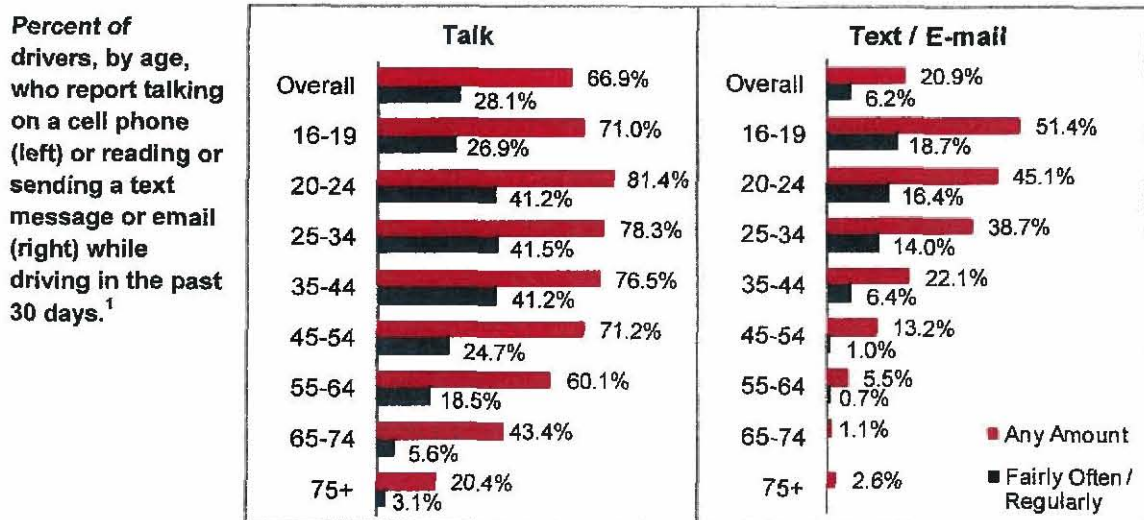


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TRANSPORTATION COMMITTEE
RELATED TO DISTRACTED DRIVING AND CELL PHONES

13 April 2010

Context

- Distracted driving is a serious, widespread traffic safety problem that comprises a variety of distractions, including cell phones.
- Research by the AAA Foundation for Traffic Safety found that as of April 2009, over two out of every three drivers admitted talking on their cell phones while driving, and more than one in five admitted reading or sending text messages or emails while driving. Rates of self-reported texting and emailing while driving are highest among teenage drivers; rates of cell phone use are highest among young- and middle-aged adults.¹



- Observational surveys by the National Highway Traffic Safety Administration report that 6% of drivers were talking on handheld cell phones, an estimated additional 5% were talking on hands-free cell phones, and 1% were “visibly manipulating hand-held devices” (e.g., dialing or text messaging) at any given daylight moment in 2008.²

Safety Impacts

- Estimates of the number of crashes, injuries, and deaths caused by driver cell phone use or other forms of distracted driving vary widely, due to limitations of existing motor vehicle crash data.
- Studies using driving simulators have found that using a cell phone while driving significantly impairs a driver's reaction time^{3,4} and increases crash risk.⁵
- Studies of the cell phone records of crash-involved drivers suggest that using a cell phone while driving is associated with roughly a quadrupling of crash risk.^{6,7}
- A study using in-vehicle data collection equipment to monitor a sample of drivers over an extended period estimated that dialing a cell phone nearly tripled the risk of being involved in a crash or near-crash, talking on a cell phone increased risk by about 30%, and each contributed to about 3.6% of crashes and near-crashes overall.⁸
- Preliminary results reported from two forthcoming studies of the safety impact of texting while driving demonstrate that this behavior is extremely dangerous:
 - A study in which college students text messaged during a computer-based driving simulation reportedly finds that text messaging increases crash risk by a factor of 8.⁹
 - Preliminary findings from a naturalistic study of a sample of heavy-truck drivers suggest that text messaging while driving increases the risk of a truck driver having a crash or near-crash by a factor of 23.⁹

Legislation

- A series of observational surveys by the Insurance Institute for Highway Safety has shown that laws against handheld cell phone use while driving significantly reduce the proportion of drivers observed talking on hand-held cell phones.¹⁰ However, questions remain regarding the overall safety impact of handheld cell phone bans, given that the preponderance of evidence suggests that using a hands-free cell phone while driving impacts reaction time and crash risk similarly to using a hand-held cell phone.
- A study of motor vehicle collision insurance claims in several states before and after the enactment of laws against using handheld cell phones while driving found no evidence that the laws reduced the number of collision claims significantly.¹¹
- A series of observational surveys conducted by the Automobile Club of Southern California at seven roadside locations in Orange County found that texting on roadways dropped by roughly 70% during the first six months after California's texting ban went into effect—from about 1.4% to about 0.4%.¹²

