

# Making streets safe for seniors on foot

Older walkers face the same dangers as younger pedestrians but often have less physical agility to cope with those dangers.

Grocery shopping is a health hazard for 70-year-old Mary Williams.

That's because she must walk in the busy, narrow two-lane street to get there since the road has no sidewalk.

"It's dangerous, but I take my chances," the Durham, N.C. resident said.

The sidewalk between the nine-story senior center where Ms. Williams lives and the grocery store three blocks away is virtually non-existent.

"It quits after just one block," 60-year-old Howard Sellers said in disgust. Sellers is also a resident of the center.

"Quite a few of us walk down there," he said. "We definitely need a sidewalk back and forth to the store. There's lots of traffic and it's unsafe. At night it's dark and there are no lights down there either."

The sidewalk situation in Durham is similar to that of many U.S. cities.

Valerie Kartman, a 74-year-old resident of Ocean City, Md., sold her condominium two years ago because she said she "couldn't handle the traffic anymore."

Although there was a supermarket across the six-lane street from her high-rise home, she said there were no accommodations for crossing the road.

"It would be impossible to cross on foot," Ms. Kartman said. "And there would be no way for an elderly person to make it."



Walking is an ideal exercise for seniors. Safe and accessible sidewalks offer seniors an important way to stay healthy and connected to the community.

Making roads accessible and safe for pedestrians is a priority of the Partnership for a Walkable America — a coalition of private, state and federal organizations united with the common cause of raising public awareness about these issues. Another focus of the Partnership is to emphasize the healthiness of walking — both the physical benefits it provides those who do it and the social benefits communities reap from this activity.

"Everybody out there is a legal user of the space between the right-of-way lines, but frequently, there's only enough space for cars," said Jerry Scannell, chairman of the Partnership and president of the National Safety Council in Chicago. "We have many situations where we've almost designed out of our highway system any kind of accommodation for

## **Older Walkers Face High Fatality Risk**

Senior pedestrians are a special concern for the Partnership because they are more physically frail than younger pedestrians and therefore have a higher risk of being killed if they are hit by a motor vehicle, said Partnership member Mike Cynecki, a member and past chairman of the Transportation Research Board's Pedestrian Committee.

"One of the problems older pedestrians face is that when they get involved in a minor accident, it can be a traumatic experience for their body and can cause serious injury, whereas younger pedestrians may be hit in an accident with the same impact but have the physical resilience to spring back," Cynecki said.

In fact, pedestrians ages 65 and older are two to eight times more likely to die than younger people when struck by vehicles, according to crash studies.

Research also shows that approximately 15 percent of pedestrians in this age bracket die after being hit by motor vehicles.

"Older pedestrians face the same dangers as younger pedestrians but they often have less physical agility to cope with those dangers," Cynecki said. "Quite often, their eyesight is not as good. Their reaction time is generally not as good and their mobility is often not as good so sometimes stepping down sidewalk curbs is such a challenge that they look down when they do that rather than looking at traffic. Also, on average, their hearing is not as good so they sometimes have problems in parking lots with not being able to hear cars that are backing out as they are walking by."

In 1994, just eight percent of the more than 95,000 pedestrian crashes that took place in the United States involved a senior citizen, yet seniors

made up almost 25 percent of the fatalities due to pedestrian crashes.

That year pedestrian crashes took the lives of 1,249 senior adults, ages 65 and older and injured another 6,850.

## **Providing Access For Senior Pedestrians**

There are many things traffic engineers can do to make roads more friendly for older pedestrians, said Charles Zegeer, associate director of roadway studies at the University of North Carolina Highway Safety Research Center in Chapel Hill, N.C.

"In wide streets, many agencies are tending to install raised median refuge islands so pedestrians only have to worry about one direction of travel at a time and this can greatly increase their walking safety," said Zegeer, a member of the Institute of Transportation Engineers, a Partner organization.

Curb ramps are another good idea for older pedestrians, he said.

"Many pedestrians are not mobile enough to be able to step up and down very high curbs so they can benefit from ramps," Zegeer said.

Ramps also help those in wheelchairs, but can be problematic for those with vision difficulties, he said.

