

## Pedestrian Safety 2014 Resource Guide



CSN has produced this resource guide to provide a comprehensive, annotated list of resources for pedestrian safety. The resource guide is divided into eight sections: Data; Safe Routes to School; Pedestrian Safety for Preschoolers; Other Programs, Strategies and Campaigns; Program Planning, Implementation, and Evaluation; Policy; Research; and Distracted Walking. Each item in this resource guide includes a short description and a link to the resource itself. Descriptions of reports, guides, toolkits, campaigns, websites, and initiatives are excerpted from the publications themselves while research articles are excerpted from the article abstracts.

### *Data*

#### **NHTSA Traffic Safety Facts: 2010 Data - Pedestrians**

A pedestrian is defined as any person not in or upon a motor vehicle or other vehicle. In 2010, 4,280 pedestrians were killed and an estimated 70,000 were injured in traffic crashes in the United States. On average, a pedestrian was killed every two hours and injured every eight minutes in traffic crashes. Almost three-fourths (72%) of pedestrian fatalities occurred in an urban setting versus a rural setting. In 2010, almost one-fifth (19%) of all children between the ages of 5 and 9 who were killed in traffic crashes were pedestrians. Children age 15 and younger accounted for 7 percent of the pedestrian fatalities in 2009 and 23 percent of all pedestrians injured.

<http://www-nrd.nhtsa.dot.gov/Pubs/811625.pdf>

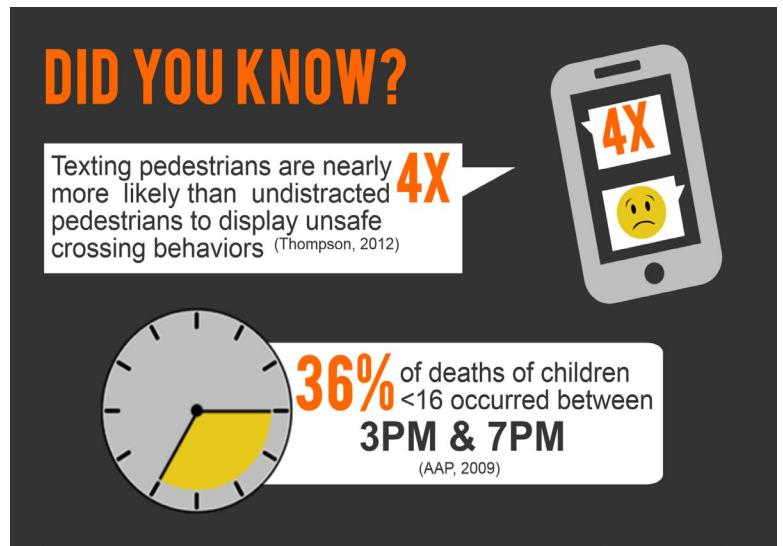
#### **Not-in Traffic Surveillance - 2007 Children**

This issue of Crash\*Stats focuses on information in the National Highway Traffic Safety Administration's (NHTSA) Not-in-Traffic Surveillance (NiTS) system regarding children 14 and younger. The NiTS 2007 produced an overall estimate of 262 fatalities and 115,000 injuries to children 14 and younger in nontraffic crashes and noncrash incidents. Overall, an estimated 106 child fatalities occurred each year when pedestrians or other nonoccupants

- Data
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were struck by forward-moving vehicles, and 99 child fatalities occurred each year in backovers. The third most common not-in-traffic fatality scenario for children was hyperthermia or excessive heat while in the vehicle, which resulted in an average of 27 fatalities per year. The three most common not-in-traffic injuries involving children in declining order were extremities such as hands or feet caught in closing vehicle doors, falls while exiting or entering vehicles, and being cut by vehicle parts such as bumpers and license plates.

<http://www-nrd.nhtsa.dot.gov/Pubs/811116.pdf>



### [Infographic] Walking Safe: Child Pedestrian Safety (2013)

This infographic from CSN highlights injuries among child pedestrians. It charts the relationship between age groups and injuries.

<http://www.childrensafetynetwork.org/publications/pedestrian-safety-infographic>

### Motor Vehicle Traffic-Related Pedestrian Deaths – United States, 2001-2010 (2013)

Pedestrian travel makes up 10.5% of all trips (i.e., any travel from one address to another) taken in the United States, and pedestrians represent 13% of all motor vehicle traffic-related deaths. To determine traffic-related pedestrian death rates by sex, age group, race/ethnicity, and urbanization level, the Centers for Disease Control and Prevention (CDC) analyzed 2001-2010 data from the National Vital Statistics System (NVSS). The results of that analysis indicated that the overall, annualized, age-adjusted traffic-related pedestrian death rate was 1.58 deaths per 100,000 population.

