury by 71 percent for infants and 54 percent for toddlers in passenger cars.[5]
- Using a booster seat with a seat belt instead of a seat belt alone reduces a child's risk of injury in a crash by 45 percent, according to the Center for Injury Research and Prevention, Children's Hospital of Philadelphia, and the Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania.[6]

- In 2017, 50 unrestrained motor vehicle passengers under four years old were killed when restraint use was known. This is up from the 45 killed in 2016.[7]
- Over 325 lives were saved in 2017 by restraining children four and younger in passenger vehicles.[8]
- Across all age groups, injury risk is lowest (less than two percent) when children are placed in an age-appropriate restraint in the rear seat.[9]
- A Lou Harris public opinion poll found that 84 percent of Americans support all states having booster seat laws protecting children age four through seven.[10]
- According to IIHS, expanded child restraint laws covering children through at least age seven were associated with:[11]
    - Five percent reduction in the rate of children with injuries of any severity;
    - Seventeen percent reduction in the rate of children with fatal and incapacitating injuries;
    - Children being three times as likely to be in appropriate restraints;
    - Six percent increase in the number of booster-seat aged children seated in the rear of the vehicle where children are better protected.
- According to the American Academy of Pediatrics (AAP), infants and toddlers are at a particularly high risk of head and spine injuries in motor vehicle crashes because of their relatively large heads and structural features of the neck and spine. By supporting the entire head and spine, a rear facing car seat provides optimal support during a crash.[12]

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[1] 10 Leading Causes of Injury Deaths by Age Group Highlighting Unintentional Injury Deaths, United States – 2018, Centers for Disease Control and Prevention.

[2] 2018 NHTSA data provide to Advocates for Highway and Auto Safety (Advocates) per request

[3] Child Passenger Safety, Centers for Disease Control and Prevention, available at https://www.cdc.gov/features/passengersafety/

[4] Insurance Institute Highway Safety (IIHS) Child Safety, State Laws available at https://www.iihs.org/topics/seat-belts/seat-belt-law-table

[5] Revised Estimates of Child Restraint Effectiveness, NHTSA, Dec. 1996, DOT HS 96 855.

[6] Kristy B. Arbogast, Jessica S. Jermakian, Michael J. Kallan and Dennis R. Durbin, "Effectiveness of Belt Positioning Booster Seats: An Updated Assessment," Pediatrics 2009;124;1281, October 19, 2009

[7] Quick Facts 2017, NHTSA, July 2019, DOT HS 812 747.

[8] Quick Facts 2017, NHTSA, July 2019Oct. 2017, DOT HS 812 747

[9] Risk of Child Injury by Seat Row and Restraint Type, 1998-2002, Age 0-12 years, Children's Hospital of Philadelphia, 2014. Available at https://injury.research.chop.edu/sites/default/files/documents/seat_row_0.pdf

[10] Lou Harris, for Advocates for highway and Auto Safety, 2004.

[11] Effects of booster seat laws on injury risk among children in crashes, Eichelberger, Angela H.; Chouinard, Aline O.; Jermakian, Jessica S. *Traffic Injury Prevention* November 2012.

[12] Policy Statement – Child Passenger Safety, American Academy of Pediatrics, Committee on Injury, Violence, and Poison Prevention, 2018.