



Breaking Report from the National Sleep Foundation

UPDATE ON DROWSY DRIVING



November 2, 2022

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Update on Drowsy Driving

Drowsy driving is a significant public health concern in the United States. Rigorous estimates suggest drowsy driving-related motor vehicle crashes account for roughly 20% of all motor vehicle crashes.¹⁻³ In fact, data from the AAA Foundation indicates that sleepiness is implicated in 21% of all motor vehicle crashes resulting in a death and 13% of motor vehicle crashes resulting in hospitalizations—totaling over 300,000 police-reported crashes, over 100,000 injuries, and over 6,000 deaths in the United States each year.³ The National Sleep Foundation believes these figures are likely underestimates of the true scope of the problem.

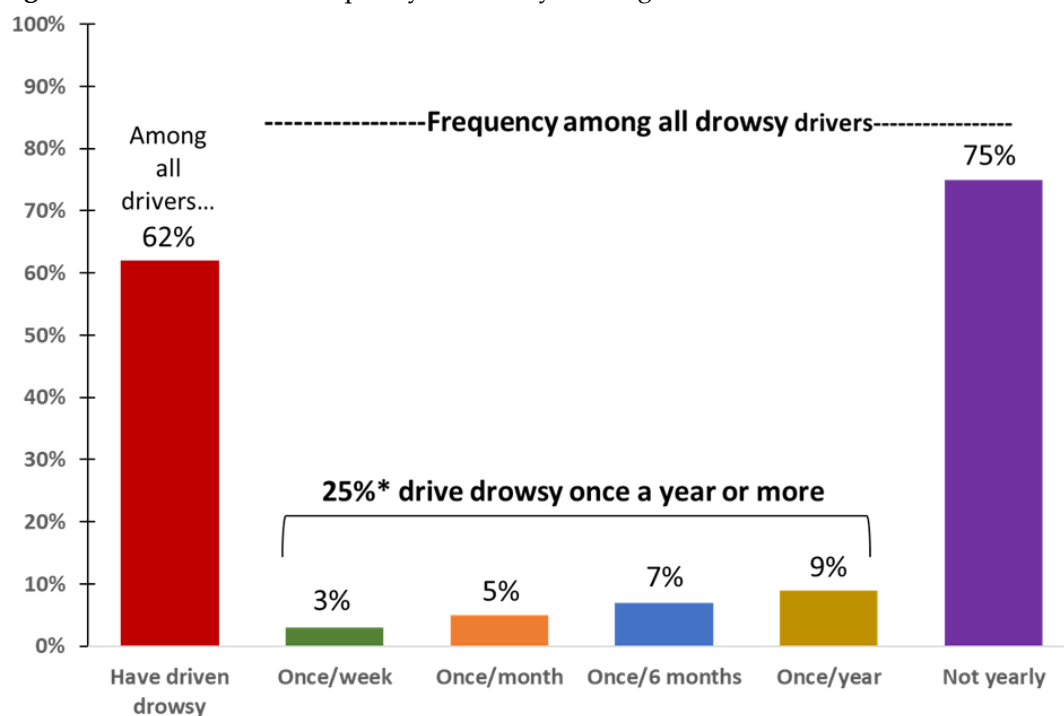
Drowsy driving is impaired driving. As such, it's no surprise that drowsy driving is often called the "fourth D" among drunk, drugged, and distracted causes of impaired driving. Given the striking public health impact of drowsy driving, and because it is preventable—often by ensuring drivers get enough of the quality sleep they need—the National Sleep Foundation has engaged in ongoing efforts since its founding in 1990 to educate the public about the dangers of drowsy driving and ways to help prevent it. Formally, the National Sleep Foundation developed and has hosted Drowsy Driving Prevention Week® since 2007, with 2022 marking its 15th year as a national campaign. In 2016, the National Sleep Foundation published landmark consensus guidelines to establish a clear definition of when an individual is categorically too sleep deprived to operate a motor vehicle, along with defining quantifiable thresholds for sleep-related driving impairment. This consensus statement, endorsed by the AAA Foundation for Traffic Safety, American College of Chest Physicians, American College of Occupational and Environmental Medicine, and Society for Research on Biological Rhythms, affirmed that "drivers who have slept for two hours or less in the preceding 24 hours are not fit to operate a motor vehicle."⁴ The consensus statement further noted that "most healthy drivers would likely be impaired with only 3 to 5 hours of sleep during the prior 24 hours."⁴ To assess Americans' current attitudes and behaviors related to drowsy driving, the National Sleep Foundation conducted a nationally representative survey. Results were alarming and suggested extensive opportunities for public education about both sleep health and driver safety.