[http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6215a1.htm?s\\_cid=mm6215a1\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6215a1.htm?s_cid=mm6215a1_w)

### Trauma Center-Based Surveillance of Nontraffic Pedestrian Injury among California Children | Western Journal of Emergency Medicine (2012)

Every year in the United States, thousands of young children are injured by passenger vehicles in driveways or parking areas. Little is known about risk factors, and incidence rates are difficult to estimate because ascertainment using police collision reports or media sources is incomplete. This study from the *Western Journal of Emergency Medicine* used surveillance at trauma centers to identify incidents and parent interviews to obtain detailed information on incidents, vehicles, and children.

<http://escholarship.org/uc/item/99f2s4hs>

### Dangerous by Design: Solving the Epidemic of Preventable Pedestrian Deaths (and Making Great Neighborhoods) - A T4America Report (2009)

This report, published by Transportation for America (T4America), highlights the continuing national tragedy of pedestrian deaths and injuries and suggests state projects to make it safer and more convenient to walk. According to the report, Orlando is the most dangerous city for pedestrians. The other cities in the top 10 most dangerous were: Tampa, FL; Miami, FL; Jacksonville, FL; Memphis, TN; Raleigh, NC; Louisville, KY; Houston, TX; Birmingham, AL; and Atlanta, GA. In the past decade, 43,000 Americans were killed while crossing or walking along a street. Of those, 3,906 were children



younger than 16. T4 America has called on Congress to improve pedestrian safety by: designating federal funds to pedestrian projects; expanding the Safe Routes to School program; and adopting the Complete Streets program that focuses on ensuring streets are safe for all modes of transportation.

<http://t4america.org/2009/11/09/dangerous-by-design/>

### *Safe Routes to School*

**Safe Routes to School Travel Data: A Look at Baseline Results - An NCSRTS Report (2010)**

This report, published by the National Center for Safe Routes to School (NCSRTS), reveals parent attitudes on walking to school. Over 130,000 parent responses and almost 2.4 million student trips to or from elementary and middle schools were included in the analysis. According to parents, trips on foot totaled only 11 percent in the morning and 15 percent during the afternoon. Biking trips comprised 2 percent of trips in both directions. The most common parents' decision factors for allowing or not allowing their children to walk or bike to school were: distance; safety of intersections and crossings; weather or climate; and presence of sidewalks or pathways; followed by traffic volume and speed along the route.

[http://www.saferoutesinfo.org/sites/default/files/SRTS\\_baseline\\_data\\_report.pdf](http://www.saferoutesinfo.org/sites/default/files/SRTS_baseline_data_report.pdf)

### **Evaluation of the Safety Benefits of Legacy Safe Routes to School Programs: A NHTSA Study (2008)**

Safe Routes to School (SRTS) programs aim to increase children's walking and biking to school. As the SRTS programs grew, there arose a concern that these programs could result in an increase in child pedestrian and bicycle-related crashes. The goal of this National Highway Traffic Safety Administration (NHTSA) study was to consider this concern. The study results reveal a consistent pattern of declining pedestrian and bicycle crash involvements of elementary school children over the years during which SRTS programs were implemented. The authors conclude that SRTS programs were at least benign with respect to crashes.

<http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/811013.pdf>

### **Public Health-Led Safe Routes to School Programs: Experiences from Six Health Departments - A Safe States Alliance Report (2009)**

In many communities across the United States, public health is already a strong partner in state and local Safe Routes to School (SRTS) programs. This report, published by the Safe States Alliance, describes such programs in six health departments in diverse settings among five states that were awarded National Highway Traffic Safety Administration (NHTSA) and Safe States Alliance one-year mini-grants to engage the public health community in SRTS initiatives.

<http://c.ymcdn.com/sites/www.safestates.org/resource/resmgr/imported/SRTS%20FINAL%20Lessons%20Learned%20Report%20-%20rebranded%208.10.pdf>

### **Safe Routes to School: Putting Traffic Safety First - How Safe Routes to School Initiatives Protect Children Walking and Bicycling: A Safe Routes to School National Partnership Report (2009)**

This report describes how five local Safe Routes to School (SRTS) programs created safer environments

for children walking and bicycling. The five communities (Santa Rosa, CA; Miami-Dade County, FL; State of Maine; Springfield, MO; and Portland, OR) each demonstrated how the “5 E’s” of SRTS (evaluation, education, encouragement, enforcement, and engineering) improve traffic safety.

