

TIRF USA Road Safety Monitor 2023

Alcohol-impaired driving in the United States

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KEY FINDINGS

- > The percentage of drivers who often or very often reported driving while alcohol-impaired declined to 8.4%, down from 10.3% in 2022.
- > Self-reported alcohol-impaired driving is the least prevalent among top road risks including speeding through a traffic light (18.7%), speeding well over the limit (16.7%), fatigued driving (15%), and driving after consuming THC (10.8%).
- > The most common reasons given by drivers who drove when they thought they were probably over the legal alcohol limit were that they thought they could drive carefully or that they were okay to drive.
- > Positively, in 2023, the estimated number of safe rides reached 199 million (a new record exceeding pre-pandemic levels) with over 80% of drivers reporting they relied on safe rides as an alternative strategy to avoid alcohol-impaired driving.
- > In terms of perceptions of road risks as a serious or very serious problem, U.S. drivers ranked texting drivers as the top risk followed by alcohol-impaired ones.

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This fact sheet summarizes the national results of the 2023 USA Road Safety Monitor (USA RSM) on alcohol-impaired driving. This is the ninth annual public opinion survey conducted by the [Traffic Injury Research Foundation USA, Inc. \(TIRF USA\)](#) with sponsorship from the [Anheuser-Busch Foundation](#). The survey takes the pulse of the nation regarding the alcohol-impaired driving issue by means of an online survey of a random, representative sample of U.S. drivers aged 21 years or older. A total of 1,525 drivers completed the poll in October 2023 (results can be considered accurate within plus or minus 2.5%, 19 times out of 20).

This fact sheet summarizes key findings regarding the prevalence of alcohol-impaired driving, reasons for engaging in this behavior and characteristics of these drivers. Survey results are compared to data from previous years.

Background

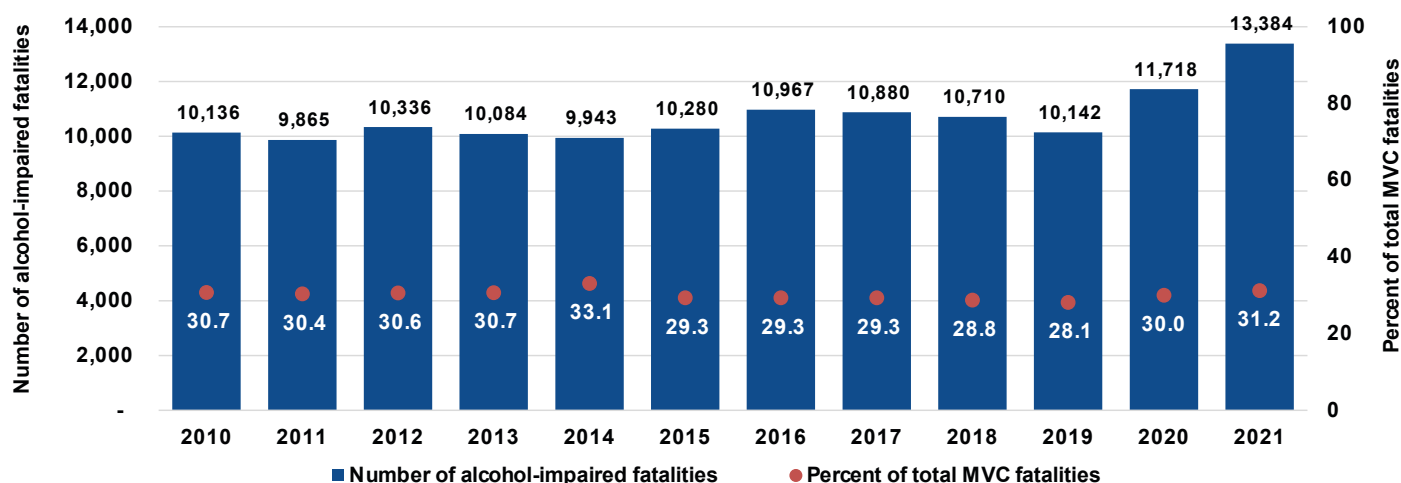
What proportion of total crashes involves alcohol-impaired driving?