Drowsy Driving Survey

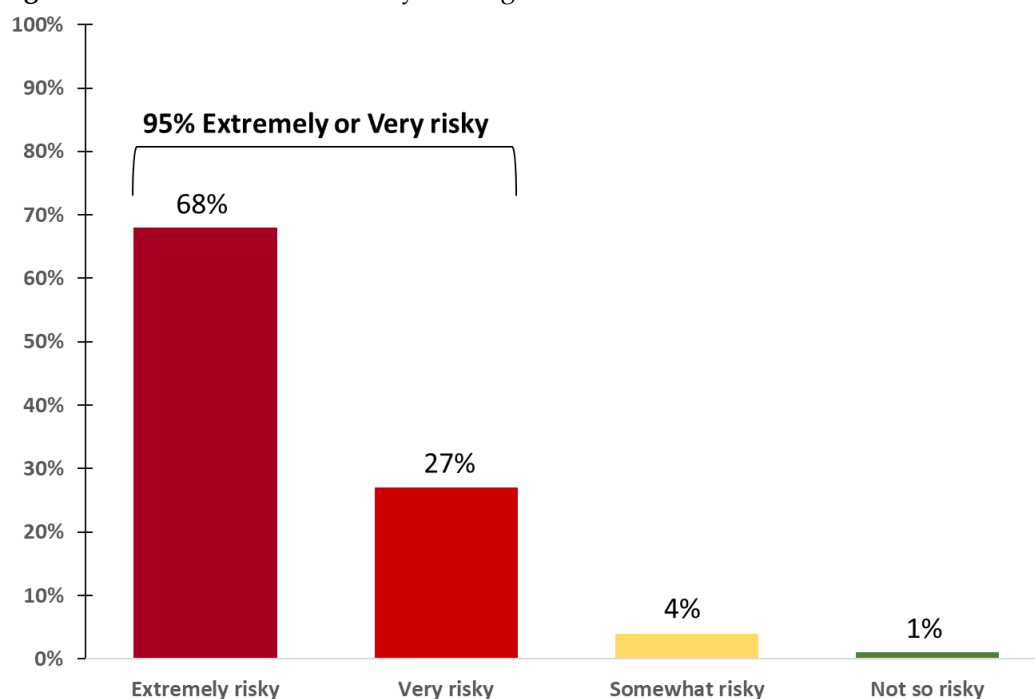
In anticipation of the 2022 Drowsy Driving Prevention Week, the National Sleep Foundation conducted a survey among a random national sample of 1,012 adults. The survey focused on both behaviors and attitudes related to drowsy driving. The survey was produced by Langer Research Associates. The sample was weighted to ensure it reflected the general US population in regards to sex by age categories, race/ethnicity, education, geographic region, household income, and language proficiency. Results have a margin of sampling error of 3.3 points for the full sample including design effects.

Nearly 2/3 (62%) of those who drive, and 58% of all adults, report having driven while so tired they had a hard time keeping their eyes open—an astounding 150+ million US adult motorists. Of people who drove while drowsy, one in four (representing over 37 million Americans) reported doing so once per year or more, with the remainder doing so less than once per year. Figure 1 displays a graphical representation of lifetime prevalence and frequency of drowsy driving in the United States.