[http://saferoutespartnership.org/sites/default/files/pdf/Safety\\_report\\_final.pdf](http://saferoutespartnership.org/sites/default/files/pdf/Safety_report_final.pdf)

### **Safe Routes to School Guide (2013)**

Provides information on engineering, education, enforcement, encouragement, and evaluation strategies to increase safety for children bicycling and walking to school.

<http://guide.saferoutesinfo.org/>

### **Safe Routes to School for Law Enforcement**

The participation of law enforcement agencies in SRTS is critical. First, law enforcement professionals command the attention of the public and audiences in a unique way. Second, involvement of law enforcement enhances engineering and education efforts to provide a more comprehensive SRTS program and a greater likelihood of ensuring safe behaviors among pedestrians, bicyclists, and motorists. This resource is designed to assist officers and law enforcement agencies in their local SRTS efforts. It includes: tips for law enforcement officers on walking and bicycling safety; take away materials for students, parents, school staff, and others; talking points on bicycle and pedestrian safety; tips on addressing parental concerns; and activities for children.

<http://apps.saferoutesinfo.org/lawenforcement/>

### **Implementing Safe Routes to School in Low-Income Schools and Communities: A Resource Guide for Volunteers and Professionals (2010)**

This resource guide focuses on schools and communities in which at least half of the students or community residents are low-income.

<http://www.saferoutespartnership.org/sites/default/files/pdf/LowIncomeGuide.pdf>

### **Every Step Counts: SRTS Marketing Materials**

“Every step counts” is the theme of a series of free, downloadable Safe Routes to School (SRTS) marketing materials. The first part of the series, available now, is focused on the benefits of walking and bicycling to school and how to motivate parents to make that choice. School zone safety, including speeding and distracted driving, will be the focus of the next part of the series. The materials can be used to reach parents at the local and national level. They include: images for community newsletters; a take-home SRTS flyer for students; and materials for organizations’ websites.

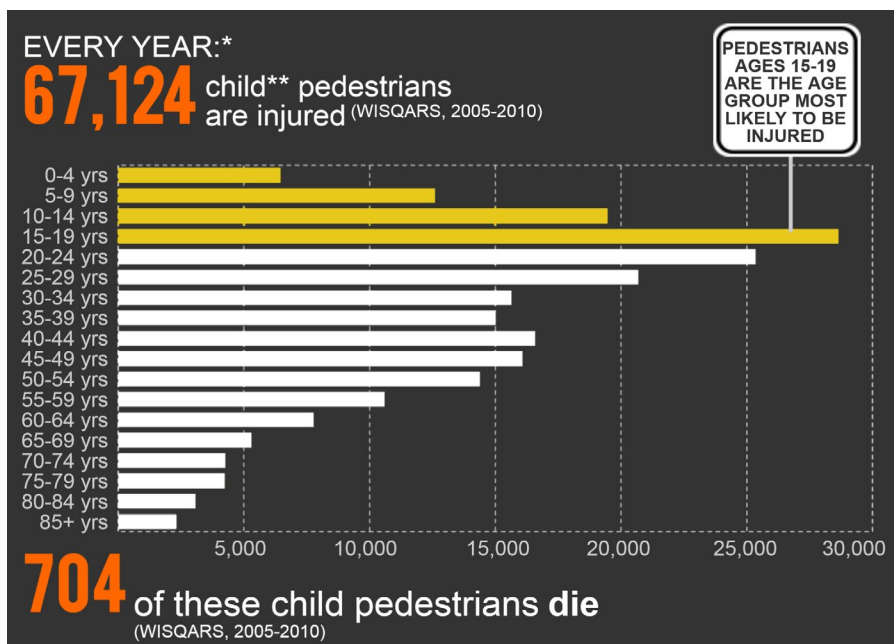
<http://www.saferoutesinfo.org/program-tools/every-step-counts-marketing-materials>



### **The Cost-Effectiveness of New York City’s Safe Routes to School Program | American Journal of Public Health (2014)**

This study evaluates the cost-effectiveness of a package of roadway modifications in New York City funded under the Safe Routes to School (SRTS) program. Researchers use a Markov model to estimate





long-term impacts of SRTS on injury reduction and the associated savings in medical costs, lifelong disability, and death. Ultimately, SRTS is associated with an overall net societal benefit of \$230 million and 2055 quality-adjusted life years gained in New York City. The study concludes that SRTS reduces injuries and saves money over the long run.

<http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2014.301868>

**Parent Safety Perceptions of Child Walking Routes | Journal of Transport and Health (2014)**

Walking rates to school remain low for U.S. children in large part due

to parent concern for child safety. Little research exists that identifies which features of streets and intersection lead parents to feel that walking is unsafe for their children. In this study, parent volunteers conducted an audit of streets and intersections leading to seven elementary schools in a suburban school district. Parents were most likely to feel concern about streets that lacked sidewalks or had sidewalks with obstructions. These results support the use of appropriate behavior models for assessing walking choices, highlight the importance of well-maintained sidewalks and age-appropriate crossings for young families, and demonstrate the importance of including the public in street audits.

