

# **Pedestrian Safety Fact Sheet**

LAST UPDATED JULY 2021

# More than 350 children ages 0–19 years were killed as pedestrians<sup>\*</sup> in motor vehicle crashes in the U.S. in 2019.<sup>1</sup>

# **Fatal Injuries**

- There were 359 children ages 0–19 years killed as pedestrians in motor vehicle crashes (MVC) in • 2019, at a rate of less than 1 per 100,000 children (0.44 per 100,000).<sup>1,2</sup>
- The overall rate of fatal pedestrian injuries among children ages 0–19 years decreased by 68 • percent between 1994 and 2019 (1.35 to 0.44 per 100,000, respectively).<sup>1-3</sup>
- Between 1994 and 2019, the rate of fatal pedestrian injuries among children ages 0–11 years decreased by 82 percent —a decrease that likely reflects fewer children in this age group walking to school and the creation of safer walking environments (Figure 1). Comparatively, the rate among children ages 12–19 years decreased 47 percent over the same time period.<sup>1-3</sup>

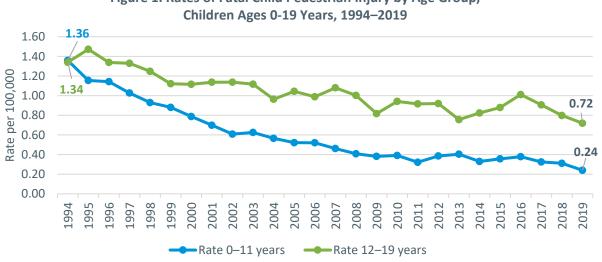


Figure 1. Rates of Fatal Child Pedestrian Injury by Age Group,

<sup>\*</sup> Pedestrians are defined by the National Highway Traffic Safety Administration (NHTSA) as any person on foot, walking, running, jogging, hiking, sitting, or lying down who is involved in a motor vehicle traffic crash or event.





## **Nonfatal Injuries**

- In 2019, an estimated 15,011 children ages 0–19 years suffered a nonfatal pedestrian injury as a result of a MVC, at a rate of 18.33 per 100,000 children.<sup>2,4</sup>
- The overall rate of nonfatal pedestrian injuries among children ages 0–19 years decreased by 37 percent between 2005 and 2019 (29.14 to 18.33 per 100,000, respectively).<sup>2,4,5</sup>
- Between 2005 and 2019, the rate of nonfatal pedestrian injury among children ages 0-11 years and 12–19 years decreased by 55 percent and 19 percent, respectively (Figure 2).<sup>2,4,5</sup>



#### Figure 2. Rates of Nonfatal Child Pedestrian Injury by Age Group, Children Ages 0–19 Years, 2005–2019

### **Risk Factors**

- Age:
  - In 2019, the rate of fatal pedestrian injury among children ages 12-19 years was nearly three times greater than the rate for children ages 0-11 years (0.71 and 0.2 per 100,000, respectively).<sup>1,2</sup>
  - In 2019, children ages 12–19 years accounted for only 41 percent of children ages 0–19 years. Despite this, they made up 67 percent of fatal child pedestrian injuries and 66 percent of nonfatal child pedestrian injuries.<sup>1,2,4</sup> When older teens ages 15–19 years are considered, the discrepancy is even larger. This age group accounted for 26 percent of all children ages 0–19, but 50 percent of fatal child pedestrian injuries and 45 percent of nonfatal child pedestrian injuries.<sup>1,2,4</sup>





- Sex: In 2019, boys accounted for 64 percent of fatal pedestrian injuries and girls accounted for 39 percent. Boys were more than 1.7 times more likely to be killed as pedestrians than girls (0.55 and 0.32 per 100,000, respectively).<sup>2,4,5</sup>
- Race: Black or African American children had the highest risk for fatal child pedestrian injury in 2018 (data on race unavailable for 2019) with a fatal injury rate more than twice that of White and American Indian children (0.47 per 100,000 vs. 0.20 and 0.19 per 100,000, respectively).<sup>1,2</sup>
- Time of Day: In 2019, fatal pedestrian injuries were most likely to occur between the hours of 5:00 PM and 7:59 PM for children ages 0–11 years and between the hours of 8:00 PM and 10:59 PM for children ages 12–19 years (33 percent and 27 percent of fatal injuries for each age group, respectively).<sup>1</sup>
- Pedestrian Distraction: Walking while distracted by technology, such as cell phones and headphones, increases the risk of pedestrian injury.<sup>6,7</sup> More than 9 in 10 (95 percent) children ages 12–19 years have access to a smartphone, with nearly half (45 percent) indicating they are on it constantly.<sup>8</sup> In a Safe Kids Worldwide national survey of teens ages 13–17 years, 1 in 4 indicated they had ever fallen or stepped off a step, sidewalk or curb while using their phone; 1 in 3 had ever walked or bumped into something while using their phone; 1 in 3 had crossed the street while texting and more than half in the last six months had crossed the street while wearing headphones.<sup>9</sup>
- Geographic location: The rate of fatal pedestrian injury among children ages 0–5 years is lowest in Minnesota and Kansas (0.31 and 0.31 per 100,000) and highest in Delaware (1 per 100,000) (states with unstable or suppressed rates excluded from ranking) (based on combined rate for 2010–2019) (Table 1).<sup>1,2</sup>