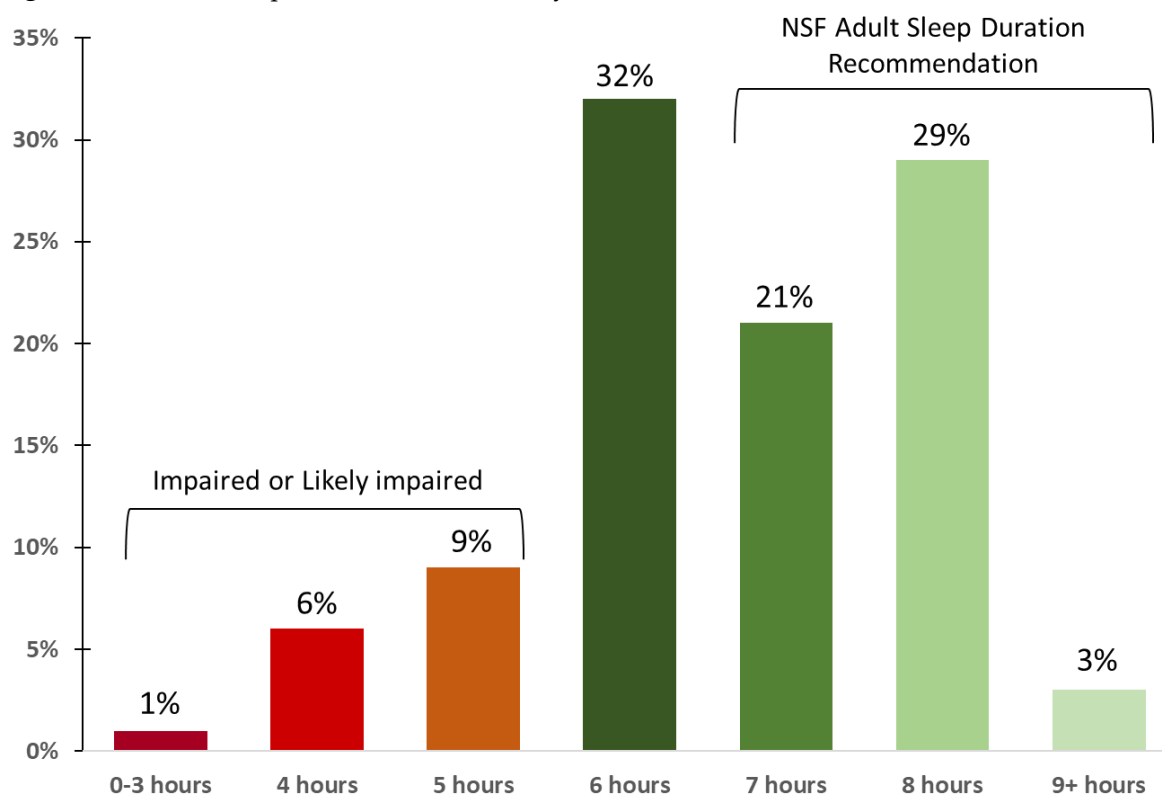
A combined 95 percent of Americans call drowsy driving "extremely" or "very" risky, with 2/3 (68%) assigning it the highest level of risk (see Figure 2 for graphical presentation of perceived risk).

Figure 1. Prevalence and Frequency of Drowsy Driving.

*Note: The frequency of driving while drowsy once a year or more is 24.9%. Rounding resulted in it appearing as though the frequency is 24%.

Figure 2. Perceived Risk of Drowsy Driving.

When asked directly about the amount of sleep needed to drive safely the next day, drivers, on average, feel they need 6.7 hours (SD = 1.4) of sleep to drive safely. Nearly half (47%) of drivers report needing fewer than seven hours of sleep to drive safely, including one in six (16%) drivers who report needing fewer than six hours of sleep to drive safely the next day. Figure 3 presents a complete breakdown of survey respondents who indicate specific sleep duration needs required to drive safely and indicates National Sleep Foundation's consensus guidance on impaired driving and sleep duration.

Figure 3. Hours of Sleep Needed to Drive Safely.

