



Pedestrian Safety and Teens

Every hour, a teen pedestrian is injured or killed after being hit by a car in the United States.



In 2012, 284 teen pedestrians died and another 10,000 were injured.



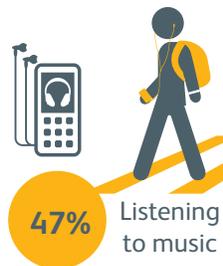
In our survey of 1,000 teens, 40% say they have been hit or almost hit by a car, bike or motorcycle while walking.



When asked what happened when they were hit or almost hit, teens say:



Teens who have been hit or nearly hit report crossing the street while:



Overall, half of teens say they walk in the dark at least sometimes; we know that three-quarters of teen pedestrian fatalities happen between 7 p.m. and 7 a.m.



Talk to your teens about walking safely.
Visit safekids.org to find out how.

SAFE
K:IDS
WORLDWIDE™

Teens on the Move

Being a teenager—or the parent of one— isn't easy. Early school mornings, late nights on homework and evolving relationships with friends and family all present new challenges for kids who are learning to take control of how and where they spend their time. Some of those new challenges involve traveling safely, whether it be riding in a car, on a bike or walking.

While staying safe as a driver and a passenger is important, riding in a car isn't the only time a teen is at risk for a serious injury involving a motor vehicle. In 2012, 284 teens ages 13 to 19 died after being hit by a motor vehicle while walking.¹ Another 10,000 were injured.² Said another way, every hour a teen pedestrian is killed or injured in the United States. And while teens account for one-third of the population of children in the United States, they make up two-thirds of the pedestrian fatalities.^{1,3}

Safe Kids Worldwide, with the support of FedEx, surveyed 1,040 teens ages 13 to 18 to explore walking behaviors and their experiences as pedestrians. We learned that 40 percent of teens say they have been hit or nearly hit by a car, bike or motorcycle while walking.

Teens who have been hit or had a close call more often report being distracted while crossing the street, and crossing the street in risky ways. For example, the proportion of teens who say they text while crossing the street is two times greater for teens who have been hit or almost hit, compared to those who haven't. Half of teens overall say they cross the street while distracted by a mobile device.

When we looked at unsafe crossing behaviors, we found that teens who had been hit or had a close call more frequently reported crossing in the middle of the block and running across the street than teens who hadn't been hit or had a near miss. Half of teens in the survey say they walk in the dark at least sometimes; we know that three-quarters of teen pedestrian fatalities happen between 7 p.m. and 7 a.m.¹⁰

Here are three ways to help teens — and all of us — stay safe while walking:

- 1. Put down phones and headphones when crossing the street.**
- 2. Cross at a traffic signal or crosswalk, when possible, and make eye contact with drivers before crossing.**
- 3. Be especially alert when it's dark out, and make sure you're visible to drivers.**

A teen pedestrian is killed or injured by a motor vehicle every hour in the United States.^{1, 2}

Teens Injured While Walking: The Numbers

Every hour, a teen pedestrian is killed or injured by a motor vehicle in the United States.^{1,2} In 2012, 284 teenagers ages 13 to 19 died as pedestrians.¹ Teens have the highest pedestrian death rates among children 19 and under. The pedestrian fatality rate for teens ages 13 to 19 was nearly three times that of 5- to 12-year-olds, and twice that of children ages 4 and under.^{1,3} In fact, while teens account for 38 percent of the population of children in the United States, they make up 58 percent of the pedestrian fatalities (Figure 1).^{1,3} Among children who are nonfatally injured while walking, the highest injury rates are among teens.^{2,3} In 2012, an estimated 10,088 teens ages 13 to 19 were injured while walking.² The pedestrian injury rate for teens ages 13 to 19 is more than three times that of children 4 and under.^{2,3}

So why are teens at greater risk for injury and death while walking than younger children? One possible explanation is the use of mobile technologies like cell phones and headphones. As of September 2012, 78 percent of teens ages 12 to 17 had cell phones, and 37 percent owned a smartphone, an increase from 23 percent in 2011.⁴ Researchers have explored the link between distraction from mobile devices and risky walking behaviors through both real-world and virtual observations.^{5,6}

