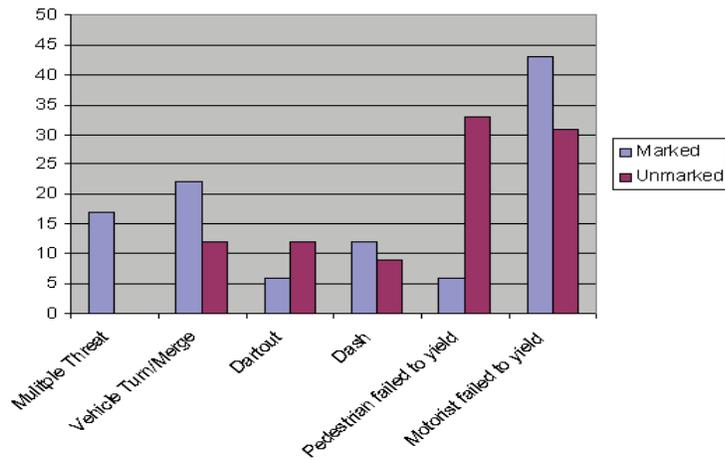


## Are Marked Crosswalks Safer?



Marked crosswalks are thought to increase visibility and therefore, pedestrian safety. But do they in every case? This article shares the results of a University of North Carolina study to determine how marked crosswalks affect pedestrian safety where there is not a signal or stop sign. These are called uncontrolled crossings.

### Study Objective and Methods

The five year study, compared pedestrian crash data at marked crosswalks and unmarked crossing areas at uncontrolled intersections. Data were collected from 2,000 sites (half marked) in 30 cities. Marked crosswalks were compared with nearby unmarked crossing. Many of the marked and unmarked crosswalks were at opposite sides of the same intersection. Data were not collect at school crossing.

To compare safety between marked and unmarked crosswalks, data was collected on traffic volume, pedestrian exposure, number of lanes, median type, speed limit, and other variables. Crash causes were also examined (see above).

### The Results

Results indicate no difference in pedestrian safety between marked and unmarked crosswalks at uncontrolled locations under the following conditions:

- Two lane roads;
  - Multi-lane roads without raised medians and average daily traffic volume below 12,000;
  - Multi-lane roads with raised medians and average daily traffic volume below 15,000.
- Surprisingly, there was a significant increase in crashes on roads with marked (versus unmarked) crossings under the following conditions:
- Multi-lane roads without raised medians and average daily traffic volume about 12,000;
  - Multi-lane roads with raised medians and average daily traffic volume above 15,000.

### Speed, Lanes, Type of Marking

Speed was not found to be related to crash frequency although 93% of study sites had posted speeds 25 to 30 mph.

Multi-lane crossing had higher crash rates than two-lane crossing. For both marked and unmarked multi-lane crossing, those with raised medians or raised crossing islands had lower pedestrian crash rates than the multi-lane crossings without them.

Type of crosswalk marking pattern (parallel lines, zebra stripes, etc...) had no effect on pedestrian crash rate.

### MUTCD Guidelines

The Manual of Uniform Traffic Control Devices (MUTCD) does not give specific guidelines for when marked crosswalks should be used at uncontrolled intersections. Instead, its guidance includes:

- Crosswalk width should not be less than 6 feet;
- Crosswalk marking should be provided at points of pedestrian concentration, such as at loading islands, mid block pedestrian islands, and/or where pedestrians need assistance in determining the proper place to cross the street.

According to the MUTCD, "Crosswalk lines should not be used indiscriminately. An engineering study should be performed before they are installed at locations away from traffic signals or STOP signs."



### Study Conclusions

The report finds that "under no condition was the presence of a marked crosswalk alone at an uncontrolled location associated with a significantly lower pedestrian crash rate compared to unmarked crosswalks." It makes a strong argument for not spending funds to mark crosswalks to improve safety at uncontrolled intersections. However, marked crosswalks are appropriate in a few cases (e.g. selected low-speed, two-lane streets at downtown crossing locations).

The effectiveness of a marked crosswalk increases when coupled with islands. Therefore, measures such as installing pedestrian refuge islands and reducing street crossing distance should be considered instead of or along with crosswalk markings.

Source:  
*Are Marked Crosswalks Safer?* Mass Interchange, Bay State Roads

## Exercise helps you think better and faster

If your job requires good judgment and quick thinking, then exercise regularly.

Regular exercise, according to studies, increases brain function. Exercise also reduces anxiety and depression and helps to ward off the mental effects of aging.

A report published in the *Journal of Exercise Physiology* compared fitness scores to state-mandated test scores and found the fittest students had the highest scores on the academic test.

A study of the cognitive consequences of exercise published in the journal *Acta Psychologica* shows that exercise facilitates thinking, especially information processing.

Other research shows that exercise can make the brains of older people act younger. Magnetic resonance imaging before and after six months of aerobic exercise show that the brain activity of older people was similar to that of 20 year olds, according to the University of Illinois.



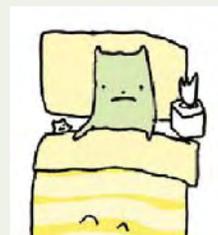
**Technology Transfer Center**  
New Hampshire LTAP at UNH

## Sick Time

Does a hacking and sneezing co-worker make you grimace? According to Ron Goetzel, the director of Cornell University's Institute for Health and Productivity, you probably should. Why? It's likely that person is going infect others as well.

Here are a few ways to stay healthy in the office, even when co-workers are not.

- Keep a clean desk, disinfect it every day.
- Clean your desktop tools: phone, mouse and pad, and other items touched regularly.
- Wash hands frequently, for 20 to 30 seconds with soapy water.
- Keep tissues on hand for sneezes and to muffle coughs.
- Stay in good general health. Get enough sleep, eat a healthy diet, and drink lots of liquids.
- Maintain a regimen of cleanliness at all times. People are more contagious before they show symptoms and after their symptoms are gone.



Source:  
Cornell local Roads Program, Winter 2006, p. 2  
<http://www.seroundtable.com/archives/sick-in-bed-green-small.gif> December 9, 2006