

# CHILDREN AS PEDESTRIANS

Children have no lobby. Although they make up approximately 20% of our population, rarely does anyone ask them what they think or what they would do in a given situation. Too often, children are left out of the planning and design processes for urban areas, public places, streets and even schools.

Children are not small adults. They see and react to the world around them very differently than adults as shown in the video by AAA Safety Foundation, *Children in Traffic*. Compared to adults, children have:

- ♦ A lower profile
- ♦ One-third narrower visual field
- ♦ Difficulty detecting the source of a sound
- ♦ Inability to judge closure speed
- ♦ No sense of danger, overconfidence
- ♦ Cannot read traffic signs (until approximately. age 8-10)
- ♦ A tendency to be restless - like to be in motion
- ♦ Once in motion, children are compelled to complete the motion
- ♦ A desire to copy adults (who can be poor role models)
- ♦ A basic lack of experience
- ♦ Failure to recognize risk
- ♦ Little perspective beyond their self centered world
- ♦ The belief that adults will look out for them
- ♦ Single focus capability (only one thought at a time)
- ♦ An inability to understand complex situations
- ♦ A tendency to mix fantasy with reality

## NEEDS AND LIMITATIONS

Children have a great affinity for the street. European studies of play areas show that over 80% of the time children are playing outdoors it is in the street. The street is the interesting place where friends are met and where activities occur. Until children are at least eight or nine years old they need supervision in the street environment. Many parents are unable to devote sufficient time to such supervision, and due to work and isolation from neighbors, an informal neighborhood network of adults who supervise street activities is also lacking.

To overcome negative peer influences, parents should spend time walking and playing with their children, being good role models and setting basic rules of where and when it is safe to play. Parents must help children establish proper searching techniques (look left - right - left...and keep on looking) and help them develop gap assessment skills. Children must be taught about the dangers associated with vehicles backing up. They must be taught what an

edge is. They must learn the differences among zones that are relatively safe, such as yards; transition zones, such as sidewalks; and zones where there is a much higher level of risk, such as streets.

### **THERE IS A NEED FOR ACTION – THE PEDESTRIAN AS AN ENDANGERED SPECIES**

More than other age groups, children and older adults (age 66+) rely on walking as their primary transportation mode. Pedestrians in these two age groups walk with the physical limitations associated with old age and children in the early stages of their development. Children have not yet acquired the skills needed for traffic safety and their physical development in terms of such things as peripheral vision and ability to discern the source of sounds. Older adults have the experience and basic skills, but are often slower than they used to be, have poor eyesight, hearing loss and a range of other disabilities. Too often the combination of underdeveloped or diminishing physical capacity leads to tragedy when mixed with motor vehicle traffic.

*Children and older adults are highly over represented in pedestrian crash statistics.* The single greatest factor in child fatalities from birth through age 15 is walking and bicycle crashes. Nationally, in 1992, over 2,000 child pedestrians and bicyclists were killed and over 10,000 were permanently disabled. In Colorado, in 1991, statistics show that in the 0 -15 age group, five pedestrians and five bicyclists were killed, 375 pedestrians were injured and 378 bicyclists were injured. For all ages that year there were 1,244 crashes and 13 fatalities. Populations at both ends of the age spectrum are increasing as one wave of Baby Boomers nears retirement age and a new Boom is said to be in the works. Clearly, there is a need for action.

### **WHY CHILDREN DO NOT WALK TO SCHOOL**

When children do not walk to school everyone suffers. Busing costs \$200-600 per child per year. Many children spend up to 90 minutes a day on a bus. Parental driving adds to peak hour traffic, pollutants and creates safety problems in neighborhoods and schools. Planners, engineers and police must address common reasons why children do not walk or ride bikes to elementary and middle school. Aside from poor school locations, the main reasons children do not walk include:

- |   |                           |
|---|---------------------------|
| Too much traffic                            | Traffic too fast          |
| No sidewalk                                 | Unsafe weather conditions |
| No trails (between neighborhood and school) | Fear of kidnapping        |
| Fear of crime                               | Fear of loose dogs        |
| Fear of school bullies                      | Too far                   |

