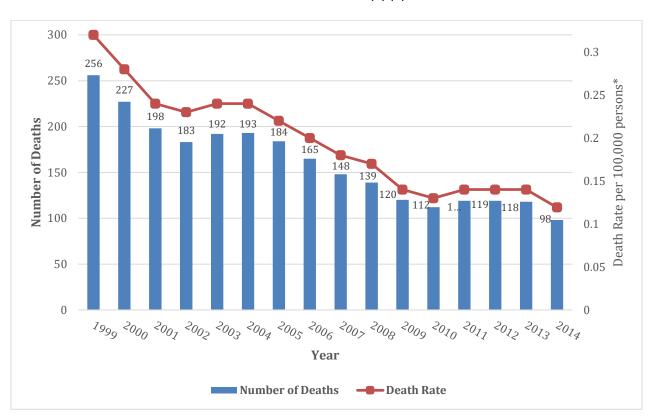


Bicycle, Skate and Skateboard Safety Fact Sheet (2016)

Fatalities

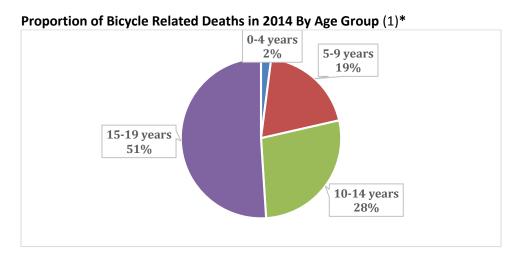
- 98 children ages 19 and under died from biking-related injuries in 2013. (1)
- There has been a 62 percent reduction in the number of bike-related deaths per year in children since 1999 and a 17 percent decrease the in the past year, from 2013 to 2014. (1) (2)

Bicycle-Related Fatalities and Death Rate Among Children Ages 19 and Under 1999 to 2014 (1) (2)



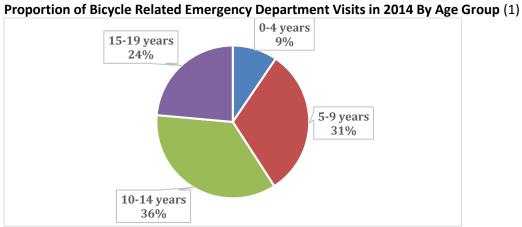


More than half of all children under 19 who were killed in bicycle-related incidents in 2014 were 15 to 19 years of age, and a majority (88 percent, 86 children) were boys. (1)



Injuries

- 242,931 children ages 19 and under were seen in emergency rooms for injuries related to riding bikes in 2014. (3)
- Every year, 26,000 children are seen in emergency departments for traumatic brain injury related to bicycle-riding. (4)



84,414 children ages 19 and under had skateboard-related injuries, and 59,316 had skatingrelated injuries, in 2014. (3)



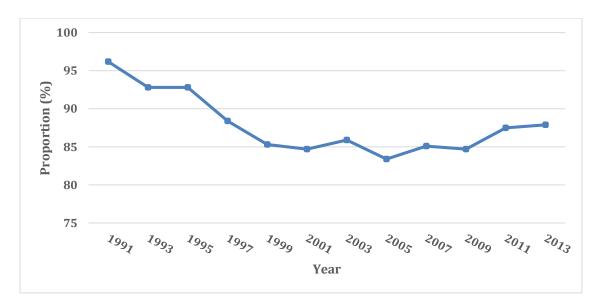
Bicycle Riding Behaviors and Outcomes

- In 2013, children under 15 years were responsible for 7 percent of fatalities and 11 percent of injuries due to bicycle accidents. (5)
- Males of all ages have higher rates of death and injury due to bikes, and the bike-related fatality rate for 15-19 year olds is almost six times higher for boys than girls. (5)
- In 2010, 20 percent of the approximately 14.5 million children ages 17 years and under rode a bike six or more times a year, accounting for 37 percent of all bicycle riders in the United States. (6)
- There was a 21 percent decrease in the proportion of children ages 17 years and under who rode a bike six or more times a year from 2000 to 2010. (6)

Bicycle Helmets

- Helmets reduce the risk of head injury by at least 45 percent, brain injury by 33 percent, facial
 injury by 27 percent and fatal injury by 29 percent. (7) (8)
- Compared to older children, younger children are more likely to wear helmets. (8) (7)
- Helmet wearing by high school students significantly increased from 1999 to 2013. (9) However,
 of the 67 percent of high school students who rode a bike in 2013, 88 percent reported never or
 rarely wearing a helmet. (9)

Proportion of High School Students Who Rarely or Never Wore a Helmet While Bike Riding 1991 to 2013 (9)







