

## ALCOHOL-IMPAIRED DRIVING & COVID-19 IN THE UNITED STATES Results from the 2020 TIRF USA Road Safety Monitor

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This fact sheet summarizes the national results of the 2020 USA Road Safety Monitor (USA RSM) on alcohol-impaired driving. This is the sixth 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 1,501 drivers completed the poll in September 2020 (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. In response to the COVID-19 pandemic, this RSM also describes the effects of the pandemic on risky driving behaviors. Preliminary research showed decreased traffic volumes led to increases in speeding and impaired driving (Hughes et al. 2020; Thomas et al. 2020) and this survey provides additional insight.

### THE TRAFFIC INJURY RESEARCH FOUNDATION USA, Inc.

The mission of the Traffic Injury Research Foundation USA, Inc. (TIRF USA) is to develop and share the knowledge that saves – preventing injuries and loss of life on American roads, reducing related social, health and insurance costs, and safeguarding productivity. TIRF USA is an independent road safety research institute that obtained 501(c)3 non-profit status in the US in 2014.

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The knowledge source for safe driving

## Background

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

According to the National Highway Traffic Safety Administration (NHTSA), the overall fatality rate has decreased consistently for the past three years from a high in 2016. Vehicle miles traveled (VMT) increased by 0.8% from 2018 to 2019 and the estimated fatality rate per 100 million VMT decreased by 3.5 percent from 1.14 in 2018 to 1.10 in 2019. Similarly, there was a 5.3% decrease in alcohol-impaired driving fatalities from 2018 to 2019. Alcohol-impaired driving fatalities involving a driver with a blood alcohol concentration (BAC) of .08 or greater accounted for 28% of total motor vehicle crash (MVC) fatalities in 2019 (or 10,142 lives lost) compared to 2018, when the number of fatalities was 10,710 (29.1% of total MVC fatalities) (NCSA, 2020). The percent of alcohol-impaired driving fatalities of all driving fatalities in 2019 represents the lowest percentage since the beginning of data collection on alcohol in 1982. Despite these declines, preliminary data from the first half of 2020 demonstrate concerning trends, as the COVID-19 pandemic has resulted in fewer VMT, but a higher fatality rate per VMT, along with increased risky driving behaviors such as speeding, failing to wear seatbelts, and driving under the influence of alcohol or drugs. Once available, the alcohol-related traffic crash fatalities can provide more insight into how the pandemic has affected this risky driving behavior.

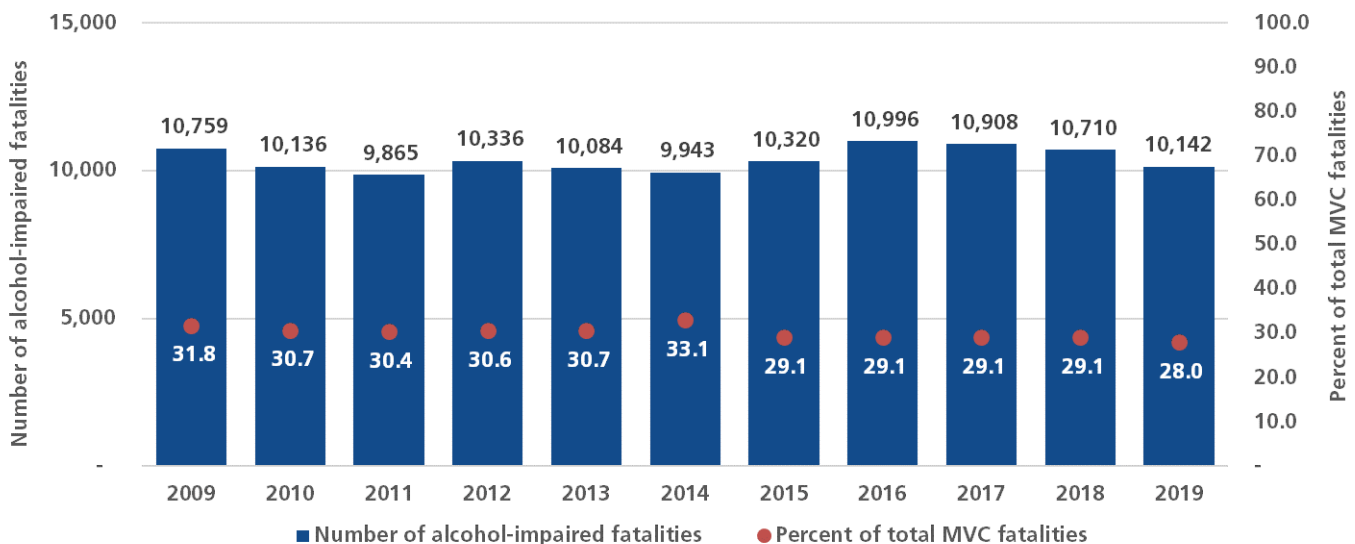
### Where does the issue of alcohol-impaired driving sit on the public agenda?

