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Edward Tenner is an independent writer and speaker on the history of technology and the unintended consequences of innovation. He holds a Ph.D. in European history from the University of Chicago and was executive editor for physical science and history at Princeton University Press. A former member of the Harvard Society of Fellows and John Simon Guggenheim fellow, he has been a visiting lecturer at Princeton and has held visiting research positions at the Institute for Advanced Study, Woodrow Wilson International Center for Scholars, and the Princeton Center for Information Technology Policy. He is now a visiting scholar in the Rutgers School of Communication and Information and an affiliate of the Center for Arts and Cultural Policy of Princeton’s Woodrow Wilson School. He was a founding advisor of Smithsonian’s Lemelson Center, where he remains a senior research associate.

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Is Music Listening a Bigger Highway Risk Than Cell-Phone Talking?

By Edward Tenner

The National Transportation Safety Board's recommendation for national laws banning all cell phone use, even hands free, is backed up by both anecdotes and statistics, but still seems drastic. After all, even driving after drinking isn't totally banned but regulated by blood alcohol level.

But the real problem may be as much that it doesn't go far enough, as that it goes too far. Most of us, even cautious, defensive drivers, have never had a chance to develop emergency reflexes; you can verify this by observing or trying an advanced computer driving simulator, as I was able to do at a conference of safety engineers a few years ago. The experience made me think a lot more about mirrors and intersections, among other things. It's a good thing, too. At busy New York street crossings, there are almost three violations per minute on average.

Cell phone conversation is just one example of multitasking on the road, and psychological researchers have reminded us of the unintended consequence of juggling activities. The Boston Globe has reported that the University of Michigan psychologist David Meyer and his coauthors found that people who toggle between tasks lose valuable time in the transitions. The brain must refocus each time it switches activities, and the more complicated the task, the more time it takes to refocus. Meyer and his colleagues found that people who toggle between tasks lose valuable time in the transitions. The brain must refocus each time it switches activities, and the more complicated the task, the more time it takes to refocus.

Electronic panels integrating music, climate control, and navigation have become more common, increasing potential cognitive load as drivers shift among modes.

Risks abound. According to the computer scientist Dario Salvucci on his Drexel University site: A recent GMAC survey reported that 20% of drivers age 18-24 have used an iPod while driving. Knowing how distracting cell phones can be, it may not be surprising that using an iPod while driving can also be distracting. More surprising is the size of the effect. Our study of iPod distraction found that selecting a song on an iPod can degrade performance almost twice as much as dialing a cell phone. Even more surprisingly, selecting a song can degrade performance twice as much as watching a video on the iPod. The level of distraction for iPod use is severe and warrants further
consideration as an important source of driver distraction.

It's possible that a ban on use of smartphones even for hands-free talking and texting will indirectly encourage even more hazardous behavior. So-called risk compensation may not be a universal law as some of its advocates believe, but it happens. We've seen the results of trying to prohibit totally what the majority of the public demands. Harm reduction through driver education may do more good than a complete ban.
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So the problem identified here is searching for music on your iPod, not simply listening to music, right? If so, the headline is very misleading.

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