Survey respondents were asked about confidence in their ability to drive safely under various sleep duration conditions, which were selected based on published consensus recommendations.⁴ Detailed responses are depicted in Figure 4. Generally, confidence in ability to drive safely declined with reduced sleep duration; however, even at the lowest queried sleep duration, 0-2 hours of sleep, one in six (16%) respondents expressed being either 'very' or 'somewhat' confident in their ability to safely drive. In fact, when considering ability to safely drive when only having slept between 0-2 hours the previous night, less than half of all respondents, 46 percent, expressed being 'not at all' confident in their ability to drive.

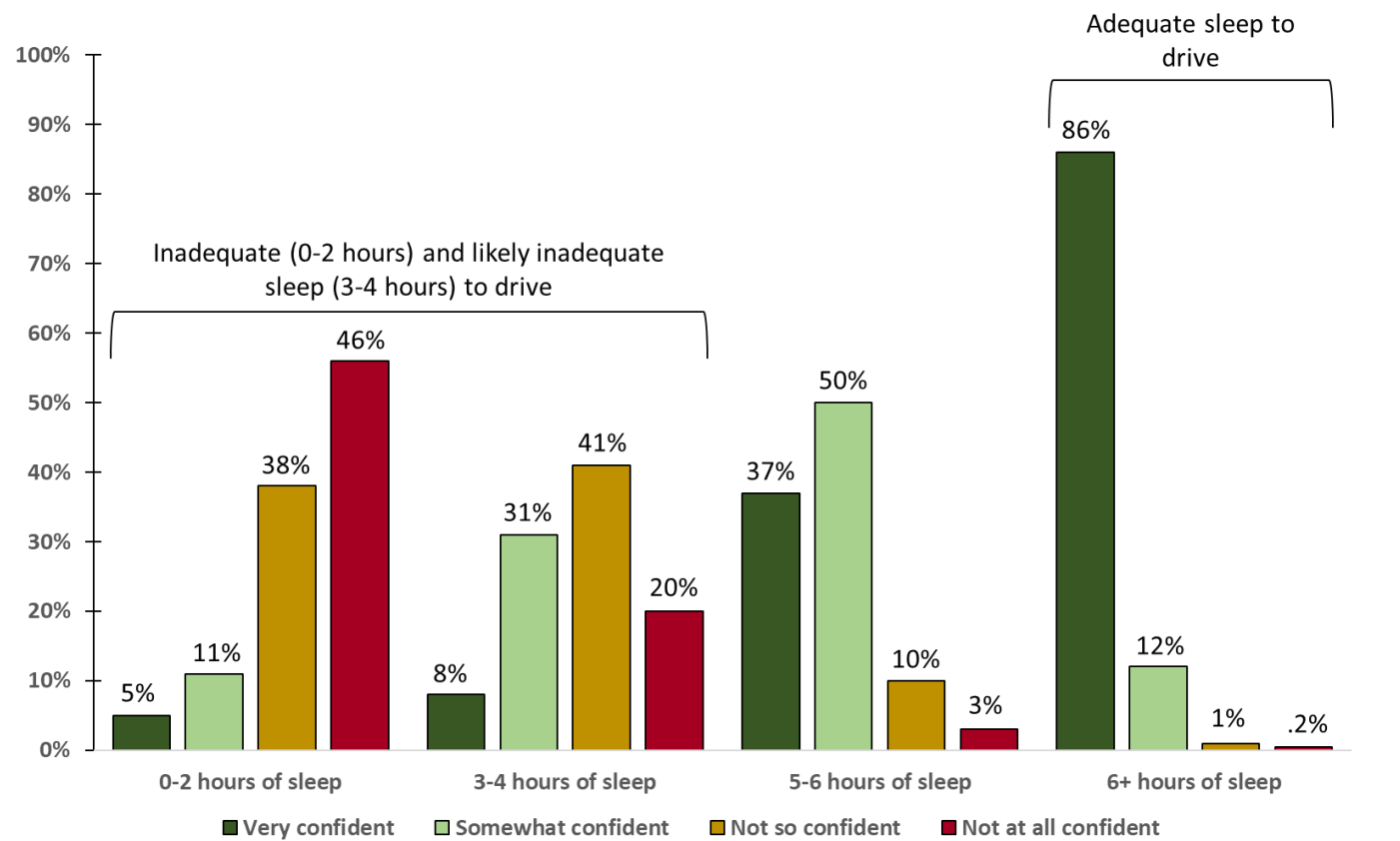
Finally, survey respondents were asked to report on habitual workday/weekday and weekend/non-workday sleep durations. The average reported sleep duration for workdays was 7.1 hours, while the average reported sleep duration for weekends was 7.4 hours. These sleep durations correspond to approximately 56 percent of adults getting the National Sleep Foundation's recommended seven to nine hours of sleep (for most adults) before an average workday, and just 62 percent of adults getting the recommended seven to nine hours of sleep before an average weekend.