Other real and perceived reasons that must be understood and dealt with include both parental and child attitudes:

- ♦ Driving preference (my kids are not poor & only poor kids walk)
- ♦ It is easier for the parent
- ♦ Time constraints (not ready on time or older child's school opens later)
- ♦ No one to walk with
- ♦ No adult supervision (no one to report strangers)
- ♦ Not enough police presence
- ♦ Inadequate school crossing guards

### **COMMON CHILD PEDESTRIAN CRASHES**

As previously stated, children are over represented in pedestrian crashes due to high levels of exposure and lack of experience and skills. Despite the high injury rates, children have fewer than expected fatalities since they often recover well from all but high speed or run over crashes. All pedestrian injuries can be quite serious, since they are often disfiguring, leaving permanent disabilities and serious emotional scars. Young children are often involved in types of crashes that rarely happen to adults. Often, children fail to understand key traffic safety principles or simply are not always mature enough to watch out for their own well-being. Motorists must learn to be far more cautious around children.

**The most common injuries and ways to prevent them are:**

#### **BACKING CRASHES** (Ages 2 - 4)

Children age four and under do not understand the risk of playing behind a parked car, under a car or in the vicinity of a garbage truck, delivery truck or other vehicle that attracts them. The resulting crashes are especially tragic, since it is often the parent, an older sibling, other relative or neighbor that backs over the child. Parents must be vigilant in supervising any child of this age and work with the child from an early age to establish rules for avoiding places and situations that are dangerous.

#### **DRIVEWAY DART OUT** (Ages 4 - 11)

In this type of crash, the child runs out of his or her own driveway, off the sidewalk or out of an alley with out stopping. The motorist may have insufficient detection and response time. Vegetation, parked cars, walls and other obstructions can block a motorists's view of children. This type of crash most often takes place in residential neighborhoods. Parents can assist by teaching the concept of edges, establishing rules, providing good supervision from an early age and parking so that the family car does not create a visual barrier. Neighborhood streets should be designed so they permit only low operating speeds for motorists.

#### **INTERSECTION DASH** (Ages 9 - 15)

Children who are impatient and want to get past an intersection or across a street as fast as they can put themselves at substantial risk. Faced with a child dashing unexpectedly into the street, a motorist may have insufficient time to react and avoid a crash.

**PLAYING IN THE STREET** (All ages)

In some neighborhoods, especially where there are no yards, open lots, parks, schools or other open areas, children are likely to play in the streets. In general, this is *not* where motorists expect to find them. Motorists who are not attentive or familiar with the neighborhood, children chasing a ball or concentrating on their game rather than traffic are all factors contributing to crashes. Planners should work to gain approval of a system of recreation areas, parks and other open spaces that are located within easy walking distance from all residences.

**SEVEN CATEGORIES OF THE MOST FREQUENT PEDESTRIAN CRASHES**

**DART OUT**

33% - Pedestrian suddenly appears, usually between parked cars. In two thirds of these cases the pedestrian is hit in the near lane.

**INTERSECTION DASH**

9% - Pedestrian runs into the street at an intersection and is seen too late by the motor vehicle driver.

**VEHICLE TURN - MERGE**

7% - Driver is concentrating on turning or merging into traffic and fails to see the pedestrian.

**MULTIPLE THREAT**

3% - A vehicle stops for a pedestrian who is crossing and the stopped vehicle screens the pedestrian from view of the driver of the overtaking vehicle.

**BUS STOP RELATED**

3% - A multiple threat as above, where the stopped vehicle is a commercial vehicle or school bus.

**ICE CREAM VENDOR**

2% - A pedestrian, usually a child, is struck by a passing vehicle as he approaches or leaves the truck.

**BACKING UP**

2% - A pedestrian is struck by a backing vehicle, in a parking lot, street, or a non-curbed open lot where drivers back over sidewalks. Older pedestrians are highly over represented in this crash with 9.5% of their total fatalities. Children under age 4 are also highly over represented since most of their fatalities are in this category with most incidents happening in their own driveway.