To better understand the prevalence of distraction among middle- and high-school students, Safe Kids collected more than 34,000 observations of students crossing in school zones and found that one in five high schoolers and one in eight middle schoolers were observed crossing the street while distracted by phones, headphones, and other mobile devices.⁷ In another study, researchers looked at how many pedestrians were observed distracted while crossing the 10 intersections in Manhattan with the greatest numbers of pedestrians hit by cars. They found that more than one in four were distracted by headphones or cell phones while crossing.⁸ The rise in smartphone use means phones are used for purposes other than texting, such as the Internet and taking pictures. Using the Internet is just as distracting as texting: college students crossing the street in a virtual simulator while using the Internet on their phones were more likely to be hit or almost hit by a virtual vehicle than those who weren't distracted.⁹

We know that distraction is just one habit that can put teens at risk. That's why Safe Kids surveyed 1,040 teens ages 13 to 18, in 6th through 12th grade, to gain insights into teens' walking behaviors and how their attitudes and choices may put them in danger of being hit while walking.

Figure 1: Teens made up one-third of the population but two-thirds of the fatalities in children 19 and under in 2012

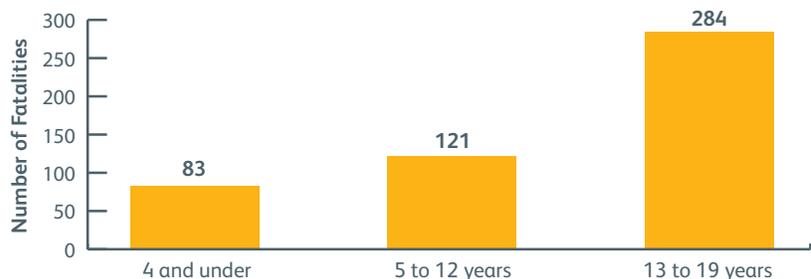
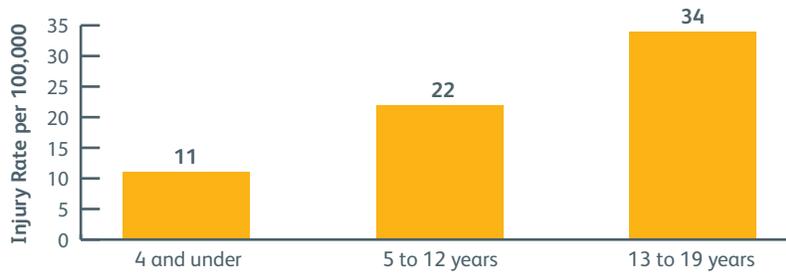


Figure 2: The pedestrian injury rate for teens was more than three times that of children 4 and under in 2012



What We Learned from Teens

One in eight teens (12 percent) say they most often walk to get to and from school (Figure 3). Regardless of whether they walk, ride a school bus or get a ride from a parent, teens were asked how much time they spend walking on their trip to school. More than 70 percent say they walk for some part of their trip, and a quarter say they walk 20 minutes or longer (Figure 4).

We also asked about characteristics of their walk to school. Almost nine out of 10 teens (87 percent) say there are sidewalks on their walk to or from school. More than half of teens (52 percent) say there is a crossing guard on their walk at least some of the time. Of those teens, less than half (42 percent) say they actually cross the street with the guard. Pedestrian safety may not be top-of-mind for many teens: only 40 percent of teens say they have had instruction crossing the street safely in school in the past year.

Figure 3: How do you most often get to and from school?

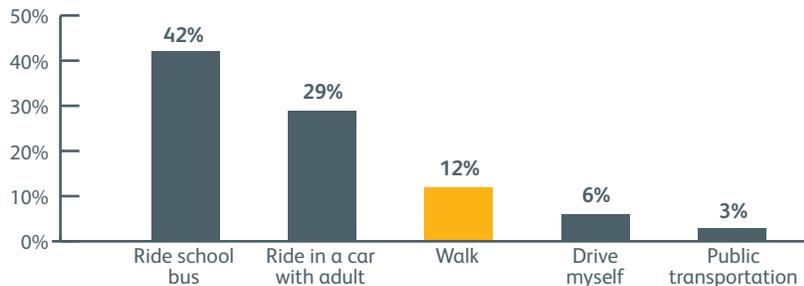
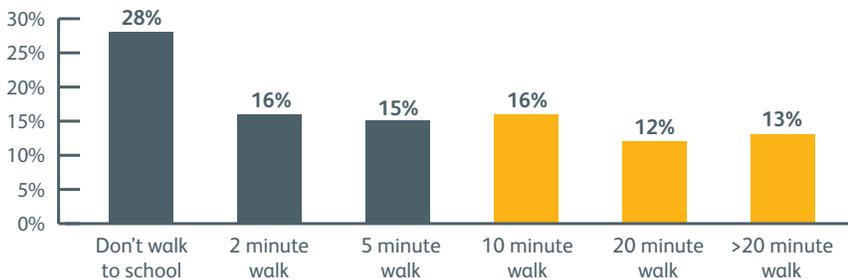


Figure 4: 41 percent of all teens say they walk 10 minutes or longer on their trip to school



With the support of FedEx, Safe Kids Worldwide surveyed 1,040 teens ages 13 to 18 to explore walking behaviors and their experiences as pedestrians.