<http://www.sciencedirect.com/science/article/pii/S2214140514000322>

**Investigating and Improving Pedestrian Safety in an Urban Environment | Injury Epidemiology (2014)**

Prompted by a series of fatal and nonfatal pedestrian-vehicle collisions, university leadership from one urban institution collaborated with its academic injury research center to investigate traffic-related hazards facing pedestrians. This descriptive epidemiologic study used multiple data collection strategies to determine the burden of pedestrian injury in the target area. Recommendations to improve pedestrian safety were developed in accordance with the three E's of injury prevention (education, enforcement, and engineering), along with plans for implementation and evaluation. These results underscore the importance of using multiple methods to fully understand the problem, developing pragmatic recommendations that align with the three E's of injury prevention, and collaborating with leadership who have the authority to implement recommended injury countermeasures.

<http://www.injepijournal.com/content/1/1/11/abstract>

## ***Pedestrian Safety for Preschoolers***

### **Pedestrian Safety for Little Kids on the Way: Tips for Parents from Safe Kids**

"Teach children safe pedestrian behaviors by modeling safe behaviors: cross streets at corners; use traffic signals and crosswalks whenever possible; and make eye contact with drivers prior to crossing in front of them...Don't allow little kids to cross streets alone...Make sure your child is visible when he is walking. Add retroreflective materials to children's clothing."

[http://www.safekids.org/safetytips/field\\_age/little-kids-1%25E2%2580%25934-years/field\\_risks/pedestrian-safety](http://www.safekids.org/safetytips/field_age/little-kids-1%25E2%2580%25934-years/field_risks/pedestrian-safety)

## **NHTSA. Keeping Kids Safe Inside and Out: Backovers - A Brief Manual for Parents**

A backover incident typically occurs when a car coming out of a driveway or parking space backs over a child because the driver did not see him/her..." This short manual provides several prevention tips for parents.

<http://icsw.nhtsa.gov/safercar/PARENTS-backup/backover.htm>

## ***Other Programs, Strategies and Campaigns***

### **Parent Central: A Website from NHTSA**

This website has information for parents on a variety of topics, including: car seats; bicycle, school bus, and pedestrian safety; seat belts; teen driving, which includes sections on impaired and distracted driving; and the dangers of trunk entrapment, heat stroke, back-overs, seat belt entanglement, power windows, and vehicle roll-away. It was created by NHTSA with collaboration from American Academy of Pediatrics, Safe Kids Worldwide, Governors Highway Safety Association, National Organizations for Youth Safety, Children's Hospital of Philadelphia, Chuggington, and the American Driver and Traffic Safety Education Association.

<http://www.safercar.gov/parents/>

### **Pedestrian Safety - Think Safe, Ride Safe, Be Safe! Toolkit - Traffic Safety Campaign from NHTSA and Chuggington**

Think Safe, Ride Safe, Be Safe! is a child transportation safety campaign from NHTSA and Ludorum, the producers of the Chuggington™ television series. The campaign provides you tools to help your child walk and ride more safely. Lessons focus on four main areas: pedestrian, bus, bike, and car seat safety. The program includes a fun and informative Chuggington traffic safety website, topic-specific safety tip sheets, downloadable safety activity materials and more.

<http://www.nhtsa.gov/parents/parents-peds.html>

### **Safe Kids: Walk This Way**

Safe Kids Worldwide and program sponsor FedEx created Safe Kids Walk This Way to teach safe behavior to motorists and child pedestrians and create safer, more walkable communities. The goal of the initiative is preventing pedestrian-related injury to children. Since the launch of the program in spring 2000, Safe Kids Walk This Way has spanned the globe, engaging FedEx volunteers to reach families in hundreds of communities throughout the United States and around the world. Safe Kids Walk This Way relies on FedEx employee volunteers and encourages new partners, including public officials, public agencies, community organizations and parents, to join Safe Kids Worldwide coalitions to improve conditions for child pedestrians.

<http://www.safekids.org/walk-way>

### **Everyone Is a Pedestrian: A Website from NHTSA**

This NHTSA website has a variety of pedestrian safety tip sheets for parents/caregivers and children. The research, statistics, curricula, and researchers will help identify pedestrian safety problems and promote and select programs and countermeasures.