- Boys ages 10 to 14 years are almost three times less likely to wear a helmet than boys ages 5 to 9 years; this difference in helmet wearing behavior is not found between girls in the same age groups. (8)
- From 1994 to 2003, the proportion of children ages under 14 years who wore a helmet increased from 25 percent to 48 percent. (8)
- The odds of not wearing a helmet are twice as high for Hispanic compared to non-Hispanic children, kids whose parents have not completed high school and those living in the Midwest and South compared to the Northeast. (8)
- A child who rides with companions wearing helmets or adults in general, regardless if the adult is wearing a helmet or not, is more likely to wear a helmet himself. (10) (8)
- Community based non-legislative interventions, which provide free helmets, can increase the odds of a child wearing a helmet by four times. (6)
- Bicycle helmet laws and safe routes to school have been identified as effective ways to reduce bike-related fatalities among children. (11)
- Laws requiring the use of a bike helmet has been associated with a significant reduction in the odds of bike-related head injuries in children. (12) (13) (14)

Last updated March 2016. If you have a question about this factsheet, please call 202-662-0600.

References

- Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS). [Online].; 2015; codes used: ages 0 to 19 years, all races, both sexes, year 2013 [cited 2016 March 3. Available from: http://webappa.cdc.gov/sasweb/ncipc/dataRestriction_inj.html.
- United States Census. US Census American Fact Finder. [Online]. [cited 2016 March 3. Available from: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_pums_c sv_2014&prodType=document.
- 3. United States Consumer Product Safety Commission. National Electronic Injury Surveillance System. [Online]. Codes used: ages 0 to 19 years, all races, both sexes, year 2014 product codes used: bike 5040, 5033; skateboard- 1333, 5042; skate 3255, 3297, 3216, 321 [cited 2016 March 3. Available from: http://www.cpsc.gov/en/Research--Statistics/NEISS-Injury-Data/.
- 4. Centers for Disease Control and Prevention. Head Injuries and Bicycle Safety. [Online].; 2015 [cited 2016 March 3. Available from:





 $\frac{\text{http://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/headinjuries.}}{\text{html.}}$

- National Highway Traffic Safety Administration. Traffic Safety Facts 2013 Data: Bicyclists and Other Cyclists. Technical Report. Washington, DC:, National Center for Statistics and Analysis; 2015. Report No.: DOT HS 812 151.
- 6. Gluskin Townley Group, LLC. The U.S.Bicycle Market: A Trend Overview.; 2011.
- 7. Ross LT, Brinson MK, Ross TP. Parenting Influences on Bicycle Helmet Rules and Estimations of Children's Helmet Use. The Journal of Psychology. 2014; 148(2).
- 8. Dellinger AM, Kresnow M. Bicycle helmet use among children in the United States: The effects of legislation, personal and household factors. Journal of Safety Research. 2010; 41.
- 9. Frieden TR, Jaffe HW, Cono J, Richards CL, Iadermarco M. Youth Risk Behavior Surveillance United States, 2013 MMWR. Surveillance Summary. Atlanta: Centers for Disease Control and Prevention, Surveillance, Epidemiology and Laboratory Services; 2014. Report No.: Volume 63, Number 4.
- 10. Khambalia A Macarthur C, Parkin PC. Peer and Adult Companion Helmet Use Is Associated With Bicycle Helmet Use in Children. Pediatrics. 2005; 116(4).
- 11. Goodwin A, Kirkley B, Sandt L, Hall W, Thomas L, O'Brien N, Summerlin D. Countermeasures That Work: A Highway Safety Countermeasure Guide For State Highway Safety Offices, Seventh Edition, 2013. Washington, D.C.: National Highway Safety Administration; 2013. Report No.: DOT HS 811 727.
- 12. Macpherson AK To TM, Chipman ML, Wright JG, Parkin PC. Impact of Mandatory Helmet Legislation on Bicycle-Related Head Injuries in Children: A Population-Based Study. Pediatrics. 2002; 110(5).
- 13. Ji M, Gilchick RA, Bender SJ. Trends in helmet use and head injuries in San Diego County: The effect of bicycle helmet legislation. Accident Analysis and Prevention. 2006; 38.
- 14. Lee B, Schofer JL, Koppelman FS. Bicycle safety helmet legislation and bicycle-related non-fatal injuries in California. Accident Analysis and Prevention. 2005; 37.
- 15. National Highway Traffic Safety Administration. Fatality Analysis Reporting System. [Online].; 2016 [cited 2016 January 8. Available from: http://www-fars.nhtsa.dot.gov//QueryTool/QuerySection/SelectYear.aspx.

