

# Cell phones dangerous for child pedestrians, study finds

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Children who talk on cell phones while crossing streets are at a higher risk for injuries or death in a pedestrian accident, said psychologists at the University of Alabama at Birmingham (UAB) in a new study that will appear in the February issue of *Pediatrics*.

"Cell phones clearly offer convenience and safeguards to families, but they also may pose risk," they said, "particularly when children attempt to multitask while conversing on the cell phone and have reduced cognitive capacity to devote to potentially dangerous activities such as crossing streets."

For the study, researchers used a virtual reality software program and three screens to display an actual Birmingham-area crosswalk with simulated vehicles of different sizes traveling on the virtual street. The psychologists found that all of the children - even those who were experienced with talking on cell phones, crossing streets or rated as highly attentive - were more likely to exhibit risky behaviors when they crossed the virtual street while talking on a cell phone.

Specifically, it took the children who were on a cell phone 20 percent longer to begin crossing the street, and they were 43 percent more likely to be hit by a vehicle or have a close call in the virtual environment. In addition, the children looked both ways 20 percent fewer times before crossing the street and gave themselves 8 percent less time to cross safely in front of oncoming traffic when they were on the cell phone. (more)

The study was published by UAB doctoral student Despina Stavrinou, M.S., under the direction of UAB psychologist David Schwebel, Ph.D. UAB graduate student Katherine Byington also contributed to the study.

In this study, 77 children, aged 10-11, completed simulated street crossings in the virtual

environment. They were asked to cross the virtual street six times without a cell phone and six times while talking on a cell phone with an unfamiliar research assistant.

The UAB researchers asked the children to cross the virtual street when they believed it was safe. The children stepped from the "curb," onto a pad with a pressure switch electronically connected to a computer, and the system registered the precise moment they entered the "street."

Cell phones are quickly becoming ubiquitous among American schoolchildren, the UAB psychologists wrote. "Commercial interests actively market cell phones for children, and marketing research firms estimate that 54 percent of children 8-12 will have cell phones by the end of [this year,] double the 2006 rate."

Just as drivers should limit cell phone use while driving, pedestrians, and especially child pedestrians, should avoid using cell phone while crossing streets, the UAB researchers said.

More research is needed to determine the impact that texting, listening to mp3 players and talking to peers has on children's ability cross streets safely, they said.

The study was partially supported by the UAB Injury Control Research Center through a grant from the Centers for Disease Control and Prevention and a cooperative agreement with the Federal Highway Administration.

Source: University of Alabama at Birmingham

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