<http://www.nhtsa.gov/nhtsa/everyoneisapedestrian/index.html>

## [CSN] Promoting Traffic Safety for Children and Adolescents: State Health Departments in Action (2006)

This publication describes the results of a scan of 10 state health departments, one in each NHTSA region, to learn of traffic safety activities. It provides information on state programs and initiatives concerning child passenger safety, impaired driving prevention, bicycle safety, and pedestrian safety.

<http://www.childrenssafetynetwork.org/sites/childrenssafetynetwork.org/files/Promotingtrafficsafetyforchildrenandadolescents.pdf>

### Let's Move: A National Campaign

This campaign, led by First Lady Michelle Obama, aims to solve the epidemic of childhood obesity within a generation. It gives parents, community leaders, teachers, doctors, and nurses the support they need to make healthy food available in every school and home and to help our kids to be more physically active.

<http://www.letsmove.gov/>

### Complete Streets

This campaign, conducted by the National Complete Streets Coalition, seeks to fundamentally transform the look, feel, and function of the roads and streets in the United States, by changing the way most roads are planned, designed, and constructed. By 2009, 100 states, regions, counties, cities, and towns had adopted Complete Streets policies.

<http://www.smartgrowthamerica.org/complete-streets>

### Transportation for America: A National Campaign

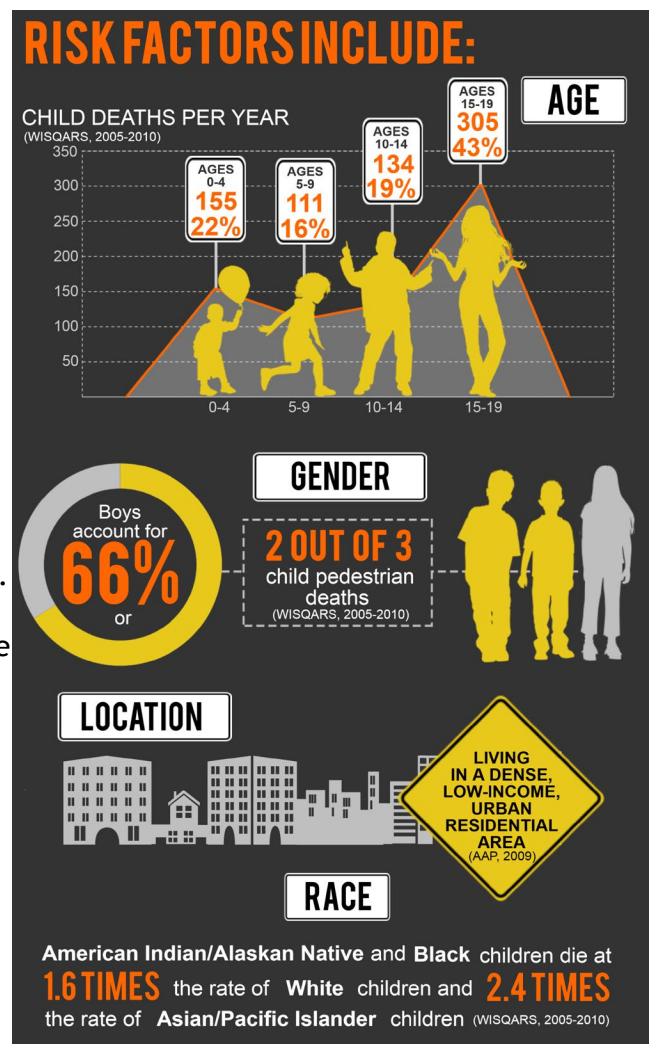
The Transportation for America campaign focuses on building a modernized infrastructure and healthy communities, including: improving safety for pedestrians, cyclists, and motorists; supporting active lifestyles; and reducing poor air quality. The campaign is made up of a growing and diverse coalition of groups, including: real estate; housing; environmental; public health; urban planning, and transportation. The American Public Health Association, the National Association of County and City Health Officials, and Smart Growth America are all partners of the campaign.

<http://t4america.org/>

### Smart Growth

“Smart Growth” is an urban planning and transportation theory that concentrates growth in the center of a city to avoid urban sprawl and advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices. The most widely used tool for achieving Smart Growth is the local zoning law. The Smart Growth movement in the United States is spurred by: demographic shifts; a strong environmental ethic; and increased fiscal concerns.

<http://www.smartgrowth.org/>



## **NHTSA Works to Reach Hispanic Communities Concerning Pedestrian and Bicycle Safety**

When Hispanic immigrants arrive here, they often rely on bicycles and/or walking as their primary means of transportation. However, they often are not familiar with our traffic signs, signals, and practices. Oftentimes, the language barrier may affect immigrants' ability to understand how to travel safely. For these reasons, they are at a higher risk of being involved in pedestrian and/or bicycle crashes. Hispanic adult men, in particular, may be at an even higher risk. In an effort to reduce pedestrian and bicycle fatalities involving newly-arrived Hispanic immigrants, NHTSA has made available several traffic safety materials in Spanish (e.g., posters, brochures, radio announcements, etc.) for use by local, state, and national traffic safety advocates.

