

# TIRF USA Road Safety Monitor 2022

## Alcohol-impaired driving & COVID-19

### in the United States

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This fact sheet summarizes the national results of the 2022 USA Road Safety Monitor (USA RSM) on alcohol-impaired driving. This is the eighth annual public opinion survey conducted by the **Traffic Injury Research Foundation USA, Inc. (TIRF USA)** with sponsorship from **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 1,503 drivers completed the poll in October 2022 (results can be considered accurate within plus or minus 2.6%, 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. In response to the COVID-19 pandemic, this RSM also describes the effects of the pandemic on risky driving behaviors. Research showed decreased traffic volumes led to increases in speeding and impaired driving (Hughes et al. 2020; Thomas et al. 2020; Vanlaar et al. 2021) and this survey provides additional insight.

## Background

### What proportion of total crashes involve alcohol-impaired driving?

According to the National Highway Traffic Safety Administration (NHTSA), the overall fatality rate decreased from 2016 to 2019 before rising in 2020. Vehicle miles traveled (VMT) decreased by 11% from 2019 to 2020 and 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 (NHTSA 2022).

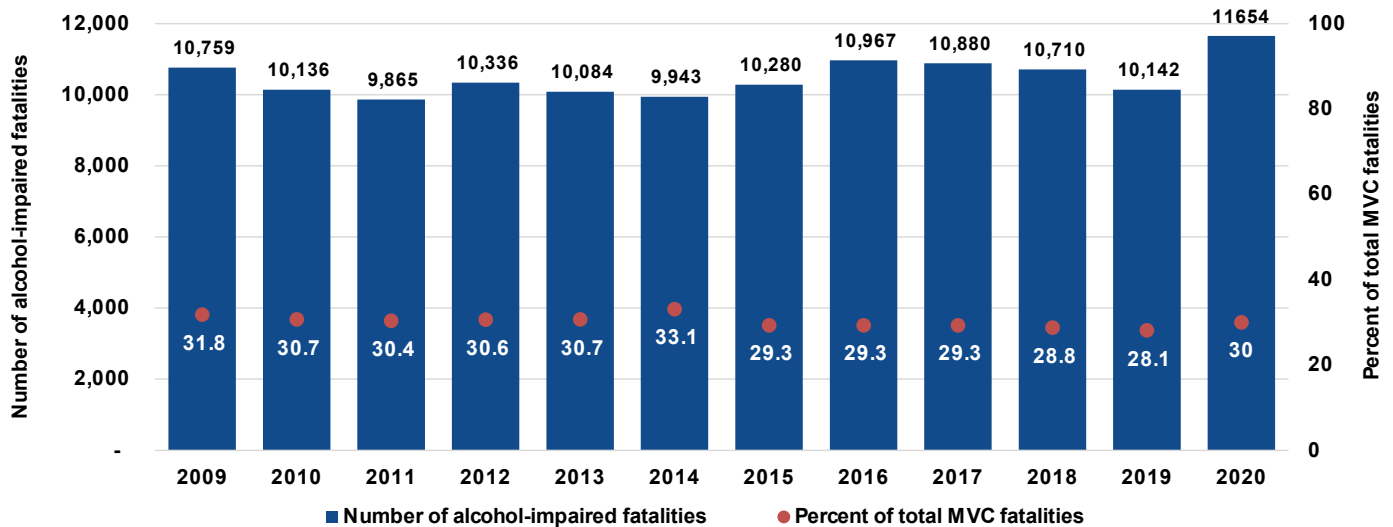
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According to the most recent available final NHTSA data, there was a 14.9% increase in alcohol-impaired driving fatalities from 2019 to 2020. Figure 1 shows fatalities involving a driver with a blood alcohol concentration (BAC) of .08 or greater accounted for 30% of total motor vehicle crash (MVC) fatalities in 2020 (or 11,654 lives lost) compared to 2019, when the number of fatalities was 10,142 (28.1% of total MVC fatalities) (NCSA, 2022a). The percent of alcohol-impaired driving fatalities of all driving fatalities in 2020 represents the highest percentage since 2015 and an increase of 6.8% from 2019. Early estimate data for 2021 from NHTSA (NCSA, 2022b) show a drop in alcohol-impaired driving fatalities to 8,174 while total fatalities rose to 42,915 from 38,824 in 2021. These numbers are however subject to change when final data are released.

