Senate Bill 10
Cell Phone Use While Operating a Motor Vehicle

Article 1:
https://injury.research.chop.edu/blog/posts/rethinking-cell-phone-use-while-driving-prevention

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.

Article 2:

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

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.