Table 1. Fatal Pedestrian Injury Number and Rates per 100,000 by State, U.S., Children											
Ages 0–19 Years, 2010–2019 <sup>1,2</sup>											
State	#	Rate	State	#	Rate	State	#	Rate	State	#	Rate
AK	11*		ID	13*		MT	15*		RI		
AL	86	0.70	IL	132	0.40	NC	195	0.76	SC	113	0.92
AR	40	0.51	IN	104	0.59	ND	10*		SD	13*	
AZ	130	0.72	KS	25	0.31	NE	22	0.42	TN	61	0.37
CA	555	0.55	КҮ	66	0.58	NH			ТХ	476	0.60
СО	64	0.46	LA	91	0.74	NJ	105	0.47	UT	64	0.64
СТ	34	0.39	MA	61	0.38	NM	42	0.75	VA	74	0.35
DC			MD	89	0.59	NV	52	0.71	VT		
DE	23	1.00	ME			NY	222	0.47	WA	65	0.36
FL	427	0.93	MI	151	0.60	ОН	152	0.51	WI	55	0.38
GA	204	0.73	MN	44	0.31	ОК	53	0.50	WV	17*	
HI	16*		MO	107	0.69	OR	41	0.43	WY		
IA	30	0.37	MS	47	0.58	PA	138	0.45			

--- State-level counts and rates based on fewer than 10 deaths have been suppressed.

\* Death rates are flagged as unstable when calculated with a numerator of 20 or less.

#### **Cost of Fatal and Nonfatal Injuries<sup>†</sup>**

- It is estimated that the combined medical care and work loss costs for fatal and nonfatal child pedestrian injuries in the U.S. totaled at least \$2.2 billion in 2017 (cost of injury data unavailable for 2019) (Table 2).<sup>10</sup>
- More than half of the combined costs of child pedestrian injuries in 2017 were incurred from nonfatal injuries that resulted in hospitalization (\$1.1 billion). Nonfatal injuries resulting in treatment and release from emergency departments (ED) cost an estimated \$177.1 million and fatal injuries cost an estimated \$953.6 million.<sup>10</sup>

<sup>&</sup>lt;sup>†</sup> Cost of injury data were calculated using most recent year of data available within the CDC's Web–based Injury Statistics Query and Reporting System (WISQARS) Cost of Injury Reports application, which includes both traffic–related and non–traffic– related pedestrian incidents that were serious enough to require an ED visit. Total combined medical and work loss costs are likely underestimated, as WISQARS cost estimates do not include ED treatment costs for injured children who were hospitalized.





Table 2. Medical, Work Loss and Combined Costs for Pedestrian Injuries Resulting in Death, ER treatment and Release, and Hospitalization, Ages 0–19 Years, 2017. <sup>10</sup>									
	Medical costs	Work loss costs	Combined costs						
Fatal Injuries	\$8,598,000	\$944,980,000	\$953,578,000						
Hospitalized Injuries	\$318,105,000	\$793,374,000	\$1,111,480,000						
ER visits (treated and released)	\$97,932,000	\$79,208,000	\$177,140,000						
Combined costs	\$424,635,000	\$1,817,562,000	\$2,242,198,000						

For more information or questions about the information in this factsheet, please contact the SKW Research Department via email at: mchandler@safekids.org

# References

- National Highway Traffic Safety Administration. Fatality Analysis Reporting System (FARS): 2005-2018 Final File and 2019 Annual Report File (ARF). https://cdan.dot.gov/query. Published 2021. Accessed April 20, 2021.
- 2. Fatal and nonfatal rates per 100,000 calculated using population data from the U.S. Census Bureau.
- 3. National Highway Traffic Safety Administration. FARS Encyclopedia. https://www-fars.nhtsa.dot.gov/Main/index.aspx. Published 2021. Accessed April 20, 2021.
- 4. National Highway Traffic Safety Administration. 2016-2019: Crash Report Sampling System (CRSS). https://cdan.dot.gov/query. Published 2021. Accessed April 20, 2021.
- National Highway Traffic Safety Administration. 2005-2015: National Automotive Sampling System General Estimates System (NASS-GES). https://cdan.dot.gov/query. Accessed April 20, 2021.
- 6. Sleet DA, Ballesteros MF, Borse NN. A Review of Unintentional Injuries in Adolescents. *Annu Rev Public Health*. 2010;31(1):195-212. doi:10.1146/annurev.publhealth.012809.103616
- Lichenstein R, Smith DC, Ambrose JL, Moody LA. Headphone use and pedestrian injury and death in the United States: 2004–2011. *Inj Prev*. 2012;18(5):287-290. doi:10.1136/injuryprev-2011-040161
- Pew Research Center. Teens, Social Media & Technology 2018. Available from: https://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/. Accessed April 20, 2021.
- 9. Chandler M, Mackay J. *Child Pedestrian Safety in the U.S.: Trends and Implications for Prevention.* Washington, D.C.; 2020. https://www.safekids.org/research-report/child-pedestrian-safety-us-





trends-and-implications-prevention.

 Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control. Data & Statistics (WISQARS): Cost of Injury Reports. https://wisqars.cdc.gov:8443/costT/. Published 2020. Accessed April 20, 2021.

