Transportation: Cell Phone Use While Operating a Motor Vehicle
SB11

Article 1:

CELL PHONE USE AND TEXTING WHILE DRIVING FACTS AND STATISTICS
Children's Hospital of Philadelphia Research Institute

Cell phone use while driving statistics and texting and driving facts show that this behavior is common and dangerous for teen drivers. Distracted driving is dangerous, contributing to 3,142 deaths on the roads in 2019, nearly a 10% increase from 2018. Cell phone use while driving, including texting and driving, is a major factor. Knowing cell phone use while driving statistics and texting and driving facts may help families manage this dangerous crash risk.

Texting and driving and other cell phone use while driving facts and statistics show that this multitasking behind the wheel is becoming a life-threatening norm. Talking while driving or texting and driving or checking or sending social media posts while driving takes eyes and brains off the task of driving. Coupled with inexperience and lack of driving skills, cell phone use can be especially deadly for teen drivers.

Because technology will change and new distractions will be introduced, parents need to make sure teens understand the value of engaged driving, where the driver is continuously attentive and focused. Make a family commitment not to use distracting devices while driving, including texting and driving and checking social media while driving.

According to research conducted at Children's Hospital of Philadelphia (CHOP), teens who do not frequently use a phone while driving believe the benefits of putting away their phone while driving outweigh any drawbacks. For these teens, the benefits associated with not using a cell phone while driving include:

- Being able to pay better attention
- Being less likely to have a crash
- Following the law

Parents need to provide teens with safe alternatives to cell phone use while driving, including texting and driving:

- Complete any call or text before starting the car
- Get directions and try to visualize the destination before turning the key
- Check in with friends or parents only after arrival

Parents should also avoid calling their teen when he or she is driving. Instead ask to be called before leaving one place and when arriving at the next destination. A teen may feel compelled to answer a parent's call or text if received while driving.

It's also a good idea to set the default "do not disturb" setting on a teen's phone. With recent upgrades in IOS, Apple created an option to avoid distraction while driving. When the phone detects driving, it

sends automated messages and does not alert the driver. Visit Apple Support to learn how to set this up.

STATISTICS

In 2019, 39% of high school students reported texting or emailing while driving during the past month.

MORE CELL PHONE USE & TEXTING WHILE DRIVING FACTS AND STATISTICS

- Young adults (ages 18-24) who self-report cell phone use while driving also engage in other risky driving behaviors, such as speeding, running red lights, and impatiently passing a car in front on the right.
- Cell phone use behind the wheel reduces the amount of brain activity associated with driving by 37%.
- High school students who reported frequent texting while driving were less likely to wear a seat belt, more likely to ride with a driver who had been drinking alcohol, and more likely to drink and drive.
- Typing text messages reduces a driver's ability to adequately direct attention to the roadway, to respond to important traffic events, and to control a vehicle within a lane and with respect to other vehicles.
- Cell phones are not just about texting—multiple behaviors, such as social media, messaging apps, GPS, and music—have the potential to draw attention away from the road.
- Young drivers with ADHD are 15% more likely to be inattentive compared to those without ADHD.

https://www.teendriversource.org/teen-crash-risks-prevention/distracted-driving/cell-phones

Article 2:

Rethinking Cell Phone Use While Driving Prevention
By: Elizabeth Walshe June 10, 2021

Cell phone use while driving has been linked to increased crash and near-crash risk. Despite the implementation of bans on handheld cell phone use while driving in many states, crash reduction results are inconsistent.

While distracted driving is dangerous enough among adult experienced drivers, it's even more dangerous for young drivers, particularly those with little experience behind the wheel. This is because young novice drivers may have limited abilities to focus their attention and control their impulses.

While young novice drivers are at the greatest risk of crashing overall, not all engage in risky driving behaviors or crash.

With colleagues Flaura Winston, MD, PhD and Dan Romer, PhD, I recently published study findings in the *International Journal of Environmental Research and Public Health* that revealed young adult drivers (ages 18-24) who self-report cell phone use while driving also engage in other risky driving behaviors, such as speeding, running red lights, and impatiently passing a car in front on the right.

A Pattern of Risky-Driving Behaviors?