In 2020, U.S. drivers were asked how concerned they were about various societal issues, including the COVID-19 pandemic. Approximately 3 in 5 (60%) Americans reported they were very or extremely concerned about the pandemic. Comparatively, 60% of U.S. drivers reported they were very or extremely concerned about alcohol-impaired driving. Slightly less than half of respondents were concerned about gun control (50%) and road safety (48%). Concern about other issues such as unemployment (46%) and immigration (36%) were lower.

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

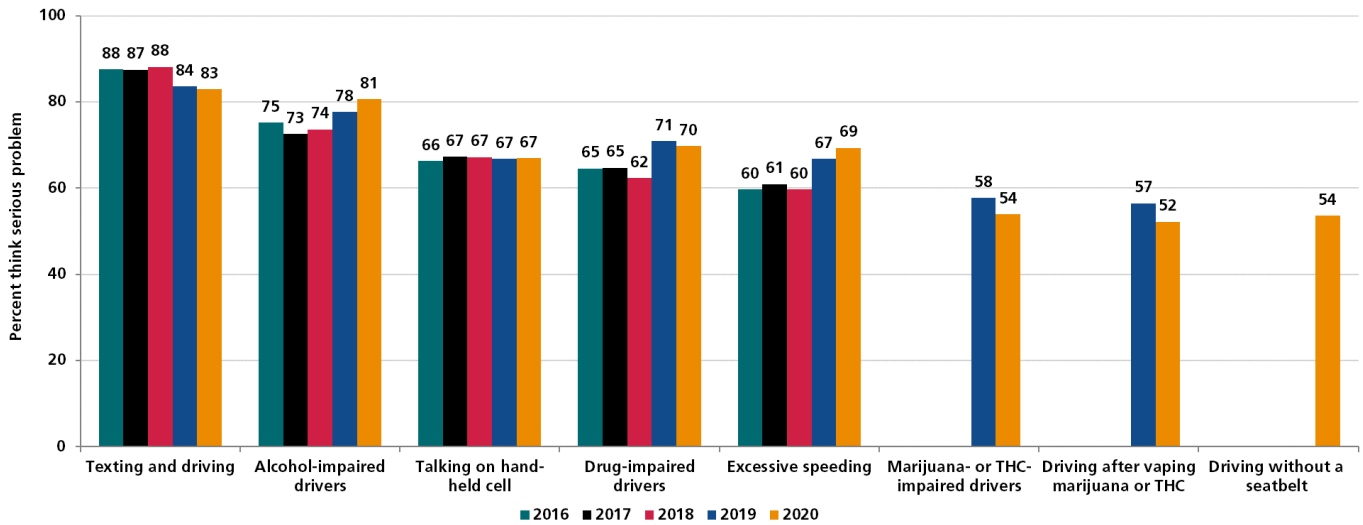
Figure 2 shows the percentage of U.S. drivers who agreed various road safety issues are a serious or very serious problem. There were 81% of U.S. drivers who reported alcohol-impaired driving as a serious problem, a significant increase from 78% in 2019. Only texting and driving was reported as a greater road safety issue than alcohol-impaired driving, as 83% of drivers believed this was a serious problem in 2020, decreasing slightly from 84% in 2019. Fewer drivers (70%) believed drug-impaired driving was a serious problem compared to the issue of alcohol-impaired driving, but the proportion of drivers reporting it as a serious problem remains relatively unchanged from last year (70% in 2020 and 71% in 2019). To a lesser extent, excessive speeding was regarded as a serious problem by 69% of respondents, increasing slightly from 67% in 2019. Talking on a hand-held phone while driving was regarded as a serious problem by 67% of U.S. drivers, and has been constant at 67% for four years in a row.