Have you ever been hit or almost hit? What happened?

“I was texting on my phone and crossing the street and the car was speeding. The car hit me and I broke my leg and my toe.”

“I was listening to music on my phone and forgot to look both sides and almost got hit by a car.”

“I was running to cross the street and I dropped my phone. I was texting a friend right before I ran. I went to go and pick it up, and there was a car right in front of me.”



Distraction, Injuries and Close Calls

We asked teens if they ever text, listen to music or use their phone while walking or crossing the street. Half of teens said they cross the street while listening to music or using their phone (Figure 5). Teens who text say they are most often texting with friends (82 percent), and teens who talk on the phone say they are most often talking to their parents (72 percent) (Figure 6). Many teens admit to walking while distracted, but fewer say they cross the street while distracted. For example, 49 percent of teens say they text while walking, but only 12 percent say they cross the street while texting. Sixty-three percent of teens say they listen to music with headphones while walking, yet 38 percent say they cross the street while wearing headphones. Does this mean that teens are getting the message and putting down phones and headphones when crossing the street? Or does it suggest that teens know what they should be doing—not crossing the street while distracted—but likely are, based on how often they say they walk while distracted?

While we may not be able to answer this question now, we are able to look at differences based on teens’ self-reported experience with pedestrian injuries. Forty percent of teens say they have been hit or nearly hit by a car, bike or motorcycle while walking (Figure 7). When asked what happened, teens said the driver was going too fast (24 percent), the teen didn’t look properly (13 percent), and the driver wasn’t paying attention (10 percent).

Teens who have been hit or had a close call more often report being distracted while crossing the street, and crossing in risky ways. For example, the proportion of teens who say they text while crossing the street is more than twice as large among teens who had been hit or almost hit (18 percent) compared to teens who haven’t been hit (8 percent) (Figure 8).

Teens who have been hit or almost hit also think it’s normal to cross the street while texting or talking on the phone: 63 percent say almost everyone or most people their age text or talk, compared to 49 percent of those who hadn’t been hit or almost hit.

We know that distraction can impact how safely someone crosses the street: a study found that pedestrians who were texting while crossing the street were almost four times more likely to cross unsafely, such as crossing in the middle of the intersection or not looking both ways, than pedestrians who weren’t distracted.⁵ When we looked at unsafe crossing behaviors, we found that teens who had been hit or had a close call more frequently reported crossing in the middle of the block (37 percent) and running across the street (40 percent) than teens who hadn’t been hit or had a near miss (Figure 9).

Figure 5: Which of the following do you ever do when walking or crossing the street?