According to the National Highway Traffic Safety Administration (NHTSA), the overall road fatality rate decreased from 2016 to 2019 before rising in 2020 and again in 2021. Vehicle-miles-traveled (VMT) decreased by 11% from 2019 to 2020 but subsequently increased 8.1% in 2021. The estimated fatality rate per 100 million VMT decreased by 3.5% from 1.14 in 2018 to 1.11 in 2019 before rising to 1.34 in 2020 and 1.37 in 2021 (NHTSA 2023).

According to the most recent available final NHTSA data, there was a 14.2% increase in alcohol-impaired driving fatalities from 2020 to 2021. Figure 1 shows fatalities involving a driver with a blood alcohol concentration (BAC) of .08 or greater accounted for 31.2% of total motor vehicle crash (MVC) fatalities in 2021 (or 13,384 lives lost) compared to 2020, when the number of fatalities was 11,718 (30% of total MVC fatalities, NHTSA, 2023). The early estimates of the first nine months of 2022 indicate a leveling-off of fatalities with a 0.2% decrease from the same period in 2021 as well as a decrease from 1.32 fatalities per 100 million miles traveled for the first three quarters of 2021 to 1.30 during the same period in 2022.

According to the most recent available final NHTSA data, there was a 14.2% increase in alcohol-impaired driving fatalities from 2020 to 2021.

Figure 1: Alcohol-impaired driving fatalities | 2010 to 2021



Source: NHTSA

Where does the issue of alcohol-impaired driving sit on the public agenda?

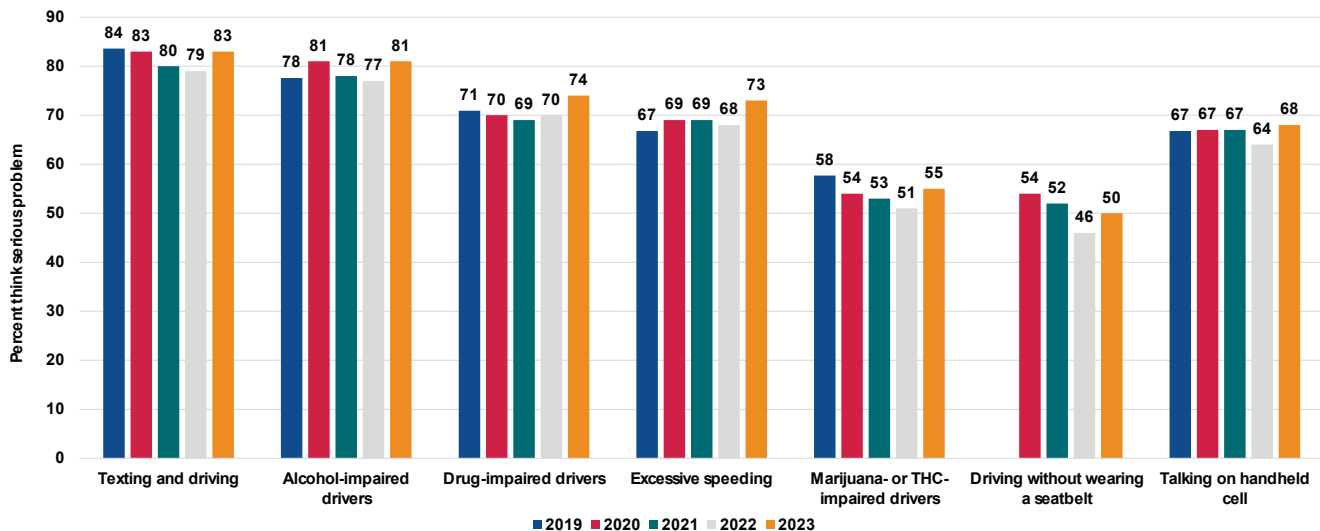
In 2023, U.S. drivers were asked how concerned they were about various societal issues. Approximately 3 in 4 (76%) U.S. drivers reported they were very or extremely concerned about the economy. Comparatively, 70% of U.S. drivers reported they were very or extremely concerned about alcohol-impaired driving. At least half of respondents were concerned about gun violence (63%), political polarization (60%), road safety (58%), and immigration (52%).

