

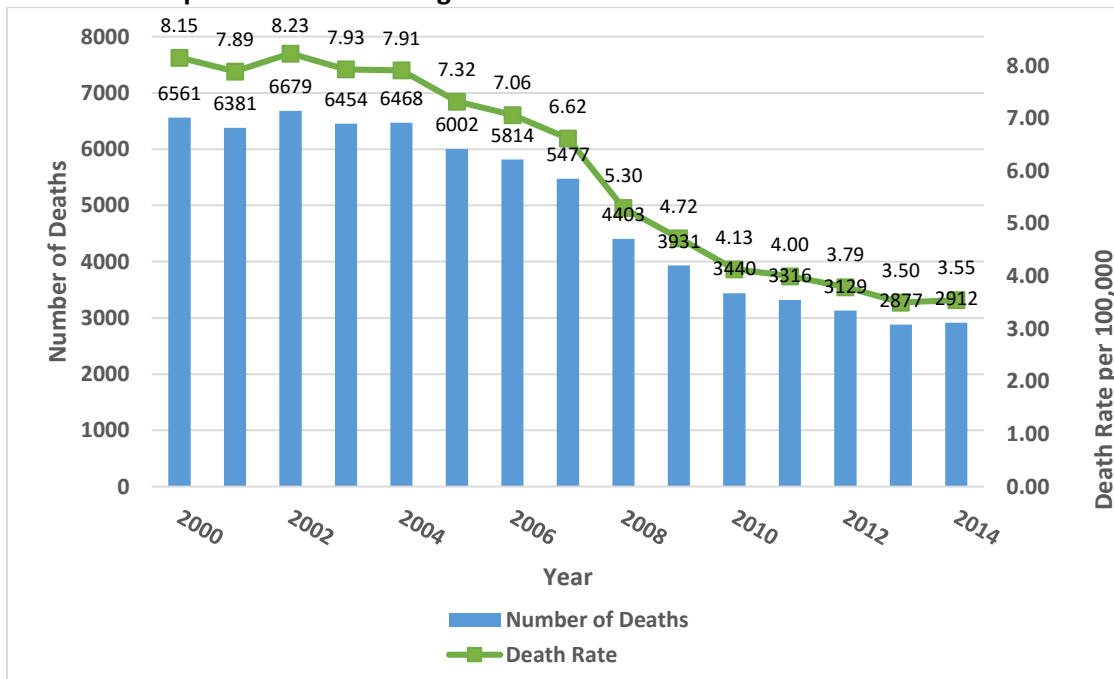
## Motor Vehicle Safety Fact Sheet (2016)

### Fatalities

#### Motor vehicle crashes

- Motor vehicle crashes (MVCs) are the number one cause of unintentional death among children ages 1 to 19.<sup>5</sup>
- 2,912 children ages 19 and under died in MVCs in 2014 as occupants or drivers. The number and rate of deaths was 2 percent higher in 2014 than the previous year. Since 2000, however, there has been a 40 percent decrease in the annual number of fatalities and a 56 percent decrease in the death rate.<sup>13</sup>
- Teenagers ages 15-19 years made up 73 percent (2,138) of motor vehicle occupant/driver fatalities among children in 2014. The teen fatality rate was ten times higher than the rates for younger children (10.2 per 100,000 population for teenagers versus 1.2 to 1.3 for children under 15 years). The teenage motor vehicle fatality rate increased 2 percent from 2013 to 2014.<sup>13</sup>
- Of the 451 children ages 8 and under who died in MVCs in 2014, 116 (26 percent) were not restrained by an age-appropriate device such as infant car seat, booster seat or seat belt. This age group was responsible for 15 percent of childhood MV fatalities.<sup>13</sup>

**Motor Vehicle Occupant Fatalities Among Children 19 and Under from 2000-2014<sup>13</sup>**



#### Non-traffic motor vehicle incidents

- 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.<sup>15</sup>

#### All-terrain vehicle crashes

- From 2004 to 2013, an average of 340 people per year were killed in crashes involving all-terrain vehicles (ATV) on public roadways. Young people make up the largest proportion of these deaths, with 20 percent between 15 and 20 years and 10 percent less than 15 years of age.<sup>21</sup>

#### Heatstroke

- 24 children, ranging in age from 5 days to 4 years, died in 2015 from heatstroke or suspected heatstroke while left in cars.<sup>23</sup>

### Injuries

#### Motor vehicle crashes

- 430,187 children ages 19 and under suffered a nonfatal injury as an occupant in a motor vehicle crash in 2013. More than half (62 percent) of these were teenagers ages 15 to 19.<sup>5</sup>

#### Non-traffic motor vehicle incidents

- An estimated 95,000 children ages 14 and under are seen in emergency rooms for not-in-traffic crash injuries each year, based on data collected in 2011-2012.<sup>15</sup>

#### All-terrain vehicle crashes

- In 2014, an estimated 93,700 people of all ages were treated in hospital emergency rooms with injuries related to ATV crashes. Twenty-six percent of these, or 24,800 injuries, were in children under 16 years of age.<sup>25</sup>

### Additional Information

#### Vehicle safety technology

- The fatality rate per vehicle mile of travel had decreased 81 percent since 1960.<sup>12</sup>
- 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.<sup>12</sup>
- Seat belt use among all ages increased from 60 percent in 1984 to 88 percent in 2012.<sup>12,20</sup>



