

THE IMPACT OF CELL PHONES ON DRIVER SAFETY

By **LARRY R. MOORE** and **GREGGORY S. MOORE**

Distracted drivers pose safety risks to themselves and their occupants, as well as the motoring and walking public. The authors examine the role of the cell phone in this growing transportation hazard.

A growing number of people are using cellular telephones to communicate—be it with co-workers, supervisors, family or friends—while driving. According to the most recent data from the Cellular Telecommunications & Internet Assn. (CTIA), more than 114 million people now subscribe to wireless service—up from 7.5 million in 1991 (CTIA). Results of a 1999 study by the Center for Urban Transportation Research (CUTR) indicate that between 1985 and 1999, use of cell phones (both hardmount and handheld) in motor vehicles increased from 500,000 to more than 63 million (CUTR). According to an April 2000 poll conducted by the Gallup Organization, 23 percent of cell phone users reported that they use a phone while driving every day.

Many safety hazards can arise when a person attempts to operate a motor vehicle while talking on a cellular phone. According to an Oct. 2000 article in *USA Today*, more than 800 people die—and some 200,000 are injured—each year in the U.S. because of drivers who accelerate through intersections (“Communities Put”). With in-car phone use on the rise—not to mention many other distractions—will these statistics increase?

Ten years ago, in-vehicle cell phones were used primarily for work purposes—

to improve communication and productivity (Gallup Organization). Today, however, personal use is a larger part of the picture. In 1998, Peter D. Hart Research Associates completed a comparison for the Cellular Telecommunications Industry Assn., which found that the highest percentage of users—some 61 percent—noted that they carried the phone for personal use.

A GROWING SAFETY CONCERN

Federal safety regulators have expressed concerns regarding the risks of using cellular telephones, Internet devices and other electronic devices while driving. National Highway Traffic Safety Administration (NHTSA) believes distracted drivers pose safety risks to themselves and their occupants, as well as the motoring and walking public. According to Tim Hurd, an NHTSA spokesperson, “driver distractions are a big problem.” The agency’s 1998 statistics reveal that 7.2 percent of drivers in fatal crashes were “inattentive—talking, eating, putting CDs in the player, using a cellular telephone.”

Those concerned also point to a study published in *New England Journal of Medicine* (NEJM). This research involved the review of 699 collisions involving vehicles that had cell phones. The study concluded that “the risk of a collision when using a cell phone was four times higher than the risk when a cell phone was not

being used.” The study acknowledged that the causes of collisions are complicated, but errors on the part of drivers contribute to more than 90 percent of events.

According to this study, drivers between the ages of 25 and 54 accounted for 81 percent of the accidents reviewed. Some 72 percent of those talking on a cell phone at the time of accident were male, 28 percent were female; among these two groups, 24 percent were professional persons and 76 were classified as other than professional.

The study also found that drivers with more than 30 years’ driving experience were involved in the least number of accidents (18 percent). Drivers with 10 to 19 years’ experience were involved most often—accounting for 35 percent of the accidents. Furthermore, those with zero to three years’ experience using the cell phone while driving were involved in 57 percent of the accidents reviewed.

The NEJM report further revealed that 516 of the 699 accidents—some 73 percent—occurred in the morning and afternoon periods. Fewer accidents involving phone-talking drivers occurred on Saturday and Sunday, while nearly equal numbers of such accidents occurred Monday through Friday—which correlates to employees traveling to and from work and as part of their employment.

In Japan, a National Police Agency sur-

What is a Hands-Free Product?

The two categories of hands-free products available for wireless phones are portable hands-free accessories and hands-free car kits.

PORTABLE HANDS-FREE ACCESSORY

This device can allow a person to use his/her wireless phone without actually holding the phone to his/her ear. The product usually consists of both a microphone and earpiece for easy, comfortable discussion without having the phone in the user's hand at the time of the conversation. This accessory can be used anywhere, including, but not limited to, an automobile.

HANDS-FREE CAR KIT

This kit is specifically designed for use in the car. It allows a driver to use a wireless phone without actually holding it in his/her hand. The product may be as simple as a device that plugs into the cigarette lighter to access a power supply and offers an external speaker and microphone, or requires the permanent installation of such components as a power booster, speaker and microphone. In some cases, a car kit may require professional installation.

Source: Cellular Telecommunications & Internet Assn.

International Restrictions

Many countries throughout Europe—including Australia, Brazil, Chile, Denmark, Germany, Greece, Italy, Japan, Poland, Romania, Portugal, Switzerland and Spain—restrict or prohibit the use of cell phones in vehicles. Many of these countries allow their use only in combination with a hands-free device.

