

Association between Cellular-Telephone Calls and Motor Vehicle Collisions

Donald A. Redelmeier, M.D., and Robert J. Tibshirani, Ph.D.

ABSTRACT

Background Because of a belief that the use of cellular telephones while driving may cause collisions, several countries have restricted their use in motor vehicles, and others are considering such regulations. We used an epidemiologic method, the case – crossover design, to study whether using a cellular telephone while driving increases the risk of a motor vehicle collision.

Methods We studied 699 drivers who had cellular telephones and who were involved in motor vehicle collisions resulting in substantial property damage but no personal injury. Each person's cellular-telephone calls on the day of the collision and during the previous week were analyzed through the use of detailed billing records.

Results A total of 26,798 cellular-telephone calls were made during the 14-month study period. The risk of a collision when using a cellular telephone was four times higher than the risk when a cellular telephone was not being used (relative risk, 4.3; 95 percent confidence interval, 3.0 to 6.5). The relative risk was similar for drivers who differed in personal characteristics such as age and driving experience; calls close to the time of the collision were particularly hazardous (relative risk, 4.8 for calls placed within 5 minutes of the collision, as compared with 1.3 for calls placed more than 15 minutes before the collision; $P < 0.001$); and units that allowed the hands to be free (relative risk, 5.9) offered no safety advantage over hand-held units (relative risk, 3.9; P not significant). Thirty-nine percent of the drivers called emergency services after the collision, suggesting that having a cellular telephone may have had advantages in the aftermath of an event.

Conclusions The use of cellular telephones in motor vehicles is associated with a quadrupling of the risk of a collision during the brief period of a call. Decisions about regulation of such telephones, however, need to take into account the benefits of the technology and the role of individual responsibility.

Source Information

From the Departments of Medicine (D.A.R.), Preventive Medicine and Biostatistics (R.J.T.), and Statistics (R.J.T.) and the Program in Clinical Epidemiology and Health Care Research (D.A.R.), University of Toronto, Toronto; and the Division of Clinical Epidemiology, Sunnybrook Health Science Centre, North York, Ont., Canada (D.A.R.).

http://content.nejm.org/cgi/content/abstract/336/7/453?maxtoshow=&HITS=20&RESULTFORMAT=&searchid=1033424601882_28022&stored_search=&FIRSTINDEX=0&sortspec=PUBDATE_SORTDATE+desc+Score+desc&volume=336&firstpage=453&fdate=1/1/1975&tdate=9/30/2002&journalcode=nejm

Woman's Arm Severed In Car Accident

(Just one example of the many cell phone-related accidents.)

A Letcher County woman suffered a horrible injury early Thursday when her arm was severed in a car crash on the Mountain Parkway in Clark County.

Jacqueline Dotson and her six-year-old daughter had to be cut out of their vehicle after the accident in which Dotson veered into the median and over-corrected, rolling her truck over the guardrail and landing upside down after flipping several times.

Several people stopped to help, and it turns out, the good samaritans may very well have saved Dotson's life. Sheila Vice, a nurse's aide, and an off-duty EMT from another county stopped to help, and put a tourniquet on Dotson's arm to stop the bleeding. Her arm was found near the accident **still clutching a cell phone.**

(Emphasis added)

"Basically we stayed there and talked to them until the EMT drivers got there," said Vice.

Rescuers used the jaws of life to get the Dotson and her daughter out of the truck. Both were flown to hospitals, and Dotson is listed in serious condition at UK Hospital. Her daughter is not in the hospital, and sheriff's officials say they believe she's going to be fine.

Both were wearing seat belts.

<http://www.wlaxtv.com/Global/story.asp?S=4449021>