Public Opinion

- The AAA Foundation reports that well over 9 out of 10 drivers consider it unacceptable for a driver to send text messages or email while driving, and nearly 7 out of 8 consider drivers text messaging and emailing a very serious threat to their personal safety. Over half of drivers who admit texting or emailing while driving say it makes them much more likely to be involved in an accident, and virtually all acknowledge that it makes them at least a little bit more likely to be involved in an accident.¹
- Seven of ten drivers consider it unacceptable for a driver to use a hand-held cell phone, but only 1 in 3 consider it unacceptable for a driver to use a hands-free cell phone while driving.¹
- Two out of three drivers believe that using a hands-free cell phone is safer than using a hand-held cell phone; even though the overwhelming majority of available evidence suggests that it is not.¹³

References

1. AAA Foundation for Traffic Safety. (2009). *2009 Traffic Safety Culture Index*. Washington, DC: AAA Foundation for Traffic Safety. (www.aaafoundation.org/reports)
2. National Center for Statistics and Analysis. (2009). *Traffic Safety Facts Research Note: Driver Electronic Device Use in 2008*. DOT HS 811184. Washington, DC: National Highway Traffic Safety Administration.
3. Horrey, W. J. & Wickens, C. D. (2006). Examining the impact of cell phone conversations on driving using meta-analytic techniques. *Human Factors*, 48(1), 196-205.
4. Caird, J. K., Scialfa, C. T., Ho, G., & Smiley, A. (2005). A meta-analysis of driving performance and crash risk associated with the use of cellular telephones while driving. In *Proceedings of the third international driving symposium on human factors in driver assessment, training and vehicle design* (pp. 478-485). The University of Iowa Public Policy Center.
5. Strayer, D. L., Drews, F. A., & Crouch, D. J. (2003). Fatal distraction? A comparison of the cell-phone driver and the drunk driver. In *Proceedings of the second international driving symposium on human factors in driver assessment, training and vehicle design* (pp. 25-30). The University of Iowa Public Policy Center.
6. Redelmeier, D. A. & Tibshirani, R. J. (1997). Association between cellular-telephone calls and motor vehicle collisions. *The New England Journal of Medicine*, 336(7), 453-458.
7. McEvoy, S. P., Stevenson, M. R., McCartt, A. T., Woodward, M., Haworth, C., Palamara, P., & Cercarelli, R. (2005). Role of mobile phones in motor vehicle crashes resulting in hospital attendance: A case-crossover study. *British Medical Journal*. Online First BMJ, doi:10.1136/bmj.38537.397512.55 (published online 12 July 2005).
8. Klauer, S. G., Dingus, T. A., Neale, V. L., Sudweeks, J. D., & Ramsey, D. J. (2006). *The impact of driver inattention on near-crash/crash risk: An analysis using the 100-car naturalistic driving study data*. DOT HS 810 594. Washington, DC: National Highway Traffic Safety Administration.
9. Richtel, M. (2009, July 28). In study, texting lifts crash risk by large margin. *The New York Times*, pp. A1. (<http://www.nytimes.com/2009/07/28/technology/28texting.html>)
10. McCartt, A. T., Hellinga, L. A., Strouse, L. M., & Farmer, C. M. (2009). *Long-term Effects of Hand-held Cellphone Laws on Driver Hand-held Cellphone Use*. Arlington, VA: Insurance Institute for Highway Safety. (http://www.iihs.org/research/topics/cell_phones.html)
11. Highway Loss Data Institute. (2010). Hand-held Cellphone Laws and Collision Claim Frequencies. *Highway Loss Data Institute Bulletin*. Arlington, VA: Highway Loss Data Institute. (http://www.iihs.org/research/topics/cell_phones.html)
12. Automobile Club of Southern California. (2009, September 25). News release: In-vehicle texting by drivers drops following ban, according to Auto Club study of California law. (<http://news.aaa-calif.com/pr/aaa/in-vehicle-texting-by-drivers-102480.aspx>)
13. AAA Foundation for Traffic Safety. (2008). *Cell Phones and Driving: Research Update*. Washington, DC: AAA Foundation for Traffic Safety. (www.aaafoundation.org/reports)