

Traffic-Related Pedestrian Injury Fact Sheet LAST UPDATED AUGUST 2023

A total of 385 children ages 0 to 19 years were fatally injured and another 9,257 were nonfatally injured as pedestrians in motor vehicle crashes in 2021.¹

This fact sheet focuses on children between the ages of 0 and 19 years who suffered fatal and nonfatal injuries as pedestrians in motor vehicle collisions in the U.S. between 2007 and 2021. Data are sourced from the National Highway Traffic Safety Administration.

Fatal Injuries

- In 2021, 385 children were fatally injured as pedestrians in motor vehicle crashes, for a rate of less than 1 per 100,000 (0.47 per 100,000).^{1,2}
- The overall rate of fatal pedestrian injuries among children decreased by 34 percent between 2007 and 2021 (0.71 to 0.47 per 100,000, respectively) (Figure 1).^{1,2}
- The rate of fatal pedestrian injuries among children ages 0 to 11 years decreased by 42 percent between 2007 and 2021—a decrease that likely reflects fewer children in this age group walking to school and the creation of safer walking environments. The rate among children ages 12 to 19 years decreased by 30 percent during the same period.^{1,2}



Figure 1. Rate of Fatal Pedestrian Injuries Overall and by Age Group, Ages 0–19 Years, 2007–2021

Nonfatal Injuries

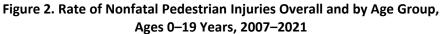
- In 2021, an estimated 9,257 children were nonfatally injured as pedestrians in motor vehicle crashes, for a rate of 11.27 per 100,000. This corresponds to a ratio of fatal to nonfatal pedestrian injuries of 1:24.^{2,3}
- The overall rate of nonfatal pedestrian injuries among children decreased by 60 percent between 2007 and 2021 (Figure 2).^{2,3}





• The rate of nonfatal pedestrian injuries among children ages 0 to 11 years decreased by 68 percent between 2007 and 2021—a decrease that again likely reflects fewer children in this age group walking to school and the creation of safer walking environments. The rate among children ages 12 to 19 years decreased by 55 percent during the same period.^{2,3}





Risk Factors

- Age: In 2021, the rate of fatal pedestrian injuries was 2.7 times higher among children ages 12 to 19 compared to children ages 0 to 11 years (0.74 and 0.27 per 100,000, respectively).^{1,2}
- Sex: In 2021, the rate of fatal pedestrian injuries was 1.6 times higher among male children compared to female children (0.57 and 0.36 per 100,000, respectively).^{1,2}
- Race and Ethnicity: Rates of fatal child pedestrian injury are highest among non-Hispanic American Indian/Alaska Native children and lowest for non-Hispanic White children (0.99 and 0.34 per 100,000, respectively). Compared to non-Hispanic White children, the rate of fatal pedestrian injury is nearly 3 times higher for non-Hispanic American Indian/Alaska Native children, more than 2 times higher for non-Hispanic Black /African American children (0.76 per 100,000), and 1.5 times higher for Hispanic children (0.51 per 100,000) (data for years 2018-2020; race and ethnicity not available for 2021). ^{1,2}
- Season: The number of fatal pedestrian injuries among children was similar during spring, summer, and fall in 2021; slightly fewer pedestrian deaths occurred during winter months (Figure 3).¹
- **Day of week:** In 2021, fatal pedestrian injuries among children were more frequent on Saturdays compared to other days of the week (Figure 4).¹





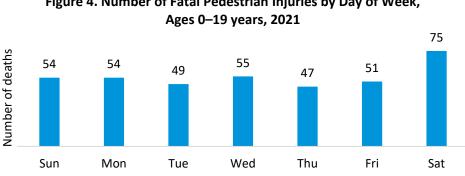


Figure 4. Number of Fatal Pedestrian Injuries by Day of Week,

Time of Day: Overall, fatal pedestrian injuries among children were most frequent between 8 pm and 12 am in 2021. However there were differences by age. While fatal pedestrian injuries were most frequent between 8 PM and 12 PM for children ages 12 to 19 years, children ages 0 to 11 years were most frequent fatally injured between 4 pm and 8 pm (32 percent and 34 percent of fatal injuries for each age group, respectively) (Figure 5).¹

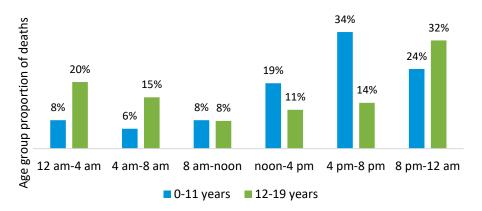


Figure 5. Proportion of Fatal MVC-Related Pedestrian Injuries by Age Group and Time of Day, Ages 0-19 Years, 2021