**Figure 1: Alcohol-impaired driving fatalities | 2009 to 2020**



Source: NHTSA Traffic Safety Fact Sheets

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

In 2022, U.S. drivers were asked how concerned they were about various societal issues, including the COVID-19 pandemic. Approximately 1 in 3 (34%) U.S. drivers reported they were very or extremely concerned about the pandemic. Comparatively, 59% of U.S. drivers reported they were very or extremely concerned about alcohol-impaired driving. At least half of respondents were concerned about road safety (50%) and gun violence (63%). Concern about other issues such as unemployment (34%) and immigration (38%) was lower.

## 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 2022, 77% of U.S. drivers reported alcohol-impaired driving as a serious problem, consistent with 2021 (78%). Only texting and driving was reported as a greater road safety issue than alcohol-impaired driving, as 79% of drivers believed this was a serious problem in 2022, similar to the 80% in 2021. Fewer drivers (70%) believed drug-impaired driving was a serious problem compared to the issue of alcohol-impaired driving which is also consistent with 2021 (69%). Excessive speeding was regarded as a serious problem by 68% of respondents, similar to 2021 (68%). Talking on a hand-held phone while driving was regarded as a serious problem by 64% of U.S. drivers, a slight decrease from previous years. Roughly half (51%) of respondents believed marijuana-impaired drivers were a serious problem, an insignificant decrease from 52% in 2021. Similarly, 46% believed driving without wearing a seatbelt was a serious problem, compared to 52% in 2020, a significant decrease.

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

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

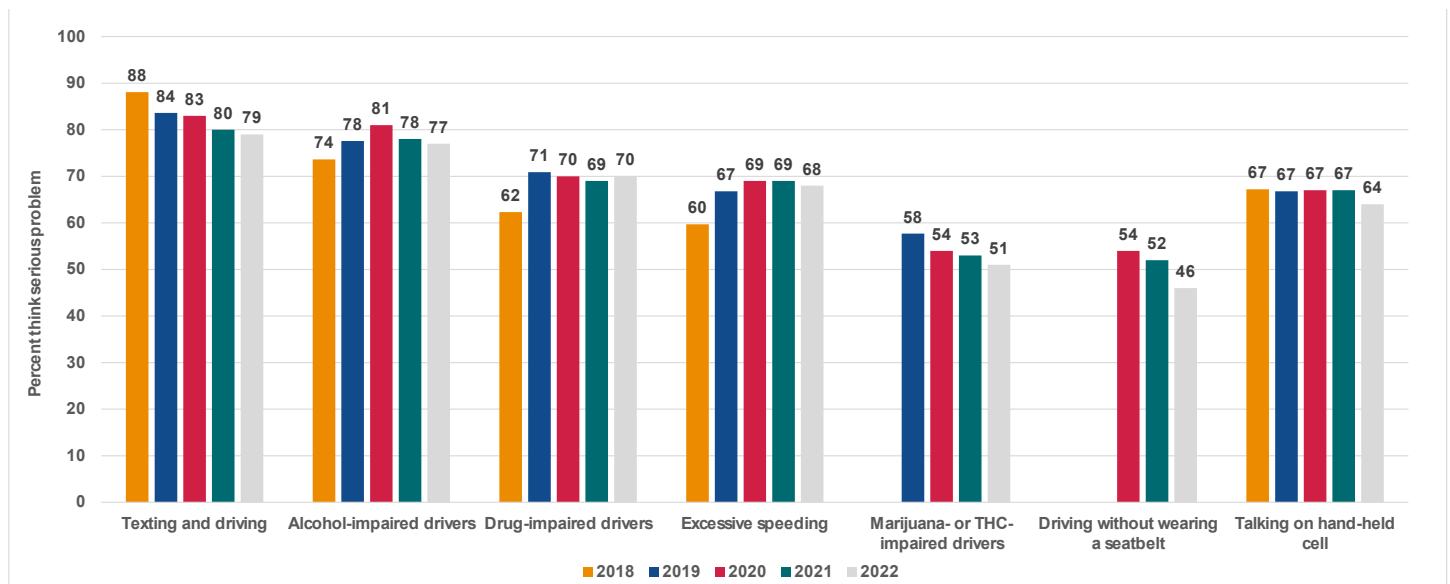
Self-reported alcohol-impaired driving by U.S. drivers is presented in Figure 3. Respondents were asked two questions. First, they were asked how many times in the past 12 months they had driven when they thought they were probably over the legal limit. Results on the left-hand side of the figure show the percentage of drivers each

