

PEDESTRIAN INJURY

In recent years, the traffic-related pedestrian death rate among children ages 14 and under has declined significantly. In large part, this decline can be attributed to decreased traffic exposure, as children are walking less often. However, pedestrian injury remains the second leading cause of unintentional injury-related death among children ages 5 to 14. While the majority of pedestrian deaths and injuries are traffic-related, children from birth to age 2 are more likely to suffer non-traffic-related pedestrian injuries, including those occurring in driveways, in parking lots and on sidewalks. Although pedestrian injuries are not as common as motor vehicle occupant injuries, a disproportionate number of the injuries sustained by child pedestrians are severe.

Children are particularly vulnerable to pedestrian death because they are exposed to traffic threats that exceed their cognitive, developmental, behavioral, physical and sensory abilities. This is exacerbated by the fact that parents overestimate their children's pedestrian skills. Children are impulsive and have difficulty judging speed, spatial relations, and distance. Auditory and visual acuity, depth perception and proper scanning ability develop gradually and do not fully mature until at least age 10.

PEDESTRIAN DEATHS AND INJURIES

- In 2001, 669 children ages 14 and under died from pedestrian injuries. Of these, 521 died in motor vehicle-related traffic crashes. One-fifth of all traffic fatalities among children ages 14 and under is pedestrian-related.
- In 2002, nearly 43,300 children ages 14 and under were treated in hospital emergency rooms for pedestrian-related injuries. Approximately 73 percent of these injuries were traffic-related.
- In 2002, 11 children ages 14 and under were killed as pedestrians in school bus-related incidents.

WHEN AND WHERE PEDESTRIAN DEATHS AND INJURIES OCCUR

- In 2002, 40 percent of traffic-related pedestrian deaths occurred between 4 p.m. and 8 p.m.; 79 percent occurred at non-intersection locations.
- Nearly 10 percent of all childhood pedestrian-related injuries occur in driveways. More than half of these occur when children are playing or walking behind a vehicle at the time of injury.
- A national observational survey found that many motorists at intersections in school zones and residential neighborhoods violated stop signs: 45 percent by not coming to a complete stop, 37 percent by rolling through and 7 percent by not even slowing down.
- For all ages, traffic-related pedestrian death rates are twice as high in urban areas as in rural areas, and non-traffic-related pedestrian death rates are twice as high in rural areas as in urban areas.
- Children ages 14 and under are more likely to suffer pedestrian injuries in areas with high traffic volume, a higher number of parked vehicles on the street, higher posted speed limits, no divided highways, few pedestrian-control devices and few alternative play areas.
- Toddlers (ages 1 to 2) sustain the highest number of pedestrian injuries, primarily due to their small size and limited traffic experience. More than half of all toddler pedestrian injuries occur when a vehicle is backing up.
- Childhood pedestrian injuries occur more often in residential areas and on local roads that are straight, paved and dry.
- A national survey found that nearly 60 percent of parents and children encountered at least one serious hazard along their routes to school. Commonly cited hazards included the lack of a sidewalk or crosswalk, wide roads and speeding drivers.
- The number of child pedestrian deaths is four times higher on Halloween evening than on any other night of the year.

- A national survey of speeding in school zones found that two-thirds of drivers exceeded the posted speed limit during the 30-minute period before and after school.

WHO IS AT RISK

- Children ages 4 and under are at the greatest risk from pedestrian death and injury. In 2001, children ages 4 and under account for approximately 40 percent of pedestrian injury-related deaths.
- An estimated two-thirds of childhood pedestrian deaths are among males.
- Black children have a pedestrian injury death rate almost twice that of white children.
- Children ages 4 and under account for 80 percent of driveway-related incidents.
- Children living in areas that have a high population density of children, household crowding, high housing density, low socioeconomic status, poor supervision and no safe play environments are more likely to suffer pedestrian injury.
- The parents of children suffering from pedestrian-related injury are three times less likely to practice other preventive behaviors and are more likely to be single parents, young mothers or both.

PEDESTRIAN INJURY PREVENTION EFFECTIVENESS

- Environmental modifications are effective at reducing traffic-related pedestrian incidents.
- Practical, skills-based pedestrian safety training efforts have demonstrated improvements in children's traffic behavior.
- A fenced play area, physically separated from residential driveways, could reduce the risk of driveway-related incidents by 50 percent.
- Policies that increase the number of people walking and bicycling appears to be an effective route to improving the safety of people walking and bicycling.
- Enforcement of traffic laws, including apprehension of hit-and-run drivers, is effective in reducing traffic-related pedestrian death and injury. Greater penalties, such as impounding the vehicles of drivers who are unlicensed or driving with a suspended or revoked license, are proven to reduce pedestrian death and injury.

PEDESTRIAN LAWS AND REGULATIONS

- There are a multitude of state and local laws that affect childhood pedestrian injuries, including low speed limits in residential areas, protecting pedestrians in crosswalks, providing for pedestrian walkways, prohibiting vehicles from passing school buses while loading and unloading passengers, providing for crossing guards and requiring that pedestrians not cross streets at locations other than designated crosswalks.

HEALTH CARE COSTS

- The total annual cost of traffic-related pedestrian death and injury among children ages 14 and under is more than \$7.2 billion.

PREVENTION TIPS

- Never allow children under age 10 to cross streets alone. Adult supervision is essential until the traffic skills and judgment thresholds are reached by each child.
- Always model and teach proper pedestrian behavior. Cross streets at a corner, using traffic signals and crosswalks whenever possible. Make eye contact with drivers prior to crossing in front of them. Don't assume that because you can see the driver, the driver can see you. Instruct children to look left, right and left again when crossing a street and to continue looking as they cross. Teach children to never run into the street and to walk facing traffic, as far to the left as possible, when sidewalks are not available.
- Require children to wear retro-reflective materials and carry a flashlight at dawn and dusk and in other low-light situations, such as rainy or foggy weather.
- Prohibit play in driveways, streets, parking lots and unfenced yards adjacent to streets.
- Teach children to cross the street 10 feet in front of a school bus and to wait for adults on the same side of the street as the school bus loading or unloading zone.