Is alcohol-impaired driving a major road safety problem for U.S. drivers?

Figure 2 shows the percentage of U.S. drivers who agreed various road safety issues are a serious or very serious problem. In 2023, a large majority (81%) of U.S. drivers reported alcohol-impaired driving was a serious problem, representing an increase from 2022 (77%). Only texting and driving was reported as a greater road safety issue than alcohol-impaired driving, with 83% of drivers reporting this was a serious problem in 2023. This was also an increase from 79% in 2022. Fewer drivers (74%) believed drug-impaired driving was a serious problem compared to the issue of alcohol-impaired driving which is consistent with 2022 (70%). Excessive speeding was regarded as a serious problem by 73% of respondents, compared to 68% in 2022. Talking on a handheld phone while driving was regarded as a serious problem by 68% of U.S. drivers compared to 64% in 2022. Roughly half (55%) of respondents believed marijuana-impaired drivers were a serious problem, an increase from 51% in 2022. Similarly, 50% believed driving without wearing a seatbelt was a serious problem, compared to 46% in 2022. Higher levels of concern across all road safety issues in 2023 may indicate that efforts to address road safety amongst the public are having the desired effect of raising awareness about road safety risks.

81% of U.S. drivers reported alcohol-impaired driving was a serious problem, an increase from 2022 (77%).

Figure 2: Percent of U.S. drivers who think various road safety issues are a serious or very serious problem | 2019-2023



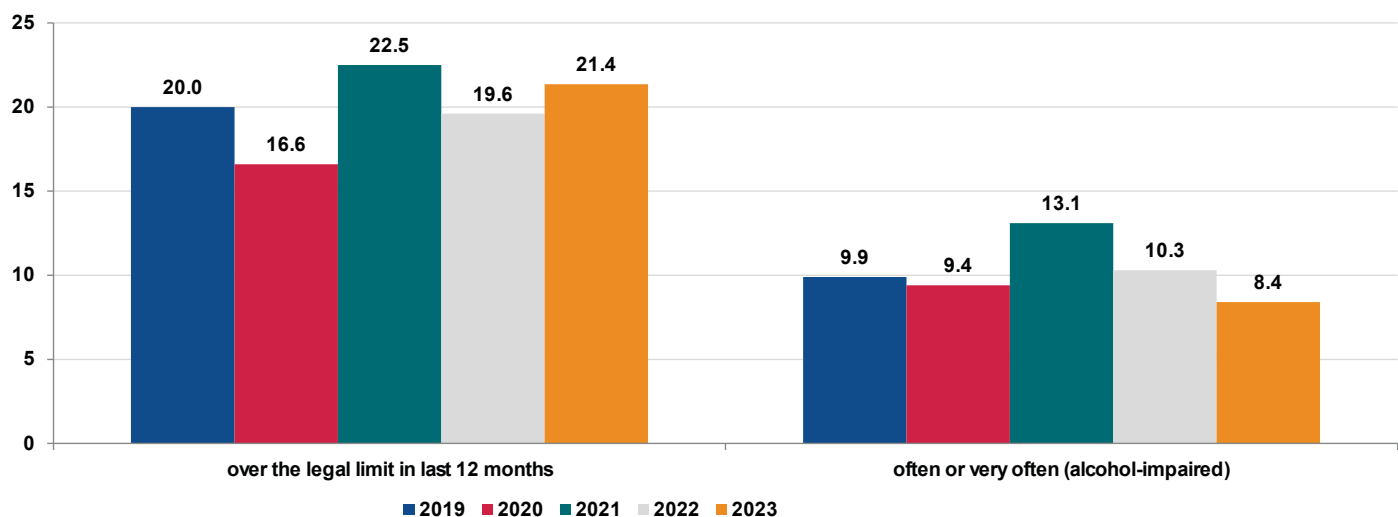
Alcohol-impaired driving behaviors as reported by U.S. drivers

How prevalent is alcohol-impaired driving among U.S. drivers?