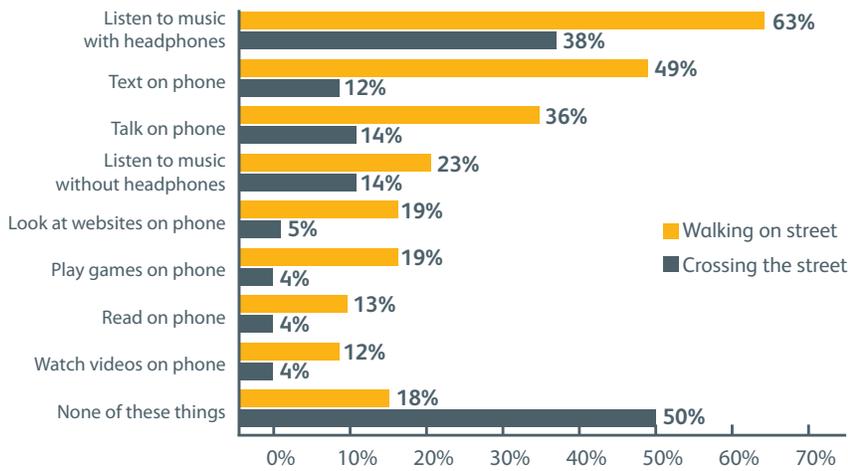
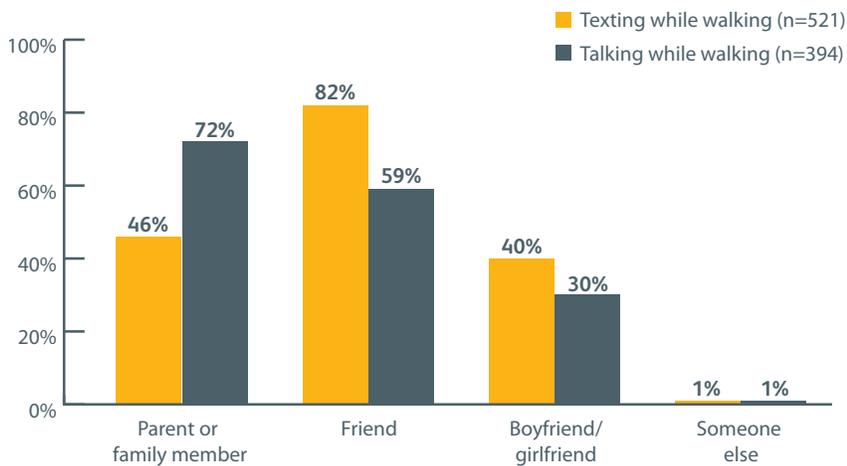


Figure 6: Who are you usually talking to when you're texting or talking on the phone while walking?



As of September 2012, 78 percent of teens ages 12 to 17 had cell phones.

Pew Research Internet Project

Figure 7: Two in five teens say they have been hit or nearly hit while walking

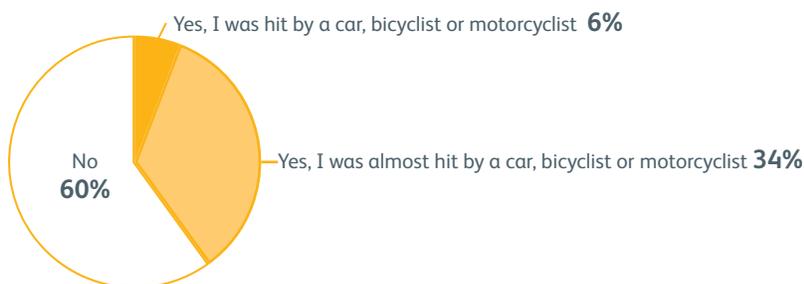


Figure 8: A larger proportion of teens who have been hit or nearly hit report crossing the street while distracted

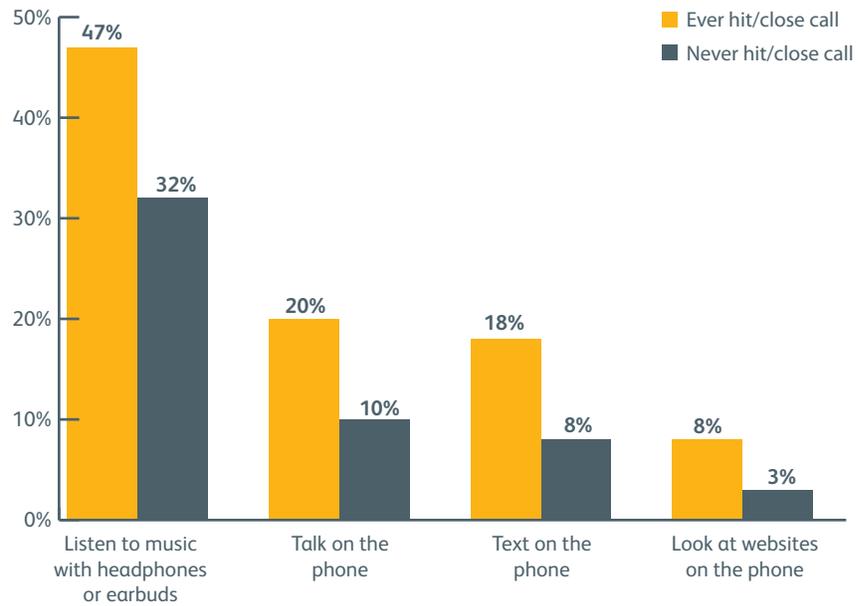
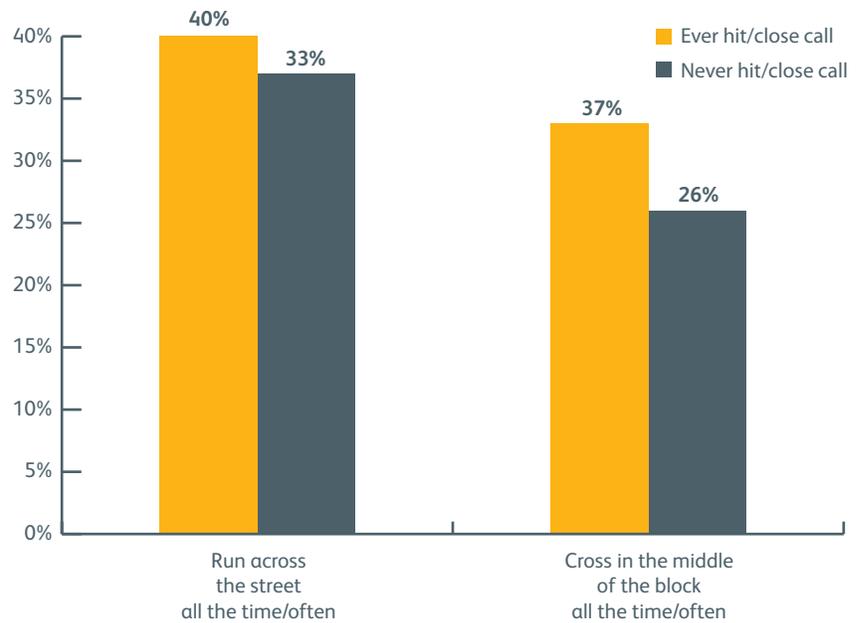


