

Motor Vehicle Occupant Safety Fact Sheet LAST UPDATED FEBRUARY 2019

Motor vehicle collisions (MVC) are the number one cause of unintentional death among children ages 1 to 19 years.¹

Fatalities

- In 2017, 3,070 children^{*} died as occupants of motor vehicles during collisions, at a rate of 3.74 per 100,000 children.¹
- Between 1994 and 2017, there was a 53 percent decrease in the number of MVC occupant deaths (this equaled a 57 percent reduction in the death rate).¹ While both the annual number and rate represent a slight decrease from 2016, they are still higher than the lows reported in 2013. Compared to 2013 the number and rate in 2017 represent a seven percent increase for both.



^{*} For the purposes of this fact sheet, children include those ages 19 years and under. Teenagers include those ages 14 to 19 years.





- From 2007 to 2011, an average of **37** children ages 14 years and under died per year in MVCs that did not occur on public roadways, but on private land such as driveways and parking lots.²
- In 2018, **52** children, ranging in age from 1 month to 11 years, died from heatstroke or suspected heatstroke while left in cars.³
- Between 1998 and 2018, 794 children or 38 per year have died as a result of vehicular heatstroke.³
- An estimated 267 deaths and about 15,000 injuries occur annually because of a vehicle backing up onto a person. 31 percent of the estimated 267 deaths are children under 5 years of age.⁵

In 2016, motor vehicle fatalities among child occupants cost the U.S. more than **5.8 billion** dollars in medical and work loss costs. On average, each death cost over **\$1.8 million in medical bills and work loss**.⁴

Non-fatal Injuries

- In 2016, there were more than **440,000** visits to Emergency Departments by children due to motor vehicle collisions.⁶
- Based on data collected in 2001-2012, an estimated **95,000** children ages 14 and under are seen in emergency rooms for not-in-traffic crash injuries each year.²

Risk Factors

- In 2017, teenagers ages 14-19 years accounted for **75 percent** of MVC fatalities among children and died at more than **6 times** the rate of children under 14 (death rates of 9.13 per 100,000 teens versus 1.34 per 100,000 children 0 to 13 years).¹
- Boys are more likely to suffer fatal MVC injuries than girls; in 2017 63 percent of fatalities were among boys and 37 percent among girls.¹
- In 2017 motor vehicle occupant death rates were highest among Black/African American children and lowest among Asian children.¹ This is a change from 2016, when American-Indian and Alaska Native children had the highest rates.
- While only 21 percent of the population lives in **rural** areas, this is where **58 percent** of MVC fatalities occurred in 2017.¹
- For the 2,806 child fatalities where restrained use was known and applicable in 2017, **43 percent** were **unrestrained**. Teens were less likely to be restrained than those under 14 years. The proportions of unrestrained fatalities by age group were **47** percent for **teens**, **48** percent for children ages **9 to 13 years**, and **27** percent for children **under 9 years**.¹

Prevention

 Vehicle safety technologies first introduced in 1956, such as seat belts, air bags and electronic stability control, are responsible for 613,501 lives saved in motor vehicle collisions from 1960 to 2012.⁷





- It is estimated that in 2016 seat belts saved the lives of 14,668 vehicle occupants ages 5 and older, while child restraint systems were responsible for saving another 328 children under age 5.⁸
- When installed and used correctly, child safety seats decrease the risk of a fatal injury by 71 percent among infants, 54 percent among toddlers and 45 percent among children ages 4 to 8.^{9,10}
- Back up cameras on vehicles may reduce the blind zone by an average of 94 percent.¹¹

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