year who answered one or more times. Second, respondents were asked how often they drove impaired, 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. Note that driving impaired could include self-reporting of driving while impaired from non-alcohol substances. Prior to 2019, the survey did not ask a specific question on alcohol impairment.

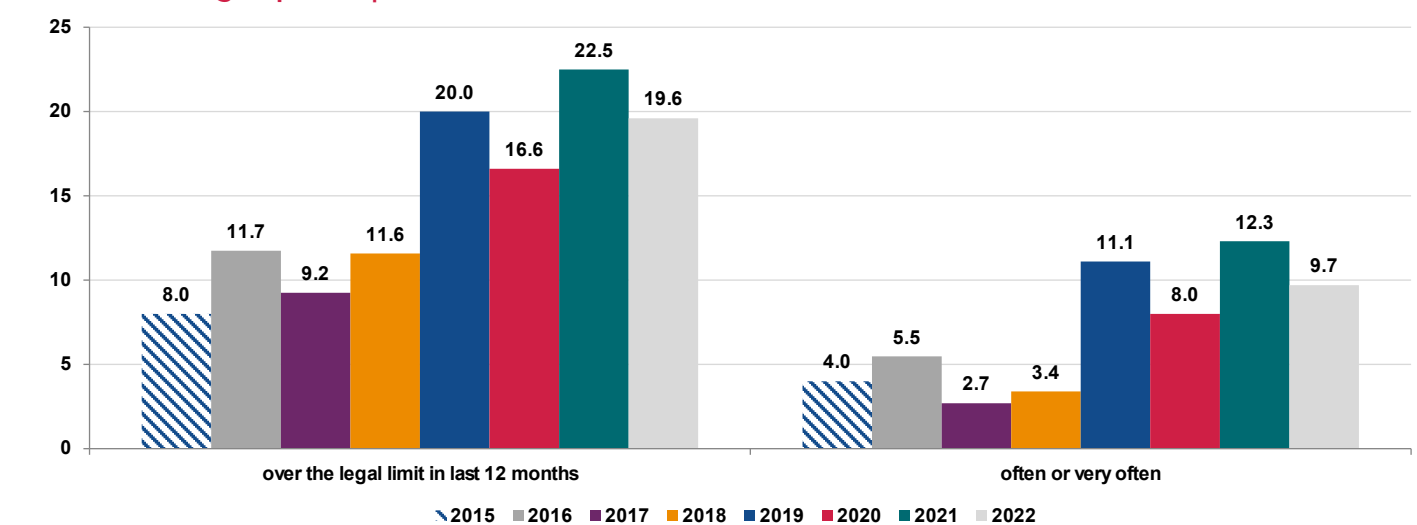
These results revealed the percentage of respondents reporting driving when they thought they were over the legal limit in the last 12 months had a non-significant decrease from 22.5% in 2021 to 19.6% in 2022. The percentage of respondents reporting driving impaired often or very often had a significant decrease, from 12.3% in 2021 to 9.7% in 2022.

The percentage of respondents reporting driving when they thought they were over the legal limit in the last 12 months decreased from 22.5% in 2021 to 19.6% in 2022.

**Figure 2: Percent of U.S. drivers who think various road safety issues are a serious or very serious problem | 2018-2022**



**Figure 3: Percent of U.S. drivers self-reporting driving over the legal limit for alcohol or driving impaired | 2015-2022**



## 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 were okay to drive (30.7%), down from 40.5% in 2021. An additional 12.6% reported they thought they could drive carefully regardless, similar to 12.4% in 2021. In addition, 9.3% believed they would not be caught (compared to 10.4% in 2021) and 8.2% thought there was no alternative to driving (compared to 7.4% in 2021). Other reasons drivers drove when they were over the legal limit included 4.7% who drove earlier than planned, 10.2% who did not think about it and 10.5% who did not know why they drove while impaired, and 5% who said they were not driving very far.