WHY PEOPLE USE CELL PHONES

One can cite many reasons why employers and private individuals use cell phones. Two primary reasons are business advantages and increased personal safety. Other leading reasons:

- Improves law enforcement and emergency ambulance response when needed.
- Reduces delays in performing certain tasks or managing projects.
- Enables a supervisor/manager to coordinate with subordinates concerning routine and emergency safety matters.
- Allows a driver to report hazards or call for emergency assistance.

BUT IS IT SAFE?

As noted, many legislative groups are considering laws to restrict cell phone use in vehicles. Advocates contend the phone-talking driver cannot fully control his/her vehicle while moving. They argue that use of a cell phone also reduces the driver's physical control—one hand on the steering wheel, one on the

phone—which restricts response capability during an emergency.

Legislation proponents also argue that phone-using drivers are often unaware of their surroundings—as evidenced by inappropriate driving behaviors (e.g., erratic acceleration/deceleration, constant braking). This problem is compounded by the many other factors that distract drivers—using the radio/CD player, adjusting controls, eating/drinking, talking to passengers and trying to control children. Proponents also contend any legislation that specifically targets cell phones—not just reckless driving behavior—would remove any gray areas in terms of enforcement and public awareness.

Others see no need for such restrictions, however. They contend that existing statutes in most states allow for action against unsafe drivers of motor vehicles. This group also contends that drivers are distracted by many things, not just cell phone use. In addition, they point to the many safety-related benefits of in-vehicle cell phones—particularly the ability to call for emergency assistance.

INCIDENT/ACCIDENT PREVENTION MEASURES

Although the most-prudent approach is to pull off the road when making/receiving a call on a cell phone, it may be difficult to enforce such a policy. Therefore, the following measures may be implemented to help reduce or eliminate certain risks related to cell phone use while driving.

- Purchase and install a hands-free device so both hands can remain on the wheel. This helps maintain better attention to the task of driving. The voice piece can also be mounted on the driver's sun visor to ease communication.
- If the call is for a vehicle occupant, allow him/her to talk directly to the caller. This allows the driver to remain focused on driving safely.
- If possible, turn the phone off until your destination is reached. Use the phone's caller identification feature to track calls received while in transit.
- Refrain from emotional/stressful conversations even if the vehicle is equipped with a hands-free device. Such exchanges can easily divert the driver's attention from the road.
- Suspend all conversations when

vey found that Japanese drivers who used cell phones while driving caused 2,297 accidents in 1997, leading to 25 fatalities and 3,000 injuries. The agency also analyzed 1,248 car-phone-related motor vehicle accidents in a six-month period between 1997 and 1998. Of these incidents, 537 (43 percent) occurred while the driver was receiving a telephone call; 286 (22.9 percent) occurred while the driver was operating the telephone; 208 (16.7 percent) crashed while talking on the telephone; and 217 (17.4 percent) are attributed to other distractions.

CURRENT U.S. RESTRICTIONS ON CELL PHONE USE

Although all states have laws regarding reckless/careless driving, few have specific legislation to govern use of cell phones while driving. Currently, only California, Florida and Massachusetts impose restrictions—and these are minor. For example, in Massachusetts, car phones are permitted provided their use does not interfere with vehicle operation and drivers keep one hand on the wheel at all times (National Conference for State Legislatures (NCSL)).

Twelve states—California, Florida, Iowa, Maryland, Massachusetts, Michigan, Minnesota, Montana, Oklahoma, Oregon, Pennsylvania and Texas—currently require police to include information about cell phones in accident reports, while Tennessee requires some law enforcement agencies to collect data about cell phone involvement in crashes (NCSL).

Since 1995, some 37 states have proposed legislation regarding the use of cell phones in automobiles. According to NCSL, in 2000, at least 27 states (compared to 15 in 1999) considered measures to limit in-vehicle cell phone use. None of the bills passed, although several are still pending.

In the face of this non-action on the state level, many local jurisdictions have moved to address this issue. Brooklyn, OH, Conshohocken, PA, Lebanon, PA, Marlboro, NJ, Suffolk County, NY, Carteret, NJ, Brookline, MA, and Westchester County, NY, now require drivers to use hands-free cell phone devices while operating a vehicle. Aspen, CO, Boca Raton, FL, Santa Monica, CA, Philadelphia, Cleveland and Chicago are considering similar initiatives.

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approaching locations that have high pedestrian traffic, while in heavy traffic or during severe weather conditions.

EMPLOYER LIABILITY

Employers must be aware of the potential liability that arises if they provide employees with cell phones or if cell phone use is a necessary component of job performance. For example, in 1999, a motorcyclist was struck and killed by a Smith Barney stockbroker who was speaking on his cell phone at the time of the accident. Although the brokerage firm did not supply the phone, the lawsuit contended that the firm encouraged its employees to use personal cell phones to conduct business. Rather than risk a plaintiff verdict, Smith Barney settled the case for \$500,000 (Alston).