Self-reported alcohol-impaired driving by U.S. drivers is presented in Figure 3. Respondents were asked two questions. First, they were asked how many times in the past 12 months they had driven when they thought they were probably over the legal limit. Results on the left-hand side of the figure show the percentage of drivers each year who answered one or more times. Second, respondents were asked how often they drove impaired by alcohol, using a scale from 1 (never) to 6 (very often). On the right-hand side, results indicate the percent of those who reported 5 or 6 on this scale.

These results revealed the percentage of respondents reporting driving when they thought they were over the legal limit in the last 12 months had a non-significant increase from 19.6% in 2022 to 21.4% in 2023. The percentage of respondents reporting driving impaired by alcohol often or very often also had a non-significant decrease, from 10.3% in 2022 to 8.4% in 2023.

Figure 3: Percent of U.S. drivers self-reporting driving over the legal limit for alcohol or driving impaired | 2019-2023



What are the reasons why U.S. drivers drove when they thought they were over the legal limit?

The most common response was they thought they could drive carefully (23.1%), up from 12.6% in 2022. An additional 17% reported they thought they were okay to drive, down from 30.7% in 2022. In addition, 14.9% believed they would not be caught (compared to 9.3% in 2022) and 7.1% thought there was no alternative to driving (compared to 8.2% in 2022). Other reasons drivers drove when they were over the legal limit included 9.2% who drove earlier than planned, 7.2% who did not think about it, 6.2% who said they were not driving very far, and 3.7% who did not know why they drove while impaired.

In 2023, male participants were more likely to believe they would not be caught (19.6%) compared to females (6%). Conversely, males were less likely (4.2%) to report they did not feel there was an alternative than females (12.3%).

Among all U.S. drivers who drove when they thought they were over the legal limit (21.4%), almost one in four (23.1%) thought they could drive carefully and 17% continue to believe they were okay to drive. This suggests they do not understand the impairing effects of alcohol on driving or the risk they pose to themselves and other drivers on the road. These results continue to support the need for educational campaigns designed to help drivers recognize they are not able to judge their own level of impairment or ability to drive after drinking.

Given that the percentage of respondents who believed they would not get caught remains high at approximately 14%, this highlights the continued importance of high-visibility enforcement to deter these behaviors.



What are the characteristics of respondents who reported driving while they thought they were over the legal limit?

Data were analyzed to determine if there were any relationships between people who reported driving while they thought they were over the legal limit within the last 12 months and their age, preferred pronouns, the distance they drive, the number of tickets issued, and whether they had previously been injured in a collision. Only drivers who reported having a drink containing alcohol in the previous 12 months were included (N=6,326). Analysis of the aggregated data from 2018-2023 revealed the following significant results:

- > Older drivers were less likely to report driving when they thought they were over the legal limit (for every one-year increase in age there is a decrease of 3.5%). To illustrate, in 2018-2023, 40.6% of respondents aged 21 to 29 years and 38.9% of those aged 30 to 39 reported this behavior, whereas 15.2% of those aged 50 to 59 and 9.5% of those over age 60 admitted to driving when over the legal limit.
- > Males were twice as likely than females to report driving while they thought they were over the legal limit.
- > With respect to tickets received in the past 12 months, those who received two or more were approximately 15 times more likely to report driving when they thought they were over the legal limit compared to those who received fewer than two tickets.
- > Persons who had been injured in the past in a motor vehicle crash were 1.3 times as likely to report driving when they thought they were over the legal limit compared to those who had not been injured before.

What are the characteristics of respondents who reported driving impaired often or very often?