Among all U.S. drivers who drove when they thought they were over the legal limit (19.6%), almost a third (30.7%) continue to believe they were okay to drive and 12.6% believe they could drive carefully regardless. This suggests, consistent with a prior RSM identified concern, 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.

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Given that the percentage of respondents who believed they would not get caught remains approximately 10%, this highlights the continued importance of high-visibility enforcement to deter these drivers. On the other hand, slightly more respondents suggested there were no alternatives to driving while impaired by alcohol in 2022 compared to 2021. Vanlaar et al. (2021) found significant changes in the preferred method of travel as a result of the pandemic, with a significant decrease of 89.3% in the use of public transit, and a significant decrease (55.7%) in the use of a taxi or rideshare. This increase in U.S. drivers reporting there were no alternatives may be an indication that people remain less willing to use public transport and ridesharing, or that access to these services is limited in areas where drinking and driving is occurring.

## 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, sex, 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. Analysis of the aggregated data from 2018-2022 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 3.4%). To illustrate, in 2018-2022, 38.1% of respondents aged 21 to 29 years and 42.5% of those aged 30 to 39 reported this behavior, whereas 15.1% of those aged 50 to 59 and 10.8% of those over age 60 admitted to driving when over the legal limit.
- > Males were 67.8% more 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 of them were approximately 11 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 35.7% more 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 often or very often and their age, sex, 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. Based on the aggregated data from the past five years, the following significant results were found, similar to those in the previous section:

- > From 2018-2022, 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 3.5%). To illustrate, 13.0% of respondents aged 21 to 29 years and 22.5% of those aged 30-39 reported this behavior, whereas among those aged 50 to 59 years approximately 7.8% and 1.9% of those over age 60 reported this.
- > Males were 61.8% more likely than females to report driving impaired often or very often.
- > 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 104% more likely to report driving impaired often or very often compared to those who had not been injured before.

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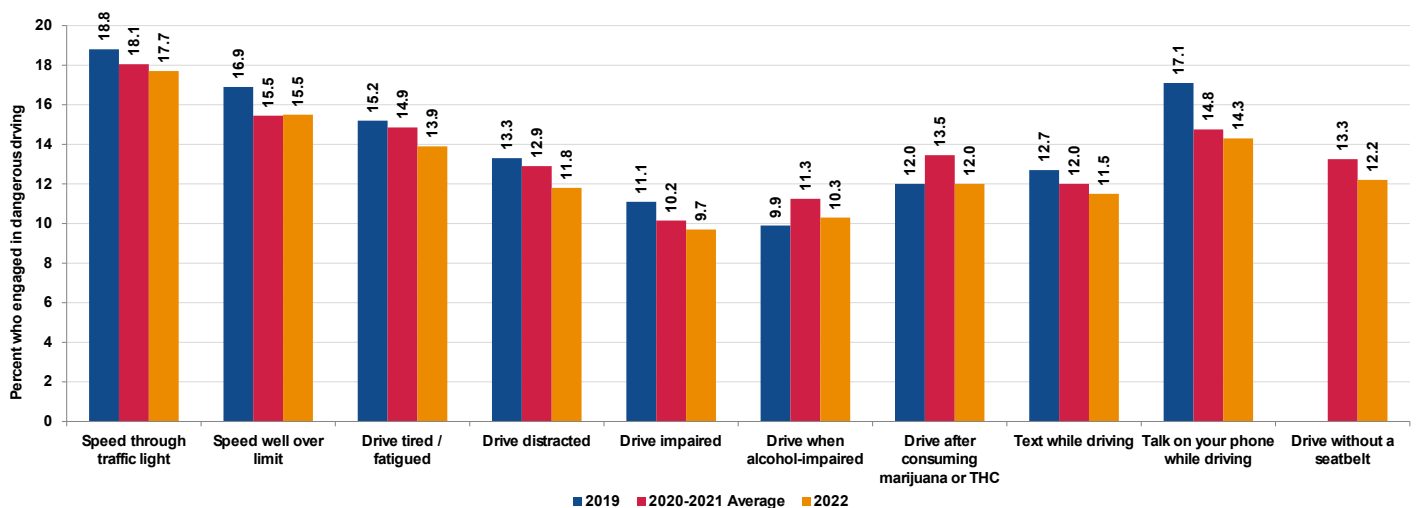
## Effects of the COVID-19 pandemic on risky driving behaviors