Figure 9: Teens who have been hit or almost hit also report risky crossing behaviors like crossing in the middle of the block





20 percent of teens who have been hit or nearly hit report talking on the phone when they cross the street.

Early Mornings, Late Nights and Distraction: A Dangerous Combination

In high school, it can feel like there's never enough time to fit everything in. School activities can run late into the night, and school often starts early in the morning.

A review of fatalities shows that 73 percent of fatal crashes involving teen pedestrians ages 13 to 19 occurred between 7 p.m. and 7 a.m. (Figure 10).¹⁰ We asked teens if they walk in the dark in the early morning or in the evening. Half of teens (50 percent) say they walk in the dark at least sometimes (Figure 11). Teens who had been hit or almost hit more frequently reported walking in the dark at least sometimes (29 percent) than those who haven't been hit or had a near miss (19 percent).

Distraction and exhaustion from late nights may play a role in creating an even more dangerous situation: a study of 14- and 15-year-olds found that kids who didn't get enough sleep the night before (4 hours) were struck by virtual cars more often and had more near misses in a virtual walking simulator than kids who had enough sleep (8.5 hours).¹¹

Figure 10: Three-quarters of fatal teen pedestrian crashes occurred between 7 p.m. and 7 a.m. in 2012

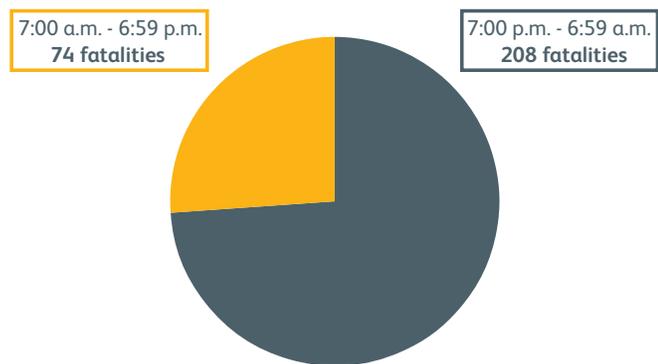
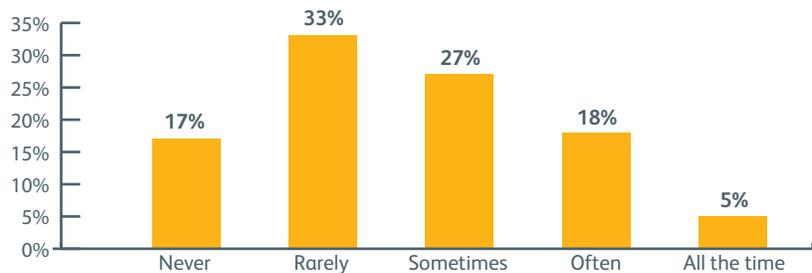