### Child passenger safety restraints

- When installed and used correctly, child safety seats and safety belts can prevent injuries and save lives. Child safety seats can reduce fatal injury by up to 71 percent for infants and 54 percent for toddlers (ages 1 to 4).<sup>17</sup>
- It is estimated that 263 children were saved due to restraint use in 2013 alone.<sup>11</sup>
- From 1975 through 2013, an estimated 10,421 lives were saved by child safety seats or adult seat belts for children ages 4 and under.<sup>17</sup>
- In 2011, 98 percent of caregivers of children ages 8 and under used restraints when transporting their children. Almost half of these caregivers did not use the restraint correctly, which reduces the protection provided in the event of a crash.<sup>19</sup>
- Only 32 percent of caregivers using rear-facing convertible car seats are very confident that they are using them correctly (in a manner which would save their child's life during a crash).<sup>19</sup>

### Teenage drivers and passengers

- In 2013, 2,163 teens ages 16 to 19 were killed in motor vehicle collisions and another 243,243 were treated in emergency departments.<sup>4</sup>
- One third of all injury costs related to motor vehicle collisions are due to those involving teenagers.<sup>4</sup>
- Mile for mile, teens ages 16 to 19 are three times more likely to be involved in a fatal crash compared to older drivers.<sup>4</sup>
- Leading causes of crashes among teenage drivers are driver inexperience, driving with other teen passengers, nighttime driving, not wearing seatbelts, distracted driving, drowsy driving, reckless and impaired driving.<sup>4</sup>
- The risk for crashes is higher for newly licensed teen drivers, teens driving with other teens, and male teens, compared to other teenagers.<sup>4</sup> Among teenage drivers ages 16 to 19, the fatality rate is three times as high for males compared to females.<sup>13</sup>
- Of the 1,275 drivers ages 15 to 19 who were fatally injured in a motor vehicle collision in 2014, 73 percent were males compared to 27 percent females. A majority of teenage passengers killed in vehicles driven by teens were also males (68 percent males, 32 percent females).<sup>13</sup>
- In 2014, 17 percent of drivers between 16 and 20 years who were killed in a motor vehicle collision had a blood alcohol content of 0.08% or higher. This number was unchanged from 2005.<sup>14</sup> Nationwide, 10 percent of teenage drivers reported driving after drinking alcohol within the past 30 days.<sup>7</sup>



- Fifty-one percent of teenage motor vehicle fatalities in 2013 occurred between 3:00 pm and midnight and 54 percent were on a Friday, Saturday or Sunday versus during the week.<sup>4</sup>
- Forty-one percent of teen drivers surveyed in 2013 said they had texted or emailed while driving in the past 30 days.<sup>7</sup>
- Compared with other age groups, teens have the lowest rate of seat belt use. In 2013, only 53 percent of high school students reported always wearing a seat belt when riding with someone else.<sup>4</sup>
- The presence of passengers in the vehicle with teenage drivers may double to triple the risk of a fatal crash. This risk is higher if the passengers are male compared to female and younger versus older.<sup>24</sup>
- Graduated driver licensing (GDL) programs across the nation have been linked to a 9% decrease in fatality among drivers ages 16 to 20. A stringent GDL program may see decreases as high as 19 percent, equating to 4.6 lives saved per state per year.<sup>11</sup>
- Requirements of a more stringent GDL program are a 6 month learning period, prohibition of driving during dark hours, limitation on the number of passengers supervised or unsupervised, and a restricted license until 17 years of age.<sup>11</sup>

#### **Non-traffic motor vehicle incidents**

- An estimated 267 deaths and 15,000 injuries per year are caused when a vehicle backs up onto a person and 31 percent of these deaths are children under 5 years of age.<sup>8</sup>
- Children under 5 years of age and boys are most at risk for injury and death from low speed vehicle run-over incidents.<sup>1</sup>
- Back up cameras on vehicles may reduce the blind zone by an average of 94 percent.<sup>9</sup>

#### **All-terrain vehicle crashes**

- While children account for 14 percent of those who ride ATVs in the U.S., 29 percent of all ATC crash injuries occur in this age group.<sup>10</sup>
- An estimated \$74 million is spent each year on hospital charges for children injured in ATV related crashes. The average cost per hospitalized child is \$113,336.<sup>10</sup>

#### **Heatstroke**

- Heatstroke is the number one cause of non-crash, vehicle-related death in children ages 14 and under.<sup>15</sup>
- Within 10 minutes, the inside temperature of a vehicle can be up to 20 degrees hotter than the outside temperature; after 30 minutes the vehicle's temperature can be up to 34 degrees hotter.<sup>23</sup>



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- A child’s body does not have the same internal temperature control as an adult’s and can warm three times to five times faster. Body temperature may rise to 106 degrees Fahrenheit within 10 to 15 minutes.<sup>3,23</sup>
  - A review of 661 media reports of child heatstroke deaths from 1998 to 2015 indicates that 54 percent of heatstroke deaths among children in vehicles occurred when a child was “forgotten” by a parent or caregiver, 29 percent of deaths occurred when a child gained access to an unattended vehicle and 17 percent occurred when a child was intentionally left in a vehicle. Circumstances were unknown in 1 percent of cases.<sup>22</sup>

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Last updated February 2016. If you have a question about this factsheet, please call 202-662-0611.