Since the World Health Organization (WHO) declared a worldwide pandemic in March 2020 there has been a substantial decrease in vehicle miles traveled (VMT) and traffic volumes. However, this decrease in traffic volume has led to an increase in risky driving behaviors such as excessive speeding and impaired driving (Carter 2020; Thomas et al. 2020; NCSA 2021) as well as possible changes in the profiles of risky drivers (Vanlaar et al. 2021). Data also indicate there has been a decrease of 22% in overall police-reported crashes, but an increase of 6.8% in fatal crashes (NHTSA 2022). Figure 4 shows the percentage of U.S. drivers who reported they often engaged in various dangerous driving behaviors in 2019, prior to the pandemic, in 2020-2021, during the height of the pandemic, and in 2022.

In 2022, alcohol-impaired driving was reported by 10.3% of drivers and was less often reported than some risky driving behaviors, such as speeding (speed through a traffic light: 17.7%; speed well over the limit: 15.5%), fatigued driving (13.9%), driving without a seatbelt (12.2%) and



Figure 4: Percent of U.S. drivers who often or very often engage in dangerous driving behaviors | 2019-2022



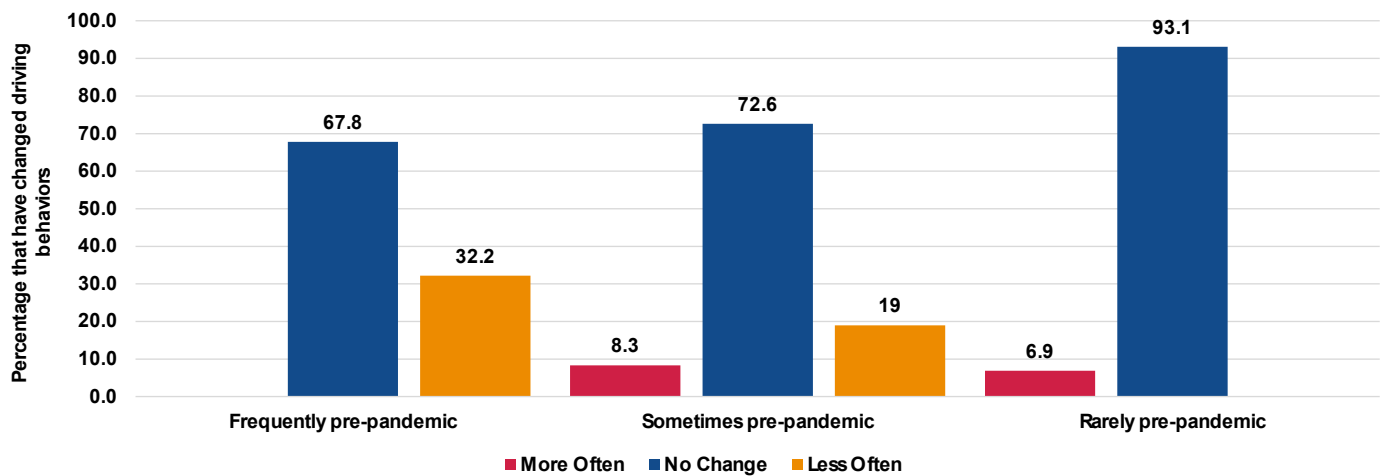
distraction-related behaviors (talk on your phone while driving: 14.3%; drive distracted: 11.8%; text while driving: 11.5%). Marijuana-impaired driving (12%) was reported more often than driving when impaired by alcohol (10.3%), but it was not a statistically significant difference.