Figure 11: Half of teens say they walk in the dark at least sometimes



**73 percent of fatal
crashes involving
teen pedestrians
occurred between
7 p.m. and 7 a.m.**





Public Policy for Pedestrian Safety

The roadmap to safer roads and sidewalks for kids involves public policy solutions. Why? Because they work. For example, states that have passed laws banning teens from texting while driving, which are enforceable by police as a primary offense—meaning the stop didn't need to be based on a more serious traffic violation—reduced teen traffic deaths by 11 percent.¹²

A Vision to Reach Zero. There is a global model for making streets safer, “Vision Zero,” which was first conceived in Sweden. There, traffic fatalities declined by almost 50 percent in the last five years and road deaths of children under 7 have dramatically declined. In 2012, only one child was killed in a crash, compared to 58 in 1970. Vision Zero uses common sense solutions to reduce car crashes with low urban speed limits, speed bumps and enhanced law enforcement.¹³

While Vision Zero is not new to the United States—aspects have been adopted in Washington, D.C., San Francisco, Chicago and Los Angeles—it gained prominence recently when it was embraced by New York City in early 2013. The city is implementing a mix of tougher enforcement measures, changes to intersections and challenging streets, technological innovations to taxicabs and traffic signals, and more.¹⁴

Safe Kids Worldwide has urged the National Highway Traffic Safety Administration to consider Vision Zero principles as it continues to develop traffic safety policies.¹⁵

Smart Infrastructure Planning. In our 2013 report “Teens and Distraction,” we called for policy that requires federally funded infrastructure projects to engineer safety “best practices” into road and transit projects. Subsequently, the Safe Streets Act, S.2004/HR 2468, was introduced by Senator Mark Begich (D-Ark.) and Rep. Doris Matsui (D-Calif.). Under the bill, state transportation planning offices would have to develop policies that consider the safety of a range of unique travelers including children, pedestrians, bikers and senior citizens. Safe Kids supports this bipartisan legislation.¹⁶

Assessing Your Streets for Safety. Championing the Safe Streets Act are Smart Growth America and the National Complete Streets Coalition, and one of the best practices they recommend are walkability audits. The audits are grassroots efforts to evaluate and create the basis for transforming dangerous intersections and streets into safety zones. Road improvements are often unpopular in a community, but by bringing in community input, the projects are more likely to be embraced. Several states have developed effective models for a walkability audit.¹⁷

Enforce Pedestrian Safety Laws. Laws that forbid a pedestrian from crossing a street in the middle of the block date back to at least 1909, when cars were redefining what a street was, and they are just as relevant today. In fact, 79 percent of the teens surveyed told us that they'd be less likely to cross a street in the middle if it were enforced as a violation of the law. Some laws might have to be modernized. The Massachusetts law still maintains the fine for a first-time offense at \$1.¹⁸

Police recently cracked down on crossing midblock and crossing against the light in Los Angeles, an offense that carries a \$197 fine.¹⁹ Since 2009, there have been more than 5,800 unsafe pedestrian cases in Columbus, Ohio, with the concentrated effort sometimes focusing on college campus neighborhoods.²⁰ Perhaps the high-visibility crackdowns that have been used successfully in encouraging seat belt use can be useful against the kind of unsafe crossing behaviors discussed in this report.

Conduct	Data Point	Policy Response
“I cross in the middle of the block all the time.”	60 percent of teens say they cross in the middle of the block at least sometimes.	Pass tougher pedestrian crossing laws and enforce them with high visibility—79 percent told us they’d be less likely to cross midblock.
“Most of my friends text and walk.”	One-third of teens say almost everyone their age talks or texts on the phone when crossing the street.	Raising awareness is probably best, but cities in New Jersey, North Carolina and Illinois passed laws banning texting and walking.
“I cross busy intersections when there’s lots of traffic.”	20 percent of teens say they cross more than five streets with traffic on their walk to school.	Policy should require federally funded road improvement projects designed for safety.
“One of the reasons I am nervous about drivers are speeders.”	57 percent feel unsafe at times walking on sidewalks and crossing streets.	A best practice under Safe Routes to School and Vision Zero is to have lower speed limits in school zones and built-in speed bumps.

“Whether you live in a city or a small town, and whether you drive a car, take the bus or ride a train, at some point in the day, everyone is a pedestrian. This month, DOT announced an initiative aimed at reversing the recent rise in deaths and injuries among the growing number of Americans who bicycle or walk to work, to reach public transportation and to other important destinations.”