Data were analyzed to determine if there were any relationships between people who reported driving impaired from alcohol often or very often and their age, preferred pronouns, the distance they drive, the number of tickets issued, and whether they had previously been injured in a collision. Only drivers who reported having a drink containing alcohol in the previous 12 months were included (N=6,326). Based on the aggregated data from the past six years, the following significant results were found, similar to those in the previous section:

- > From 2018-2023, older drivers were less likely to report driving impaired often or very often (for every one-year increase in age there is a decrease of 3.7%). To illustrate, 17.8% of respondents aged 21 to 29 years and 20.8% of those aged 30-39 reported this behavior, whereas among those aged 50 to 59 years approximately 5.8% and 1.8% of those over age 60 reported this.
- > Men were twice as likely than women to report driving impaired often or very often.³
- > With respect to tickets received in the past 12 months, those who received two or more of them were six times more likely to report driving impaired often or very often compared to those who received fewer than two tickets.
- > Persons who had been injured in the past in a motor vehicle crash were 1.6 times as likely to report driving impaired often or very often compared to those who had not been injured before.

Comparison with other types of unsafe driving behaviors

What types of other unsafe driving behaviors are reported by drivers?

The prevalence of alcohol-impaired driving was compared to other reported unsafe driving behaviors, including speeding through a traffic light, driving well over the speed limit, driving tired or fatigued, driving distracted, driving after consuming THC (the active ingredient in cannabis), texting while driving, talking on a phone while driving, and driving without a seatbelt. Respondents were asked how often they engaged in each behavior using a scale from 1 (never) to 6 (very often). Figure 4 presents the proportions of respondents who reported doing so often or very often (i.e., 5 and 6 on this scale).

Figure 4: Percent of U.S. drivers who often or very often engage in dangerous driving behaviors | 2019-2023

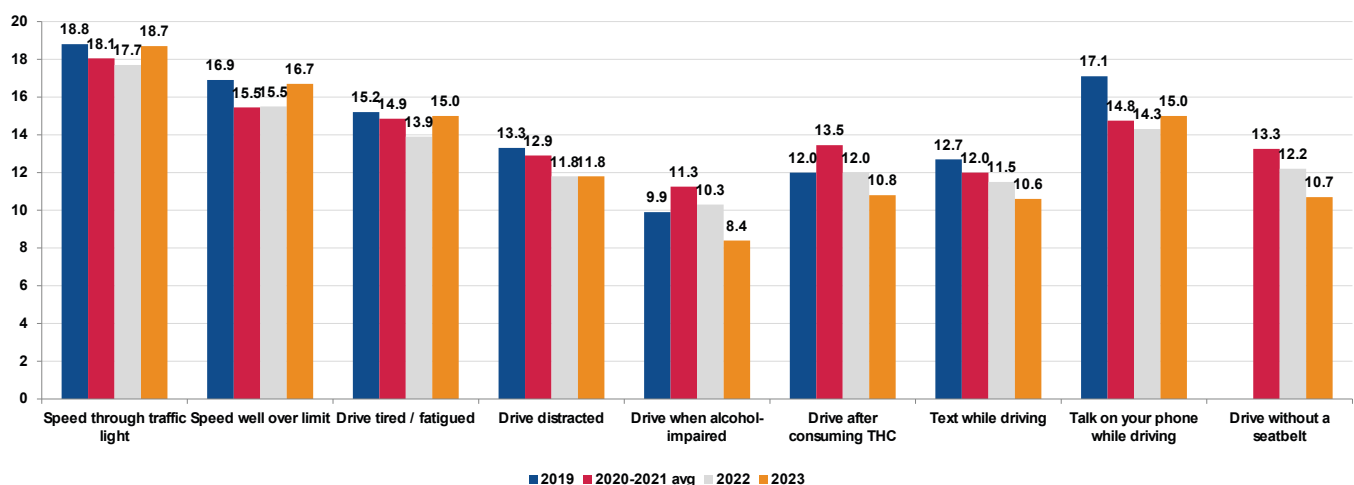


Figure 4 shows that in 2023 alcohol-impaired driving (8.4%) was the least prevalent unsafe driving behavior which is consistent with data going back to 2019. The figure also shows the prevalence of speeding through a traffic light (18.7%), driving well over the speed limit (16.7%) and driving tired or fatigued (15%) in 2023 is roughly at the same level as 2019, after showing slight decreases from 2020 to 2022.

Alcohol-impaired driving rose during 2019 to 2021 before decreasing to 8.4% in 2023. All other reported behaviors exhibit a generally decreasing trend since 2019, with lower rates of prevalence in 2023 compared to 2019, including for driving distracted (11.8%), driving after consuming THC (10.8%), texting while driving (10.6%), talking on a phone while driving (15%) and driving without a seatbelt (10.7%).