<http://www.nhtsa.gov/Driving+Safety/Bicycles/Pedestrian+and+Bicycle+Safety+among+Hispanics>

## **Getting There Safely: A Pedestrian Safety Video from NHTSA**

This video, suitable for up to age 12, briefly reviews the safety skills covered in the "Stop and Look with Willy Whistle" video for younger children, and includes more advanced pedestrian safety skills and concepts such as safety near roads with high traffic volumes, crossing controlled and signalized intersections, and visual screens and safety in parking lots. Schools, extra-curricular groups, community centers, health centers may wish to incorporate this video, or clips into their activities to inform and educate youth.

[http://www.youtube.com/watch?v=ATyNXDMvBuE&feature=player\\_embedded](http://www.youtube.com/watch?v=ATyNXDMvBuE&feature=player_embedded)

## ***Program Planning, Implementation and Evaluation***

### **[CSN] Communicating Traffic Safety to Newly-Arrived Latinos: Developing Effective Traffic Safety Materials (2007)**

This presentation is based on a CSN publication "Guidelines for developing traffic safety educational materials for Spanish-speaking audiences". It describes how to develop culturally appropriate print educational materials (such as posters, brochures and fotonovelas) for newly-arrived Latinos to help keep them safe when driving, riding, biking or walking.

<http://www.childrenssafetynetwork.org/presentations/communicating-traffic-safety-newly-arrived-latinos-developing-effective-traffic-safety>

### **How to Develop a Pedestrian Safety Action Plan: An FHWA Publication (2009)**

This manual, published by the Federal Highway Administration (FHWA), helps state and local officials to identify pedestrian safety problems and select solutions. The guide is primarily focused on street redesign and the use of engineering countermeasures. The revised 2009 edition includes sections on education and enforcement which discuss, among other topics: the Maryland Pedestrian and Bicycle Safety Education Program (elementary school curriculum); the FHWA Pedestrian Safety Campaign; the National Safe Routes to School Program; and educating high school pedestrians.

[http://safety.fhwa.dot.gov/ped\\_bike/ped\\_focus/docs/fhwasa0512.pdf](http://safety.fhwa.dot.gov/ped_bike/ped_focus/docs/fhwasa0512.pdf)

### **Evaluation of the Miami-Dade Pedestrian Safety Demonstration Project: A NHTSA Report (2008)**

The purpose of this program was to reduce deaths and injuries to pedestrians in a large, urban environment by targeting high-crash locations and zones. 16 different strategies targeting four selected zones were implemented. The strategies included education, enforcement, and engineering measures. The program's evaluation showed that crashes involving child pedestrians decreased by 32.6 percent in the four targeted zones combined, and decreased by 22.1 percent countywide.

<https://www2.hhh.umn.edu/publications/5806/document.pdf>



## **Case Study Compendium: A PBIC Report (2010)**

This report, published by the Pedestrian and Bicycle Information Center (PBIC), examines the best pedestrian and bicycle programs from across the United States and abroad. Depending on the main program's activity, the case studies are categorized into the following sections: "Comprehensive"; "Education"; "Engineering"; "Encouragement"; and "Planning".

[http://katana.hsrb.unc.edu/cms/downloads/pbic\\_case\\_study\\_compendium.pdf](http://katana.hsrb.unc.edu/cms/downloads/pbic_case_study_compendium.pdf)

## ***Policy***

### **Pedestrian Safety: An AAP Policy Statement (2009)**

This policy statement, released by the American Academy of Pediatrics (AAP), suggests that parents and caregivers learn about the developmental limitations that prevent young children from being able to navigate traffic and understand that child pedestrians should not be unsupervised before 10 years of age.

<http://pediatrics.aappublications.org/content/124/2/802.abstract?rss=1>

### **Helping Johnny Walk to School: Policy Recommendations for Removing Barriers to Community-Centered Schools (2009)**

This report, released by the National Trust for Historic Preservation, describes steps that states and localities can take to encourage more schools that are centrally located and accessible by many modes of transportation. The report suggests changes that would help ensure that educational, environmental, health, and fiscal considerations are weighed by communities when making school closing, consolidation, and site selection decisions.