U.S. Transportation Secretary
Anthony Foxx
September 2014

Pedestrian Safety: A Federal Priority

In September 2014, U.S. Transportation Secretary Anthony Foxx announced an initiative to reduce pedestrian and bicycle injuries and fatalities. The plan includes requiring local assessments of critical corridors to make walking and biking safer; providing community education and assets to create safe, walkable communities; developing ways to deter midblock crossings; and continued support for the Safe Routes to School program. One innovation in the program is “road diets,” which engineer roads to reduce car traffic and speed, making them more friendly (and safe) for walkers and bikers. Safe Kids is supportive of Secretary Foxx’s continued focus on pedestrian injuries and fatalities.

“Whether you live in a city or a small town, and whether you drive a car, take the bus or ride a train, at some point in the day, everyone is a pedestrian,” said U.S. Transportation Secretary Anthony Foxx. “This month, DOT announced an initiative aimed at reversing the recent rise in deaths and injuries among the growing number of Americans who bicycle or walk to work, to reach public transportation and to other important destinations.”

Take Action Against Distraction: The Moment of Silence Campaign

On Halloween morning in 2012, 15-year-old Christina Morris-Ward was killed while crossing the street just two blocks from her high school. Christina was wearing headphones and looking down at her phone when an oncoming car hit her in the middle of an intersection. In honor of Christina and teens who are injured and killed each year while crossing the street, take the Moment of Silence pledge to put your device down when crossing the street. Watch the video and take the pledge at safekids.org.



Pedestrian Safety Tips

- Walk on sidewalks or paths and cross at street corners. Use traffic signals and crosswalks. Most injuries happen mid-block or someplace other than intersections. If there are no sidewalks, walk facing traffic and as far away from vehicles as possible.
- Make eye contact with drivers before crossing the street and watch out for cars that are turning.
- Look up and pay extra attention when using headphones, cell phones or electronic devices. Make it a rule to put devices down when crossing the street. For headphones, pull them down or turn off the volume before crossing the street.

Methodology

The online survey was completed by teens ages 13 to 18 (n=1,040). A quota of n=200 completes was set for each age (combining 17 and 18). The survey lasted 10 minutes and was fielded from June 26 to July 3, 2014, using the Research Now youth panel. Additional efforts were made to secure a number (n=76) of respondents completing the survey through a mobile platform.

Most online samples are not projectable according to strict sampling theory that states that in order for a sample to be projectable to a population it must be a random sample of that population; that is, one in which all members of the population have a known and non-zero probability of selection. Having said that, online samples, if recruited, managed and selected correctly, can effectively reflect a known universe. They have been demonstrated time and time again to “work” in replicating known population parameters with sufficient accuracy that the right business decisions can be made.

For practical purposes, the margin of error for the total sample size of this study (n=1,040) is 3.0 percent at a 95 percent confidence level. This means that if this study was repeated using the same parameters, 19 times out of 20 (or 95 percent of the time) we would expect to get a result within +/- 3.0 percent of the results we have here.