**Figure 1: Alcohol-impaired driving fatalities from 2009 to 2019**



Source: NHTSA Traffic Safety Fact Sheets

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



More than half (54%) of respondents believed marijuana-impaired drivers were a serious problem, a significant decrease from 58% in 2019. Similarly, 52% believed driving after vaping marijuana was a serious problem, decreasing significantly from 57% in 2019. The issue of driving without a seatbelt was asked for the first time in 2020, and just over half (54%) of U.S. drivers believed this was a serious problem.

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

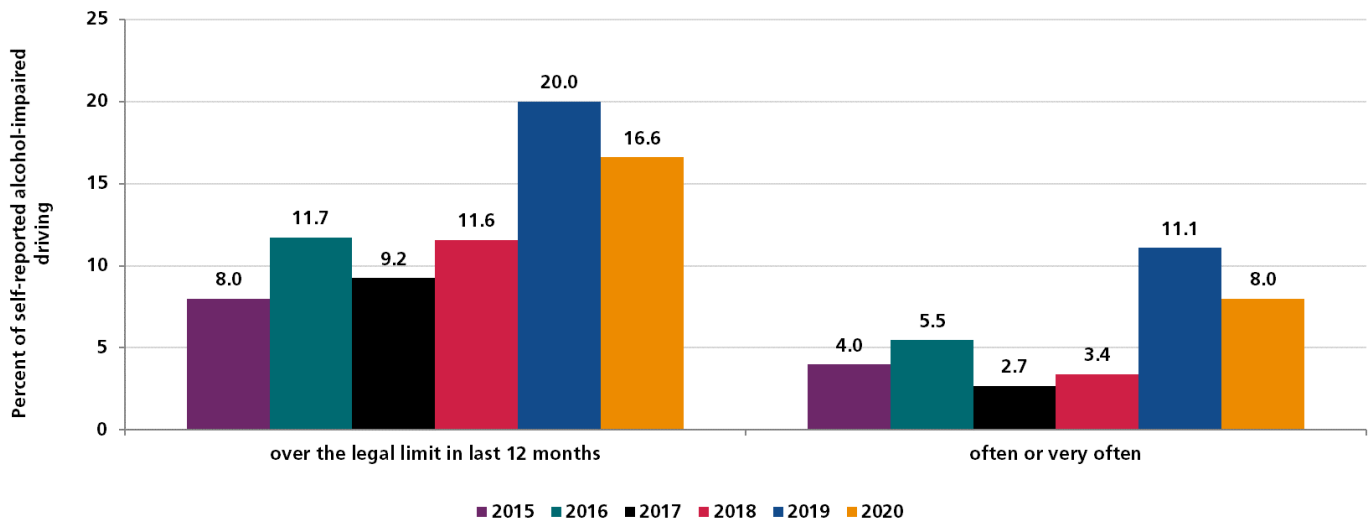
### How prevalent are alcohol-impaired driving behaviors among U.S. drivers?

Self-reported alcohol-impaired driving behavior 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 percent 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.