[http://www.bestfacilities.org/best-home/docuploads/pub/214\\_helping-johnny-walk-to-school.pdf](http://www.bestfacilities.org/best-home/docuploads/pub/214_helping-johnny-walk-to-school.pdf)

## ***Research***

### **Child Pedestrian Injury: A Review of Behavioral Risks and Preventive Strategies | American Journal of Lifestyle Medicine (2012)**

Pedestrian injury is among the leading causes of pediatric death in the United States and much of the world. This article, published in the American Journal of Lifestyle Medicine, reviews the literature on behavioral risk factors for child injury. Cognitive and perceptual development risks are discussed. The roles of distraction, temperament and personality, and social influences from parents and peers are presented in the American Journal of Lifestyle Medicine. The second section of the review considers child pedestrian injury prevention strategies. Categorized by mode of presentation, the authors discuss parent instruction strategies, school-based instruction strategies (including crossing guards), and street side training techniques.

<http://ajl.sagepub.com/content/6/4/292>

### **Determinants of Parent Perceptions of Dangerous Traffic Related To School Travel | Injury Prevention (2012)**

Walking to/from school is an important source of physical activity for children. Parents' perceptions of dangerous traffic affect whether or not their child walks to/from school. The determinants of parent's perceptions of dangerous traffic are currently unknown. The objective of this study from Injury Prevention was to determine which objective measures of the built environment and traffic at elementary schools are related to parent's perceptions of traffic danger.

[http://injuryprevention.bmj.com/content/18/Suppl\\_1/A82.2](http://injuryprevention.bmj.com/content/18/Suppl_1/A82.2)

### **The Effects of Peer Influence on Adolescent Pedestrian Road-Crossing Decisions | Traffic Injury Prevention (2013)**

Adolescence is a high-risk period for pedestrian injury. It is also a time of heightened susceptibility to peer influence. The aim of this research was to examine the effects of peer influence on the pedestrian road-crossing decisions of adolescents. These findings, published in Traffic Injury Prevention, show that road-crossing decisions of adolescents were influenced by both unsafe and cautious comments from their peers. The discussion highlights the role that peers can play in both increasing and reducing adolescent risk-taking.

<http://www.tandfonline.com/doi/abs/10.1080/15389588.2012.725259#.UZE8JqLvmp>

### **How Well Do Children Estimate the Time It Takes To Cross a Road? A Risk Factor For Pedestrian Injury | Injury Prevention (2012)**

This study from Injury Prevention examined accuracy of children's crossing time estimates. Results indicate that underestimation of the time needed to cross streets may contribute to child pedestrian injuries. Consideration of children's ability to judge the time required to cross streets accurately may be a valuable addition to the development of effective pedestrian safety training programs.

[http://injuryprevention.bmj.com/content/18/Suppl\\_1/A103.4](http://injuryprevention.bmj.com/content/18/Suppl_1/A103.4)

### **How Children Get to School: School Travel Patterns from 1969 to 2009 - A National Center for Safe Routes to School Report (2011)**

The National Center for Safe Routes to School recently released "How Children Get to School: School Travel Patterns from 1969 to 2009," a research report which provides insight into national trends in U.S. school travel. Using information from the 2001 and 2009 National Household Travel Survey (NHTS) and its predecessor the 1969 and 1995 Nationwide Personal Transportation Surveys (NPTS), the report describes how student school travel in the United States changed between 1969 and 2009. Statistics show that from 1995 to 2009 among those students living within one mile of school—a distance often considered easily walkable and bikeable—there were no significant changes in school travel trends. When all students are considered, regardless of distance lived from school, the percentage of students driven to school in personal vehicles increased while walking and school bus use dipped slightly and bicycle use stabilized.

<http://www.saferoutesinfo.org/program-tools/NHTS-school-travel-1969-2009>

### **Trauma Center-Based Surveillance of Nontraffic Pedestrian Injury among California Children | Western Journal of Emergency Medicine (2012)**

Every year in the United States, thousands of young children are injured by passenger vehicles in driveways or parking areas. Little is known about risk factors, and incidence rates are difficult to estimate because ascertainment using police collision reports or media sources is incomplete. This study from the Western Journal of Emergency Medicine used surveillance at trauma centers to identify incidents and parent interviews to obtain detailed information on incidents, vehicles, and children.

<http://escholarship.org/uc/item/99f2s4hs>



## **Walking Safely: A Report to the Nation | Safe Kids (2012)**

“Walking Safely: A Report to the Nation” examines 15-year trends in child pedestrian injuries and deaths in the U.S. The report from Safe Kids reveals that while walking safety has improved overall for children since 1995, there are still a staggering number of children hit by cars. More than 61 children are injured every day severely enough to seek medical attention. More than 500 children are killed every year.