Driving after consuming THC was reported slightly more often than driving when impaired by alcohol (10.8% versus 8.4%), which was a statistically significant difference. This may indicate some drivers believe that driving after consuming THC is safer than alcohol-impaired driving and public education is needed to raise awareness of the risks. It may also indicate the continued legalization of recreational cannabis is leading to increased rates of driving following use.

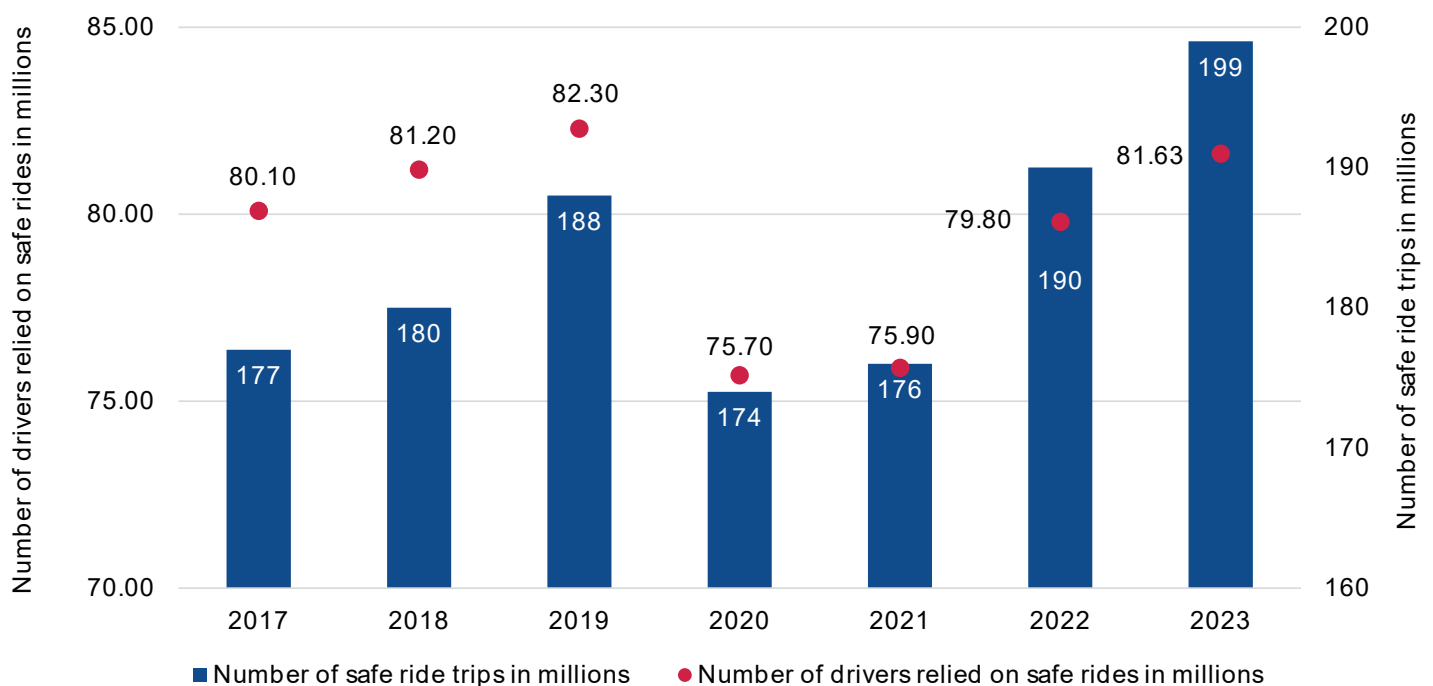
Safe rides

What proportion of drivers report using safe rides?

The proportion of respondents indicating they had been a designated driver, used a designated driver, used a taxi or public transportation or ridesharing in 2023 was 81.6% (Figure 5). This translates into an estimated 199 million drivers choosing a safe ride home after drinking.