Perceived Risk, Sleep Duration, and Drowsy Driving

Awareness of risk does not appear to translate into greater avoidance of drowsy driving. The vast majority of drivers have driven while drowsy, even though they consider it highly risky. Among drivers who see drowsy driving as extremely risky, 63 percent say they've done it anyway. Among those who see it as very risky, it's virtually the same, 60 percent.

However, there does appear to be an association between how much sleep people get and their tendency to drive drowsy. Among individuals who report getting less than the National Sleep Foundation recommended amount of nightly sleep (seven to nine hours for adults younger than 65, seven to eight hours for those 65 and older), 2/3 report having ever driven while so tired they had a hard time keeping their eyes open. However, only 59 percent of adults who report getting the recommended amount of nightly sleep have ever driven while drowsy. Differences also abound in terms of frequency of driving drowsy between those who do and do not obtain the recommended amount of nightly sleep. Among adults who do not get the recommended amount of nightly sleep, 30 percent drive drowsy at least yearly, vs. only 18 percent among adults who get the recommended amount of nightly sleep.

Figure 4. Confidence in Driving Ability with Various Sleep Durations.



Group Differences in Drowsy Driving

Finally, there are differences in both the prevalence and frequency of drowsy driving between segments of the US population. Table 1 presents a complete listing of group differences in prevalence and frequency of drowsy driving by common US demographic factors.

Conclusion

Drowsy driving is a serious public health concern associated with great personal and societal consequences, including the preventable loss of life and economic damages resulting from sleepiness-related motor vehicle crashes. Nearly 2/3, 62%, of drivers admit to having ever driven while so tired that they had a hard time keeping their eyes open—equating to an estimated 150+ million US motorists. This high rate of drowsy driving occurs despite the near universal acceptance of drowsy driving as highly risky. In terms of frequency, 1 in 4 individuals who have driven drowsy, 25%, do so once per year or more, resulting in an estimated 37+ million US motorists who drive drowsy yearly or greater.

Table 1. Drowsy Driving Prevalnce and Frequency by Group.

	Driven drowsy	Do so at least once a year
All drivers	62%	25%
Education level		
College graduates	74%	20%
Not graduates	55%	29%
Income		
Income \$100K+	71%	24%
Income <\$100K	55%	25%
Sleep duration		
Get recommended sleep	59%	18%
Get inadequate sleep	67%	30%
Household composition		
Child in household	63%	36%
No child in household	62%	20%
Sex/gender		
Men	68%	28%
Women	56%	21%
Race/ethnicity		
White	67%	21%
Other racial/ethnic groups	53%	35%

Notes: Due to sample size considerations, Black and Hispanic participants were combined into a single group. We acknowledge the methodological limitations associated with this practice.

Drowsy driving is impaired driving. It is preventable through attitudinal, behavioral, and potentially cultural changes among drivers. Drivers who get adequate nighttime sleep are less likely to drive while so tired they have a hard time keeping their eyes open. The National Sleep Foundation is dedicated to improving the health and well-being of the public through sleep education and advocacy. Please visit theNSF.org for information regarding how anyone and everyone can be their Best Slept Self®.

References

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