These results revealed the percentage of respondents reporting driving when they thought they were over the legal limit in the last 12 months decreased significantly from 20% in 2019 to 16.6% in 2020. This represents a 17% decrease from the peak in prevalence reported last year, however it remains the second-highest percentage observed since 2015. Additionally, the

**Figure 3: Percent of U.S. drivers self-reporting alcohol-impaired driving in 2015-2020**



percentage of respondents reporting driving impaired often or very often also decreased significantly, from 11.1% in 2019 to 8% in 2020.

**The percentage of respondents reporting driving when they thought they were over the legal limit in the last 12 months decreased significantly from 20% in 2019 to 16.6% in 2020.**

### **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 (31.7%), down from 39.4% in 2019. An additional 8.6% reported they thought they could drive carefully regardless, also down from 10.4% in 2019. In addition, 9.1% believed they would not be caught (compared to 9.8% in 2019) and 11.9% thought there was no alternative to driving (compared to 9.6% in 2019). A variety of other reasons were somewhat common such as 8% who did not think about it, 7.9% who did not know why they drove while impaired, to 4.7% who said they were not driving very far.

Out of all U.S. drivers who drove when they thought they were over the legal limit (16.6%), more than 40% (42.8% five-year average) 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.

Although a slightly smaller percentage of respondents who believed they would not get caught is a decrease in the right direction, this highlights the continued importance of high-visibility enforcement to deter these drivers. The increase among those who believed there were no alternatives is concerning, but noteworthy considering the COVID-19 pandemic. Vanlaar et al. (2020) 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 due to the reticence to use shared methods of transport during the pandemic.

### **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. Analysis of the aggregated data from the past five years revealed the following significant results:

- > Older drivers were 4% less likely to report driving when they thought they were over the legal limit. In 2020, 25.9% of respondents aged 21 to 39 years reported this behavior, whereas among those aged 40 to 59 years approximately 13.5% and 5.9% of those over age 60 reported this.
- > Males were 153% 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 98% 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. Based on the aggregated data from the past five years, the following significant results were found, similar to those in the previous section:

- > Older drivers were 3.3% less likely to report driving impaired often or very often. In 2020, 11.4% of respondents aged 21 to 39 years reported this behavior, whereas among those aged 40 to 59 years approximately 7.6% and 2.9% of those over age 60 reported this.
- > Males were 99% 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 51% 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 59% more likely to report driving impaired often or very often compared to those who had not been injured before.

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

Since the World Health Organization (WHO) declared a world-wide 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). Preliminary data also indicates there has been a decrease in overall crashes, but an increase in crash severity (Hughes et al. 2020).

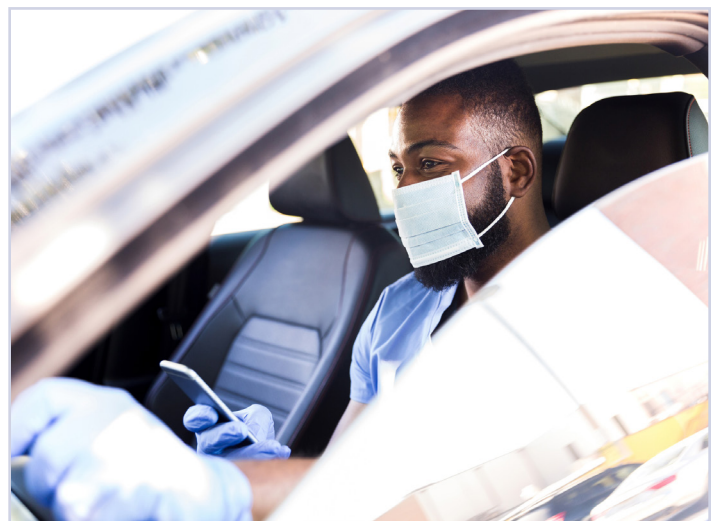
In light of this, the 2020 RSM questionnaire explored the effects of the COVID-19 pandemic on road safety, asking respondents about various self-reported unsafe driving behaviors including alcohol-impaired driving, speeding, distracted driving, drug-impaired driving, and restraint use. Specifically, respondents were asked how likely they were to engage 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 (far less likely) to 5 (far more likely); for scoring purposes, respondents were coded as more likely to engage in these behaviors while driving if they chose a 4 or 5.