In general, all dangerous driving behaviors were reported less often in 2022 compared to 2019 or the 2020-2021 average. However, drivers who reported driving when impaired by alcohol is an exception with 9.9% reporting doing so often or very often in 2019, 11.3% in the 2020-2021 period, and 10.3% in 2022, albeit these differences are not significant. Note that the data for driving when impaired by alcohol show the same pattern as the data in Figure 3 in that when 2020 and 2021 are disaggregated these data show a reduction from 2019 to 2020, followed by an increase in 2021.

The 2022 RSM questionnaire also explored the effects of the COVID-19 pandemic on road safety, asking respondents about various self-reported unsafe driving behaviors including alcohol-impaired driving, speeding, distracted driving, drug-impaired driving, and restraint use. Specifically, respondents were asked how often they have engaged in these risky behaviors during the COVID-19 pandemic, compared to their typical behavior before the pandemic.

The questions were asked on a scale from 1 (always) to 6 (never); for scoring purposes, respondents were coded as frequently engaging in these behaviors while driving if they chose a 1 or 2, sometimes engaging if they chose a 3 or 4, and rarely engaging if they chose a 5 or 6. The frequency of reported behaviors was compared to assess the percentage of drivers who reported the behavior more often, less often or at the same rate. The results for driving within two hours of using alcohol are shown in Figure 5.

**Figure 5: Percentage of U.S. drivers that have changed driving behaviors during the pandemic**



Prior to the pandemic, 18.2% of drivers reported frequently driving within two hours of using alcohol, 25.3% reported sometimes, and 56.5% reported rarely doing so. Compared to prior to the pandemic, 32.2% of the drivers who reported frequently driving within two hours of using alcohol did so less often during the pandemic. For drivers who reported driving within two hours sometimes prior to the pandemic, 8.3% reported doing so more often and 19% reported doing so less often during the pandemic. For drivers who reported doing so rarely prior to the pandemic, 6.9% reported doing so more often during the pandemic.

Overall, during the pandemic there was a net decrease in drinking and driving according to the question posed in 2022, with 16.5% reported frequently driving within two hours of using alcohol, 24.1% reported sometimes, and 59.4% reported rarely doing so. However, it is possible that those that continue to drive after drinking did so with a higher BAC which could explain the increased proportion of fatalities being alcohol-related.

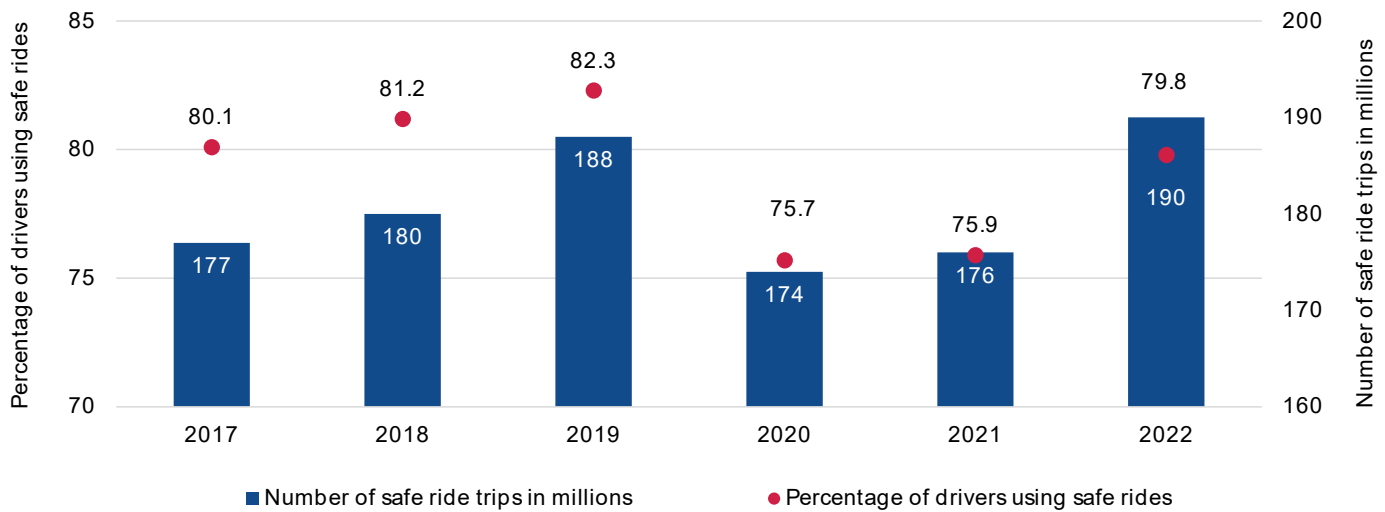
Similar patterns in behavior change were seen for excessive speeding, drugs and driving, distracted driving and seatbelt use. While overall the majority of drivers did not change their behavior, there is some evidence of a notable proportion of U.S. drivers indicating that they were more likely to engage in risky driving behaviors during the pandemic, as compared to before.

