Driver inattention and driver distraction in serious casualty crashes: data from the Australian National Crash In-depth Study

Abstract

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Driver inattention and driver distraction represent a major problem in road safety. Although both are believed to contribute to increased crash risk, there is currently limited reliable information on their role in crashes. The current study used in-depth data from the Australian National Crash In-depth Study to investigate the role of driver distraction and inattention in serious casualty crashes. The sample included 856 crashes from 2000 to 2011, in which at least one party was admitted to hospital due to crash-related injuries. Crashes were coded using a taxonomy of driver inattention that delineates five inattention subtypes: restricted attention, misprioritised attention, neglected attention, cursory attention, and diverted attention (distraction). Approximately 45 of crashes could not be coded due to insufficient information while in an additional 15 the participant indicated the other driver was at fault without specifying whether inattention was involved. Of the 340 remaining cases, most showed evidence of driver inattention (57.6) or possible inattention (5.9). The most common subtypes of inattention were restricted attention, primarily due to intoxication and/or fatigue, and diverted attention or distraction. The most common types of distraction involved voluntary, non-driving related distractions originating within the vehicle, such as passenger interactions. The current study indicates that a majority of serious injury crashes involve driver inattention. Most forms of inattention and distraction observed are preventable. This study demonstrates the feasibility of using in-depth crash data to investigate driver inattention in casualty crashes.

Key Points
- Driver inattention and distraction are believed to increase crash risk, but there is limited empirical evidence on their prevalence.
- Used in-depth crash data to assess the prevalence of driver inattention and distraction in serious injury crashes.
- Coded using a taxonomy of five inattention subtypes: restricted, misprioritised, neglected, cursory and diverted attention (distraction).
- Majority of coded crashes involved inattention, restricted and diverted attention were most prevalent. Most inattention is avoidable.
- In-depth crash data represents a cost-effective method for investigating inattention and distraction in serious injury crashes.