**Alcohol and driving.** Respondents were asked how likely they were to have driven a motor vehicle within two hours of using alcohol during COVID-19. There were 7.6% of drivers who admitted they were more likely to engage in this behavior. Almost seven out of ten U.S. drivers (68.7%) indicated there was no change in this behavior during the pandemic. Finally, 23.7% reported being less likely to drive within two hours of using alcohol during the pandemic.

**Excessive speeding.** Respondents were asked how likely they were to excessively exceed the posted speed limit during COVID-19. A total of 7.6% of U.S. drivers admitted they were more likely to excessively exceed the posted speed limit during this time, as compared to before the pandemic. A sizable proportion of

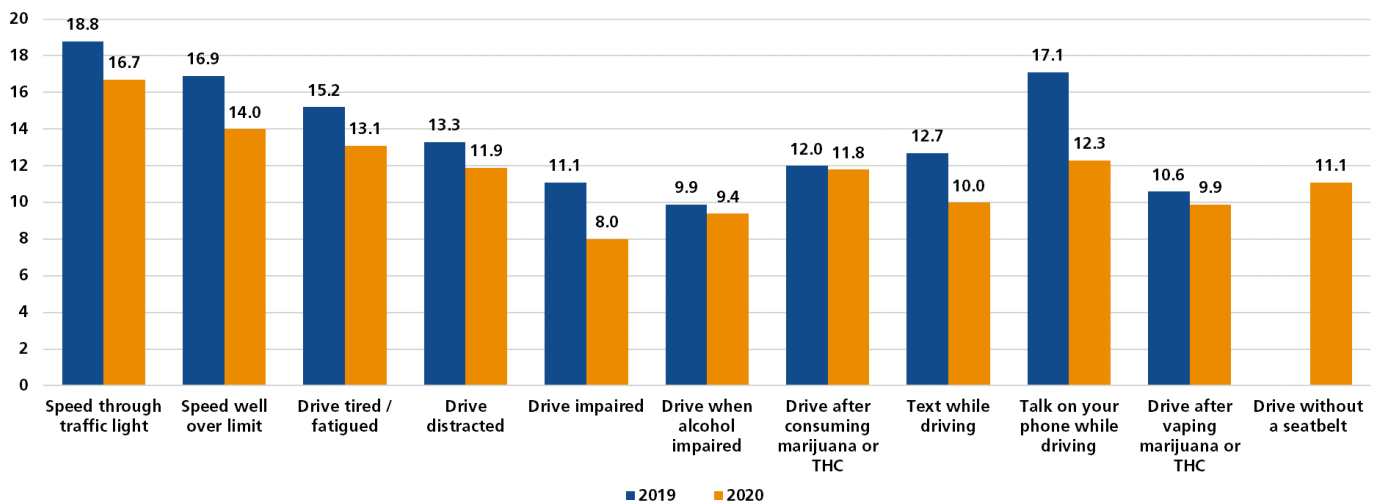
respondents reported there was no change in their speeding behaviors during the pandemic (69.9%). Finally, some respondents reported more cautious behaviors during the COVID-19 pandemic, with 22.8% of respondents reporting they were less likely to speed.

**Drugs and driving.** Respondents were asked how likely they were to have driven a motor vehicle within two hours of using drugs during COVID-19. There were 6.2% of respondents who reported they were more likely to engage in this behavior. Respondents who indicated this behavior was more likely were also asked to indicate the substance most frequently used before driving. Marijuana was the most frequently used drug by 42.6% of respondents. Prescription drugs that may affect driving were most frequently used by 39.8% of respondents. Illegal drugs were most frequently used by 17.6% of respondents. There was a large proportion of U.S. drivers that reported there was no change in the likelihood of having driven within two hours of using drugs during the pandemic (71.6%). Conversely, 22.7% reported they were less likely to drive a vehicle within two hours of using drugs during COVID-19.