"There is the potential for visually impaired pedestrians to unknowingly walk down a wheelchair ramp and into a street," he said. "That's why a tactile warning which pedestrians can feel with their feet in the ramp itself has been proposed," he said. "That way, the visually impaired can tell when they have come to a ramp."

## **Intersections Can Be Risky For Seniors**

Research shows three major areas of risk for older pedestrians said Partnership member Dr. Alfred Farina, who has more than 25 years experience as a

research psychologist in charge of pedestrian and bicycle safety research for the USDOT National Highway Traffic Safety Administration (NHTSA).

“First, seniors have a high incidence of pedestrian crashes at intersections — more so than other age groups,” said Farina, who recently retired from his position at NHTSA. “This would tend to indicate that they’re using the intersection more because of its perceived safety and so they’re bringing most of their crashes to that location.”

Richard Blomberg, president of Dunlap & Associates, agreed. His Stamford, Conn. research organization specializes in pedestrian safety research.

“Seniors are very law-abiding people,” he said. “They were the first to buckle up when the mandatory seat belt law was passed and when they cross streets, they tend to do it at intersections, unlike younger pedestrians who sometimes dart out mid-block.”

He added that intersections are often busy and this can make them difficult for older people who may have vision or hearing difficulties.

“It’s recommended that pedestrians look left, right and then left once more before stepping off the curb,” Blomberg said. “It’s important to look left last since that’s the direction cars will come from first.

When crossing intersections, Blomberg said pedestrians should also be careful to:

- Check for traffic even if they are in a marked crosswalk or the light is green. A driver may run a red light or fail to see pedestrians.
- Make eye-contact with drivers. If a pedestrian is not sure a driver sees them, they should let the vehicle go by.
- Watch for drivers turning right on red.

- Watch for drivers making turns. Drivers are concentrating on traffic and may fail to notice pedestrians.

## **Backing Vehicles**

The second high-risk area for older pedestrians is backing vehicles, Farina said.

Parking lots and streets with parallel parking can be especially problematic, he said.

“On streets with parallel parking, older pedestrians sometimes step out between two parked cars in preparation to cross the street and have their attention focused on looking for a break in traffic rather than checking to see if the car parked next to them is backing up,” he said. “They may be less attentive to the cues that a car is coming in reverse and may not hear the engine or notice the tail lights.”

In parking lots Farina said seniors encounter the same sorts of problems as in streets.

“Looking for drivers in parked cars can help seniors assess whether a driver is preparing to back up,” he said.

When walking near parked cars, Farina said pedestrians shouldn’t assume they have the right-of-way in any situation. They should also be careful to:

- Look for back-up lights on motor vehicles and listen for engine noise.
- Keep to the walkways whenever possible, especially in parking lots,
- Walk in front of parked cars whenever possible.

## **Winter Worries**

Winter and the corresponding lower sunlight angles is a third area of high injury and fatality risk for older pedestrians, Farina said.

Research shows seniors tend to be involved in more pedestrian crashes during the months of November, December and January than any other age group, he said.

“Our interpretation of this is that when people shift to warmer winter clothes, they tend to wear darker or neutral colors and this makes them less visible to the driver,” he said.

The slower movements of older people are also more difficult to detect, said Partnership member Dean Childs, director of traffic safety services for the American Automobile Association in Heathrow, Fla.

“If you see a dog or a child run, that type of movement catches your eye much more than someone who is standing or slowly moving,” Childs said.

Older pedestrians can help by being more cautious at intersections in winter. They can also enhance their visibility by wearing brighter colored clothing and retro-reflective clothing at night.

Research shows an increase in senior pedestrian crashes involving left-turning vehicles during the daylight hours of winter, Blomberg said.

The long shadows of the winter sun are believed to be a factor in this situation, he said.

“These shadows can make pedestrians difficult to be seen,” he said. “It’s the kind of thing that leads us to very specific advice for older pedestrians: Watch those left turns, try to make eye-contact with drivers and let the vehicles go by if there’s any chance the driver doesn’t see you.”

This article was written for  
the Partnership for a Walkable America  
by Emily Smith of the University of North  
Carolina Highway Safety Research Center  
Phone: (919) 962-2202  
FAX (919) 962-8710

Photograph courtesy of Dan Burden

No permission is needed to reprint  
this article in whole or in part.