As this case illustrates, a company policy is needed for employees who drive and may use a cell phone as part of their work duties. Employees must be aware of associated dangers. Following are some best practices guidelines.

- 1) Develop and implement a motor vehicle cell phone policy. The policy should clearly state any restrictions on the use of company-owned cell phones and be communicated to all affected employees.
- 2) Prepare a laminated card that outlines relevant safety procedures and distribute to all drivers.
- 3) Obtain a written "memorandum of understanding" from each employee stating that the policy will be followed at all

SAMPLE POLICY

Safety Measures For In-Vehicle Use of Cell Phones

It is the policy of this company to provide communication technology capabilities for all employees to help them remain productive and safe. When employees are entrusted with any technology, it is their responsibility to utilize it in a safe, prudent manner that in no way jeopardizes their safety or that of other employees and the motoring public. This includes protection of equipment, facilities and other materials. It is essential that when a conflict exists between safety and the utilization of an in-vehicle cell phone, safety must receive top priority. All employees, contractors, consultants and visitors to the company must receive, read and comply with this policy.

times while driving a motor vehicle for business purposes.

- 4) Provide hands-free devices, headsets or microphones to help the driver operate as safely as possible.

CONCLUSION

Drivers must use common sense and sound judgment when operating a motor vehicle—particularly when using a cell phone. This requires that they know where they are in relation to traffic and pedestrian hazards, and understand how to interface most safely with the in-vehicle technology.

Regardless of any legislative mandates that may emerge, in the authors' opinion, drivers must be aware of the hazards related to the use of cell phones while driving and realize that they are responsible for the control of their vehicles at all times. This mandates that drivers operate their vehicles at the lowest risk possible and avoid distractions that take their attention away from the task at hand—driving safely. ■

REFERENCES

- Alston, H. "A Risky Call: Employer Limitation of Employee Cell Phone Use." *Ford & Harrison LLP Management Update*. Dec. 1999.
- Buris, M. and A. Cain. "Investigation of Mobile Phones While Driving." Tampa, FL: University of South Florida, Center for Urban Transportation Research, April 1999.
- "Cell Phones Divert Drivers' Focus." *Knoxville News-Sentinel*. Aug. 30, 1999: H5.
- "Cell Phone Law May be Nation's First." *USA Today*. Sept. 2, 1999: A3.
- "Cellular Phones Disrupt Dispatchers with Accidental 911 Calls." *Knoxville News-Sentinel*. June 30, 2000: A6.
- Cellular Telecommunications and Internet Assn. (CTIA). "Annualized Wireless Industry Survey Results." Washington, DC: CTIA, 2000.
- "Cellular Telephone Technology." *NBC Dateline*. April 1, 2000.
- "Cellular Telephones." *CNN Talkback Live*. Dec. 29, 1999.
- "Cellular Phone Users." *Knoxville News-Sentinel*. (Gallup Poll.) June 11, 2000: D2.
- "Communities Put the Brakes on Cell Phones." *USA Today*. Oct. 19, 2000: 25A.
- "Expert Advice: Hang Up the Phone." *Knoxville News-Sentinel*. Aug. 30, 1999: A4.

"Firms Crack Down: Don't Dial and Drive." *USA Today*. Sept. 26, 2000: 2A.

"In-Flight Cellular Ban is Debated." *USA Today*. July 21, 2000: 6A.

"Information Overload Distracts Drivers." *Knoxville News-Sentinel*. Jan. 25, 2001: D2.

"Just How Dangerous Is the Use of Cellular Technology on the Highways?" *USA Today*. Dec. 5, 1999: H1, H2.

National Conference of State Legislatures (NCSL). "Cell Phones and Highway Safety: 2000 Legislative Update." Denver: NCSL, 2000.

"New York County Prohibits Motorists' Phone Use." *USA Today*. Oct. 27, 2000: 3A.

Peter D. Hart Research Associates. "The Evolving Wireless Marketplace." Washington, DC: Peter D. Hart Research Associates, 1998.

"Phone Devices in Cars Probed." *USA Today*. July 14, 2000: A1.

Redelmeier, D. and R.J. Tibshiranl. "Association Between Cellular Telephone Calls and Motor Vehicle Collisions." *The New England Journal of Medicine*. Feb. 13, 1997.

"Red-Light Runners Kill 800-Plus, Hurt 200,000 Annually." *Knoxville News-Sentinel*. July 14, 2000: A13.

"The Safest Way to Use Your Cellular Phone." *Time*. July 24, 2000.

"States Warn Drivers to Mute Cell Phone Chats." *USA Today*. Dec 20, 1999: 21A.

"Survive." Discovery Channel, April 1999.

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