

Sleep deprived people more likely to have car crashes

18 September 2018



Credit: CC0 Public Domain

A new study in *SLEEP* indicates that people who have slept for fewer than seven of the past 24 hours have higher odds of being involved in and responsible for car crashes. The risk is greatest for drivers who have slept fewer than four hours.

Experts recommend that adults should sleep for seven to nine hours a night, yet government surveys indicate that one in five U.S. adults sleeps for fewer than seven hours on any given night, and one in three report usually sleeping for fewer than seven hours. An estimated seven percent of all [motor vehicle crashes](#) in the U.S. and 16 percent of [fatal crashes](#) involve driver drowsiness.

While the dangers of driving drowsy were already well known, this is the first peer-reviewed study to quantify the relationship between how much a driver has slept and his or her [risk](#) of being responsible for a crash. For this new study, researchers analyzed data from a previous study by the U.S. Department of Transportation, which involved in-depth investigations of a sample of 5,470 crashes, including interviews with the drivers involved.

The researchers here found that drivers who reported fewer than four hours of sleep had 15.1 times the odds of responsibility for [car crashes](#), compared with drivers who slept for the recommended seven to nine hours in the preceding 24-hour period, comparable to U.S. Department of Transportation estimates of the crash risk of a driver with a [blood alcohol concentration](#) roughly 1.5 times the legal limit.

Researchers involved in the study also discovered that drivers who reported six, five, and four hours of sleep in the past 24 hours had 1.3, 1.9 and 2.9 times the odds of responsibility for a crash, respectively, compared with a driver who slept for seven to nine hours. Drivers who reported less than four hours of sleep had particularly elevated risk of single-vehicle crashes, which are more likely to result in injury or death. Drivers who had changed their sleep or work schedule in the past week and drivers who had been driving for 3 hours or longer without a break were also found to be at increased risk.

"Being awake isn't the same as being alert. Falling asleep isn't the only risk," said study author Brian Tefft. "Even if they manage to stay awake, [sleep-deprived drivers](#) are still at increased risk of making mistakes—like failing to notice something important, or misjudging a gap in traffic—which can have tragic consequences," he added.

More information: Brian C Tefft, Acute sleep deprivation and culpable motor vehicle crash involvement, *Sleep* (2018). [DOI: 10.1093/sleep/zsy144](#)

Provided by Oxford University Press

APA citation: Sleep deprived people more likely to have car crashes (2018, September 18) retrieved 18 June 2021 from <https://medicalxpress.com/news/2018-09-deprived-people-car.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.