## 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 2022 was 79.8% (Figure 6). Although this represents an increase of 3.9% from 2021, it is still down 2.5% from 82.3% in 2019. 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 decrease in the 2020-2022 period was due to the reticence to use a shared mode of transportation for fear of being exposed to the COVID-19 virus. However, with the data from 2022, it appears the avoidance of ridesharing may be lessening.

Figure 6: Trends in the use of safe rides | 2017-2022



## Conclusions

Data from 2022 revealed a non-significant decrease in self-reported alcohol-impaired driving compared to 2021. The year 2021 had shown the highest percentage of respondents admitting to this behavior compared to recent years. Continued monitoring of the data are needed to determine whether self-reported alcohol-impaired driving continues to decrease or reverts to an increasing trend. 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.

Concern about alcohol-impaired driving remained high and exceeded the rate of concern for the COVID-19 pandemic (34%). Recent data about the effects of COVID-19 on road safety indicates there has been an increase in impaired driving and speeding, as well as serious crashes (Hughes et al. 2020; Thomas et al. 2020; Carter et al. 2020). While a larger proportion of drivers reported driving when they thought they were over the legal limit in 2021 compared to 2019, this proportion has decreased in 2022 to below that seen in 2019. This trend is also true for the share of respondents who admitted to often engaging in this behavior.

The primary reason for drivers reporting this behavior was they believed they were okay to drive (30.7%). 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. Interestingly, the second reason most often reported in 2022 was no longer a lack of alternative options for transportation but rather the belief they could drive carefully regardless of being over the limit. This also points to a lack of understanding of the risks associated with the impairing effects of alcohol. The fact that the lack of alternative options for transportation is no longer second may be due to people's willingness to again rely on public transportation and rideshares following the significant decreases observed initially during the pandemic (Vanlaar et al. 2021). While there was a decrease from 188 million drivers in 2019



indicating they had been a designated driver, used a designated driver, used a taxi or public transportation or ridesharing, to 174 million in 2020, this number has increased in 2022 to 190 million.

The pandemic also had an impact on other risky driving behaviors, with some drivers reporting they were more likely to drive within two hours of consuming alcohol, as well as excessively speed during the pandemic as compared to before it. Some drivers also reported they were more likely to drive distracted, drive under the influence of marijuana, or drive without a seatbelt. The large majority of respondents indicated their behavior did not change, and most positively, the proportions of drivers who reported they were less likely to engage in these risky driving behaviors was larger than the proportions who reported they were more likely to do so.

While reported dangerous driving behaviors declined in 2022 compared to 2021, they nevertheless show a concerning prevalence and continued monitoring is required.

The full impact of the COVID-19 pandemic on road safety is presently unknown but it has had a concerning impact on alcohol-impaired driving according to the survey results. Encouragingly, the self-reported data indicate that rates of alcohol-impaired driving may be reverting back to pre-pandemic levels, but continued monitoring is needed to confirm this trend. These data can complement crash and fatality data, and ultimately offer a more in-depth understanding of how the pandemic has affected road safety.

In conclusion, in 2022 there were decreases in the percentage of drivers who reported driving while impaired as well as the percentage of drivers who engaged in other risky driving behaviors compared to 2021; these percentages are generally at or below rates seen in 2019. The percentage of drivers stating they relied on safe rides as an alternative strategy to avoid alcohol-impaired driving in 2022 was still lower than in 2019, although the total estimated number of trips has increased. Targeted education and enforcement efforts to reduce and prevent impaired driving remain essential to lessen the burden of the issue.



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