<http://www.safekids.org/walkingsafely>

## ***Distracted Walking***

### **[CSN] Dangers of Distracted Walking: Talking to Children about Pedestrian Safety (2012)**

This blog post from CSN highlights the dangers of distracted walking.

<http://www.childrenssafetynetwork.org/blog/dangers-distracted-walking-talking-children-about-pedestrian-safety>

### **Effect of Cell Phone Distraction on Pediatric Pedestrian Injury Risk | Pediatrics (2009)**

This study from Pediatrics was designed to examine the influence of talking on a cell phone for pediatric pedestrian injury risk. The study found that children’s pedestrian safety was compromised when distracted by a cell phone conversation. While distracted, children were less attentive to traffic; left less safe time between their crossing and the next arriving vehicle; experienced more collisions and close calls with oncoming traffic; and waited longer before beginning to cross the street.

<http://pediatrics.aappublications.org/content/123/2/e179.full>

### **Effects of Mobile Internet Use on College Student Pedestrian Injury Risk | Accident Analysis & Prevention (2012)**

College-age individuals have the highest incidence of pedestrian injuries of any age cohort. One factor that might contribute to elevated pedestrian injuries among this age group is that injuries occurred during crossing streets while distracted by mobile devices. This study from Accident Analysis & Prevention found that pedestrian behavior was influenced, and generally considerably riskier, when participants were simultaneously using mobile Internet and crossing the street than when crossing the street with no distraction. This finding reinforces the need for increased awareness concerning the risks of distracted pedestrian behavior.

<http://www.sciencedirect.com/science/article/pii/S0001457512003788>

### **Headphone Use and Pedestrian Injury and Death in the United States: 2004-2011 | Injury Prevention (2012)**

The association between distraction caused by cell phone use while driving and driver/passenger fatalities has been documented, but the safety risks associated with headphone use by pedestrians remains unknown. The objective of this study from Injury Prevention was to identify and describe pedestrian-vehicle crashes in which the pedestrian was using headphones. The majority of crash victims were males under the age of 30.

<http://injuryprevention.bmj.com/content/early/2012/01/03/injuryprev-2011-040161.short>

### **Impact of Social and Technological Distraction on Pedestrian Crossing Behavior: An Observational Study | Injury Prevention (2012)**

The objective of this study from Injury Prevention was to study the impact of technological and social distraction on cautionary behaviors and crossing times in pedestrians. It found that distracting activity is common among pedestrians, even while crossing intersections. Technological and social distractions

increase crossing times, with text messaging associated with the highest risk. Findings suggest the need for intervention studies to reduce risk of pedestrian injury.

[http://injuryprevention.bmj.com/content/early/2012/12/06/injuryprev-2012-040601.short?g=w\\_injuryprevention\\_ahead\\_tab](http://injuryprevention.bmj.com/content/early/2012/12/06/injuryprev-2012-040601.short?g=w_injuryprevention_ahead_tab)

### **Mobile Telephones, Distracted Attention, and Pedestrian Safety | Accident Analysis & Prevention (2008)**

Driver distraction is a major cause of traffic accidents, with mobile telephones as a key source of distraction. In two studies from Accident Analysis & Prevention, distraction of pedestrians associated with mobile phone use was examined. Mobile phone users crossed unsafely into oncoming traffic significantly more than did either of the other groups. For pedestrians as with drivers, cognitive distraction from mobile phone use reduces situation awareness, increases unsafe behavior, putting pedestrians at greater risk for accidents, and crime victimization.

<http://www.sciencedirect.com/science/article/pii/S000145750700070X>

### **Teens and Distraction: An In-Depth Look at Teens' Walking Behaviors | Safe Kids (2013)**

One in five high school students and one in eight middle school students crosses the street while distracted, according to this report by Safe Kids Worldwide. The report, "Teens and Distraction: An In-Depth Look at Teens' Walking Behaviors," presents an observational study that recorded more than 34,000 middle and high school students crossing the street in a school zone. Conducted in 17 states and 68 schools, the study looked at whether teens are crossing the street while distracted, and if so, what devices they are using.

[http://www.safekids.org/sites/default/files/documents/ResearchReports/skw\\_pedestrian\\_study\\_2013.pdf](http://www.safekids.org/sites/default/files/documents/ResearchReports/skw_pedestrian_study_2013.pdf)



CSN is a resource center for MCH and injury prevention professionals in State and Territorial health departments who are committed to reducing injuries and violence among children and adolescents. CSN is supported by the Maternal and Child Health Bureau, Health Resources and Services Administration, Department of Health and Human Services.

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Children's Safety Network  
Education Development Center, Inc.  
43 Foundry Avenue  
Waltham, MA 02453-8313

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