References

1. National Highway Traffic Safety Administration. Fatality Analysis Reporting System (FARS). 2012, pedestrian fatalities. Accessed July 25, 2014. Available at <http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/SelectYear.aspx>.
2. National Highway Traffic Safety Administration. General Estimates System (GES). 2012. Estimate of pedestrians (ages 20 & younger) injured in motor vehicle traffic crashes, by age. Accessed July 23, 2014.
3. U.S. Census Bureau. Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States: April 1, 2010 to July 1, 2013. Accessed July 25, 2014. Available at <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>.
4. Pew Research Internet Project. "Teens Fact Sheet." Accessed August 1, 2014. Available at <http://www.pewinternet.org/fact-sheets/teens-fact-sheet/>.
5. Thompson LL, Rivara FP, Ayyagari RC, Ebel BE. Impact of social and technological distraction on pedestrian crossing behaviour: an observational study. *Inj Prev.* 2013;19:232-7.
6. Schwebel DC, Stavrinou D, Byington KW, Davis T, O'Neal EE, de Jong D. Distraction and pedestrian safety: how talking on the phone, texting, and listening to music impact crossing the street. *Accid Anal Prev.* 2012;45:266-71.
7. Ferguson RW, Xu Z, Green A, Rosenthal KM. *Teens and Distraction: An In-Depth Look at Teens' Walking Behaviors.* Washington, DC: Safe Kids Worldwide, August 2013.
8. Basch CH, Ethan D, Rajan S, Basch CE. Technology-related distracted walking behaviours in Manhattan's most dangerous intersections. *Inj Prev.* 2014. [Epub ahead of print]
9. Byington KW, Schwebel DC. Effects of mobile Internet use on college student pedestrian injury risk. *Accid Anal Prev.* 2013;51:78-83.
10. National Highway Traffic Safety Administration. Fatality Analysis Reporting System (FARS). 2012, pedestrian fatalities by crash hour. Accessed July 30, 2014. Available at <http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/SelectYear.aspx>.
11. Davis AL, Avis KT, Schwebel DC. The effects of acute sleep restriction on adolescents' pedestrian safety in a virtual environment. *J Adolesc Health.* 2013;53:785-90.
12. Ferdinand, A, Bisakha Sen, N, Blackburn, J, Morrissey, M, and Nelson, L, "Impact of Texting Laws on Motor Vehicular Fatalities in the United States." *American Journal of Public Health.* 2014;104: 1370-1377.
13. The Economist. "Why Sweden has so few road deaths." February 26, 2014. Available at: <http://www.economist.com/blogs/economist-explains/2014/02/economist-explains-16>. Accessed August 5, 2014.
14. Flegenheimer M. "De Blasio Outlines Steps to Eliminate Traffic Deaths." *The New York Times.* February 18, 2014. Available at http://www.nytimes.com/2014/02/19/nyregion/de-blasio-unveils-plans-to-eliminate-traffic-deaths.html?module=Search&mabReward=relbias%3Aw%2C%7B%222%22%3A%22RI%3A12%22%7D&_r=0. Accessed August 6, 2014. The New York City Council passed 11 bills to implement Vision Zero and the New York State Legislature passed a bill allowing the City to lower its speed limit. New York City website, "Mayor de Blasio Signs Package of Life-Saving Traffic Safety Bills," June 23, 2014. Available at <http://www1.nyc.gov/office-of-the-mayor/news/301-14/mayor-de-blasio-signs-package-life-saving-traffic-safety-bills#0>. Accessed August 8, 2014.
15. Statement of Anthony Green, Public Policy Director at Safe Kids Worldwide, National Highway Traffic Safety Administration Public Listening Session NHTSA 2014-2018 Strategic Plan. February 24, 2014. Available at <http://www.safekids.org/public-policy-library#sthash.gnZblZie.dpuf>. Accessed August 7, 2014.
16. Safe Streets Act, H.R. 2468, 2013. Available at <https://beta.congress.gov/bill/113th-congress/house-bill/2468>. Accessed August 4, 2014. An Identical bill was introduced in the Senate, S. 2004. Available at <https://beta.congress.gov/bill/113th-congress/senate-bill/2004/related-bills>. Accessed August 4, 2014.
17. "Walkable Washington." Feet First. Available at <http://www.feetfirst.org/get-involved/walkablewashington>. Accessed August 8, 2014. "Walkability Audits." Safe Routes to School in Pennsylvania. 2014. Available at <http://www.saferoutespa.org/Resources/Walkability-Audits/>. Accessed August 4, 2014.
18. Randall R. "Why Wouldn't You Jaywalk in Boston?" *Boston Daily.* July 23, 2014. Available at <http://www.bostonmagazine.com/news/blog/2014/07/23/wouldnt-jaywalk-boston/>. Accessed August 4, 2014.
19. Nagourney A. "In a Car-Culture Clash, It's the Los Angeles Police vs. Pedestrians." *New York Times.* December 25, 2013. Available at <http://www.nytimes.com/2013/12/26/us/in-a-car-culture-clash-its-los-angeles-police-vs-pedestrians.html?pagewanted=all>. Accessed August 6, 2014.
20. Manning A. "Dozens of jaywalking tickets issued in Columbus each month." *Columbus Dispatch.* June 14, 2014. Available at <http://www.dispatch.com/content/stories/local/2014/06/15/dozens-of-jaywalking-tickets-issued-in-city-each-month.html>. Accessed August 6, 2014.

Suggested citation: Ferguson RW, Green A, Rosenthal K. *Teens on the Move.* Washington, DC: Safe Kids Worldwide, October 2014.



Sponsored
by FedEx



Safe Kids Worldwide
1301 Pennsylvania Avenue, NW
Suite 1000
Washington, D.C. 20004
202.662.0600

www.safekids.org