During the COVID-19 pandemic, the percentage of respondents decreased and the upward reversal that commenced in 2020 appears to be continuing. The COVID-19 pandemic may have affected the use of safe rides, as Vanlaar et al. (2021) demonstrated a decrease in the use of both public transit and ridesharing during the pandemic. It is possible the declining trend in 2020 and 2021 was due to the reticence to use a shared mode of transportation for fear of being exposed to the COVID-19 virus.

Figure 5: Trends in the use of safe rides | 2017-2023



Conclusions

The 2023 data reveal that the prevalence of alcohol-impaired driving remains alarmingly high and is essentially unchanged from 2022. Roughly 1 in 5 (21.4%) of drivers admitted to driving when likely over the legal alcohol limit, which translates into approximately 43 million drivers. Furthermore, roughly 1 in 10 (8.4%) reported driving while alcohol-impaired often or very often, which translates into 17 million drivers. Continued monitoring of the data are needed to determine longer-term trends on whether self-reported alcohol-impaired driving is increasing, decreasing or is stable. In addition, any increases or decreases in this self-reported behavior will need to be compared with the number and percentage of alcohol-impaired driving fatalities once more fatality data becomes available.

The percentage of drivers who believe alcohol-impaired driving is a serious problem remained high at 81% and was exceeded only by the concern about texting and driving (83%). As a societal issue, a large majority (69.7%) are concerned or extremely concerned about alcohol-impaired driving. The only issue showing greater rates of concern was the economy (76.2%).



The primary reasons for drivers reporting alcohol-impaired driving behavior were they could drive carefully (23.1%) and believed they were okay to drive (17%). This suggests a large proportion of drivers still fail to recognize the impairing effects of alcohol or do not understand how alcohol affects their driving abilities. The third most common reason given was they believed they would not get caught (14.9%), up from 9.3% in 2022. Belief in not getting caught was more prevalent among male drivers (19.6%) than female (6%). A possible contributing factor to persistent alcohol-impaired driving may be the introduction of driver-assist systems in newer vehicles. Robertson et al. (2017) found 8.5% of drivers self-reported they would engage in drinking and driving when using a limited self-driving vehicle. Another possible factor is a reduced level of enforcement that has contributed to more drivers willing to take risks with the belief they will not be caught (NPR, 2023).

Driver factors that increase the likelihood of alcohol-impaired driving include being male, being younger, having received two or more traffic tickets within the past 12 months and having previously been injured in a motor vehicle crash.

The percentage of drivers stating they relied on safe rides as an alternative strategy to avoid alcohol-impaired driving in 2023 has increased to 81.6%, and an estimated 199 million drivers, a level not seen since prior to the COVID-19 pandemic.

In conclusion, the prevalence of alcohol-impaired driving remains persistently high, although there are some indications that people are opting for safe rides. Concern among the public for alcohol-impaired driving also remains high. Targeted education and enforcement efforts to reduce and prevent impaired driving remain essential to lessen the burden of the issue.

References

Hedges & Company. How many licensed drivers are there in the US? Hudson, OH.: Hedges & Company. <https://hedgescompany.com/blog/2018/10/number-of-licensed-drivers-usa/> (Accessed December 13, 2023)

National Highway Traffic Safety Administration. (2023). Overview of motor vehicle crashes in 2021. Report No. DOT HS 813 435).

NPR. America's roads are more dangerous, as police pull over fewer drivers. April 6, 2023. <https://www.npr.org/2023/04/06/1167980495/americas-roads-are-more-dangerous-as-police-pull-over-fewer-drivers> (Accessed January 12, 2024).

Robertson, R.D., Meister, S.R., Vanlaar, W.G.M., Hing, M.M. (2017). Automated vehicles and behavioural adaptation in Canada. *Transport Research Part A*, Vol. 104, pp 50-57.

Vanlaar, W.G.M., Woods-Fry, H., Barrett, H., Lyon, C., Brown, S., Wicklund, C., Robertson, R.D. The impact of COVID-19 on road safety in Canada and the United States (2021) *Accident Analysis and Prevention*, 160, art. no. 106324.

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