- Pedestrian Distraction: Walking while distracted by technology, such as cell phones and • headphones/earbuds, increases the risk of pedestrian injury. More than 9 in 10 (95 percent) children ages 13 to 17 years reported having access to a smartphone in 2022, with nearly half (46 percent) indicating they are on it constantly.⁴ In a 2020 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.⁵
- Position in Roadway: Of the 385 children fatally injured as pedestrians in 2021, 70 percent were on the road in a traffic lane when struck, 10 percent were on a crosswalk, 5 percent were in an intersection, and the remaining 15 percent were in other locations.¹





- Urban/Rural: In 2021, the rate of fatal child pedestrian injury was nearly twice as high in rural areas compared to urban areas (0.80 per 100,000 and 0.41 per 100,000 respectively).¹
- Geographic location: In the six states of Alaska, Maine, New Hampshire, Rhode Island, Vermont, and Wyoming, plus the District of Columbia, the number of fatal pedestrian injuries among children for the period of 2012 to 2021 was too low to present. (Table 1).^{1,2} Among those where data were available, the highest rates were in South Carolina, Delaware, and Florida (0.88, 0.87, and 0.87 per 100,000, respectively) and lowest in Idaho, Minnesota, and Wisconsin (0.23, 0.29, and 0.30 per 100,000).

0–19 Years, 2012–2021 ^{1/2}											
State	#	Rate	State	#	Rate	State	#	Rate	State	#	Rate
АК			ID	11	0.23*	MT	17	0.67*	RI		
AL	81	0.66	IL	129	0.40	NC	190	0.74	SC	108	0.88
AR	44	0.56	IN	102	0.58	ND	10	0.51*	SD	11	0.46*
AZ	133	0.73	KS	33	0.42	NE	24	0.46	TN	69	0.41
CA	526	0.52	КҮ	59	0.52	NH			тх	464	0.58
со	65	0.47	LA	104	0.85	NJ	96	0.44	UT	56	0.55
ст	30	0.35	MA	53	0.33	NM	38	0.69	VA	64	0.31
DC			MD	80	0.53	NV	56	0.75	VT		
DE	20	0.87*	ME			NY	195	0.42	WA	64	0.35
FL	402	0.87	МІ	141	0.57	ОН	135	0.46	WI	43	0.30
GA	189	0.68	MN	41	0.29	ОК	56	0.53	WV	20	0.48*
ні	14	0.42*	мо	100	0.65	OR	39	0.41	WY		
IA	26	0.32	MS	52	0.65	РА	125	0.41			

Table 1. Fatal Pedestrian Injury Number and Rate per 100,000 by State, U.S., Children Ages 0–19 Years. 2012–2021^{1,2}

(-) 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 Injuries¹

- The economic costs of fatal and nonfatal pedestrian injuries among children is estimated to have totaled at least \$9.57 billion in the U.S. in 2020 (the latest year for which cost data are available) (Table 2).⁶
- Fatal pedestrian injuries accounted for the highest proportion of economic costs (76 percent), followed by nonfatal pedestrian injuries that resulted in hospitalization (13 percent).⁶

Table 2. Economic Costs of Pedestrian Injuries Resulting in Death,Hospitalization and ER treatment and Release, Ages 0–19 Years, 2020.									
		Nonfatal	Combined						
Cost	Fatal	Hospitalization	ER Treated and Released	(row)					
Medical	\$6.50 million	\$347.41 million	\$124.92 million	\$ 505.83 million					
Work Loss		\$76.72 million	\$30.34 million	\$107.06 million					
Quality of Life Loss		\$792.86 million	\$919.42 million	\$1.71 billion					
Value of Statistical Life	\$7.28 billion			\$7.28 billion					
Combined (column)	\$7.28 billion	\$1.22 billion	\$1.07 billion	\$9.57 billion					

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

References

- 1. National Highway Traffic Safety Administration. Fatality Analysis Reporting System (FARS): 2007-2020 Final File and 2021 Annual Report File (ARF). https://cdan.dot.gov/query. Published 2021.
- Centers for Disease Control and Prevention. US Census Bureau single-race population estimates obtained from CDC WONDER were used for calculating population rates. https://wonder.cdc.gov/single-race-population.HTML.
- 3. National Highway Traffic Safety Administration. National Automotive Sampling System General Estimates System (NASS-GES): 2007-2015 and Crash Report Sampling System (CRSS): 2016-2021. https://cdan.dot.gov/query.
- Pew Research Center. Teens, Social Media & Technology 2022. Pew Research Center. https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/. Published 2022. Accessed August 7, 2023.
- 5. Chandler M, Mackay J. *Child Pedestrian Safety in the U.S.: Trends and Implications for Prevention.* Washington, D.C.; 2020.
- 6. Centers for Disease Control and Prevention (CDC). Number of Injuries and Associated Costs. https://wisqars.cdc.gov/cost/. Published 2023.

¹ 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 costs are likely underestimated, as WISQARS cost estimates do not include ED treatment costs for injured children who were hospitalized.