While young novice drivers are at the greatest risk of crashing overall, not all engage in risky driving behaviors or crash. Our finding describing cell phone use while driving as part of a pattern of risk-taking may explain why some young adult drivers are more prone to crash involvement than other drivers their age.

This finding, however, is not new: We previously published a paper with the same finding. This newer study builds and expands on this prior work in two key ways:

- It goes further by replicating the same finding in a larger sample of 384 young drivers from across the United States, not just in one geographical area.
- It includes measures of personality traits to better understand the underlying individual characteristics that make some young adults engage in more risky driving behaviors than others their age:
    - Those who more frequently engaged in this pattern of risk-taking were more impulsive (act-without-thinking) than those who didn't take as many risks on the road.
    - Sensation seeking was also associated with crashes but independently of risky driving practices and impulsivity.

Taken together, these two studies suggest that it may be more beneficial to promote safe driving behavior more broadly than concentrating on combating one risky driving behavior, such as texting while driving. This makes sense since teen drivers who engage in one risky behavior are also likely to engage in other dangerous behaviors that can lead to crashes.

Our newer study also suggests that assessment of personality traits, such as impulsivity, may be helpful to identify drivers most at risk in order to provide more targeted interventions promoting safe driving, particularly among those with weaker impulse control.

https://injury.research.chop.edu/blog/posts/rethinking-cell-phone-use-while-driving-prevention

Article 3:

Drivers Make More Errors When Talking on Cell Phone than To a Passenger
October 2008

WASHINGTON — Drivers make more mistakes when talking on a cell phone than when talking to passengers, new research shows.

This finding addresses the common question about whether driver distraction comes from cell-phone use specifically or conversation generally. A full report appears in the December issue of the Journal of Experimental Psychology: Applied, published by the American Psychological Association.

Even when drivers used a hands-free cell phone, driving performance was significantly compromised. "Cell phone and passenger conversation differ in their impact on a driver's performance; these differences are apparent at the operational, tactical, and strategic levels of performance," the researchers wrote.

The study, led by Frank Drews, PhD, of the University of Utah, analyzed the driving performance of 41 mostly young adult drivers paired with 41 friends who served as conversation partners. Both sexes were equally represented.

In each of three experimental conditions (conversation with hands-free cell phone, conversation in the car, or no conversation), one person in each pair was randomly selected to be the "driver" and the other the conversation partner.

Drivers used a sophisticated simulator that presented a 24-mile multilane highway with on- and off-ramps, overpasses and two-lane traffic in each direction. Participants drove under an irregular-flow condition that mimics real highway conditions -- with other vehicles, in compliance with traffic laws, changing lanes and speeds. This context required "drivers" to pay attention to surrounding traffic.
In the cell-phone conversation condition, drivers' conversation partners were at another location. In the in-car conversation condition, partners sat next to their (simulated) drivers. In both cases, conversation partners were told to tell one another a previously undisclosed "close call" story about a time their lives were threatened.

All drivers were instructed to leave the simulated highway once they arrived at a rest area about eight miles from the starting point. Partners were told the driver had this task. The driving sequences took about 10 minutes to finish.
Drivers talking by cell phone drove significantly worse than drivers talking to passengers. The cell-phone users were more likely to drift in their lane, kept a greater distance between their car and the car in front, and were four times more likely to miss pulling off the highway at the rest area. Passenger conversation barely affected all three measures.

The authors said the problems could have stemmed from inattention "blindness," or insufficient processing of information from the driving environment. Cell-phone users may also have found it harder to hold in working memory the intent to exit at the rest area.

Conversation analyses revealed some interesting patterns, according to the researchers. When driving tasks got more complicated, drivers appeared to modulate the complexity of their speech, as measured

by syllables-per-word. Drivers also talked more when using cell phones, perhaps, the authors speculated, because they were trying to control the conversation to avoid using the mental resources required to really listen to the other person.

Meanwhile, passengers took an active role in supporting the driver, often talking about surrounding traffic. That shared situational awareness could be helpful to the driver.

Article: "Passenger and Cell Phone Conversations in Simulated Driving," Frank A. Drews, PhD, Monisha Pasupathi, PhD, and David L. Strayer, PhD; Journal of Experimental Psychology: Applied, Vol. 14, No. 4.

https://www.apa.org/news/press/releases/2008/12/phone-driving