

Texting bans, a possibly low-cost and effective means to help improve motor vehicle safety

Publication Brief

Purpose In this editorial, Dr. Flannagan reviews studies on texting while driving to analyze whether texting bans work, and whether states should adopt these measures.

Background In the June 2019 issue of *AJPH*, Ferdinand et al reported that statewide bans of texting-while-driving may be effective at reducing crash-related emergency department visits. It is well-known that texting while driving increases crash risk. However, it is less clear whether states should pass these bans. First, most studies on texting while driving have been experimental with questionable ability to translate them into driving situations in actual traffic. Second, the risk of texting while driving is difficult to capture from existing traffic crash scene data. Third, even with strong evidence for the high risk associated with texting, researchers' approaches may overestimate potential risk reduction from a ban on hand-held cell phone use. Therefore, the causal effect of a ban on crash reduction is uncertain.

Methods Dr. Flannagan analyzed data from studies on crash risk of texting while driving, including a meta-analysis of 28 experimental studies showing worse driving performance with texting (Caird et al), and studies by Dingus et al and Guo et al. She also reanalyzed the data from the second Strategic Highway Research Program Naturalistic Driving Study (2012-2015), based on in-vehicle drive video from 3,000 drivers. The author developed a baseline comparison of non-cell phone use that represents what drivers are likely to replace phones with if a ban were effective. She also reviewed results of research (Ferdinand et al) on crash-related emergency department visits.

Findings While no research has shown a clear causal connection that texting bans will decrease the risk of crash, they do decrease cell phone use. Non-field studies, for example the meta analysis by Caird et al, that show increased crash risk from texting may not translate well to the field. The author found that the likely benefit from a banning cell phone use while driving may be less than the large estimated risk reduction the researchers suggest. Also, findings from Ferdinand et al do not arise from a causal link between texting bans and emergency department visits.

Discussion Field studies focusing on texting while driving have been rare until recent years. While numerous studies provide evidence that texting behavior increases crash risk, especially for younger and older drivers, there is a lack of reliable data from the field on pre-crash texting behaviors. Handheld cell phone bans have dramatically reduced cell phone use in states that enacted them, so bans may be justified based on these facts alone if they are relatively low cost to implement. Before vehicle automation is widely implemented, attentive driving practices should be promoted to help drivers avoid crashes, thereby reducing injury and death.

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