**Distracted driving.** Respondents were asked how likely they were to have been distracted while driving during COVID-19. A total of 6.8% of respondents indicated they were more likely to have been distracted. Respondents who indicated this behavior was more likely were asked to specify the most frequent cause of distraction, and 44.7% of U.S. drivers stated competing thoughts unrelated to driving as the primary reason for their distraction. The majority of respondents indicated there was no change in their behavior during the pandemic (71.8%). There were 21.4% who reported they were less likely to be distracted while driving.

**Figure 4: Percent of U.S. drivers who often or very often engage in dangerous driving behaviors, 2019-2020**



**Seatbelt use.** Respondents were asked whether they were more or less likely to wear their seatbelt while driving during the pandemic. A total of 7.1% admitted they were less likely to do so during COVID-19. Approximately seven out of ten (71.9%) U.S. drivers indicated there was no change in this behavior and 20.9% of respondents indicated they were more likely to use their seatbelt during COVID-19.

**COVID-19 summary.** Overall, the majority of drivers did not change their behavior, whereas a smaller proportion of drivers indicated they took fewer risks on the road during the pandemic. It is possible persons taking fewer risks had a heightened awareness about safeguarding their own health. More concerning, a notable proportion of U.S. drivers indicated they were more likely to engage in risky driving behaviors during the pandemic, as compared to before. Specifically, 7.6% of drivers indicated they were more likely to drive within 2 hours of consuming alcohol, and an equal proportion of drivers admitted to excessively speeding during the pandemic. The current US RSM data also shows drivers were more likely to regard alcohol-impaired driving and excessive speeding as serious problems in 2020, as compared to previous years. Altogether, this might suggest U.S. drivers may have observed these issues more frequently on their roads

**During the COVID-19 pandemic 6% of U.S. drivers reported they were more likely to drive distracted, drive within 2 hours of using drugs, and to not wear a seatbelt.**

during the pandemic and were therefore more likely to report them as serious road safety issues this year. Findings regarding the effects of COVID-19 on other risky driving behaviors are also concerning, as more than 6% of U.S. drivers reported they were more likely to drive distracted, drive within 2 hours of using drugs, and to not wear a seatbelt. This corresponds to over 13.6 million licensed drivers reporting each of these risky driving behaviors as more likely during COVID-19.<sup>3</sup>

Consequently, respondents were also asked how often they engaged in certain dangerous driving behaviors, irrespective of the pandemic. Alcohol-impaired driving was reported by 9.4% of drivers, and was less often reported than some risky driving behaviours, such as speeding (speed through a traffic light: 16.7%; speed well over the limit: 14%), fatigued driving (13.1%), driving without a seatbelt (11.1%) and distraction-related behaviors (talk on your phone while driving: 12.3%; drive distracted: 11.9%; text while driving: 10%). Marijuana-impaired driving was reported slightly more often than driving when impaired by alcohol (11.8%), which was a statistically significant difference. In general, all dangerous driving behaviors were reported less often in 2020, compared to 2019. This is in agreement with the results above showing a proportion of drivers took extra care and were less likely to engage in certain risky driving behaviors during COVID-19. However, there remains a small but significant proportion of drivers who indicated they were more likely to take risks during the pandemic, which can help explain the preliminary data demonstrating an increase in speeding, impaired driving, and fewer but more severe crashes as a result of the pandemic (Hughes et al. 2020; Thomas et al. 2020).

<sup>3</sup> NHTSA 2018

## 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 2020 was 75.7% (Figure 5). This represents an 8% decrease from 82.3% in 2019. The COVID-19 pandemic may have affected the use of safe rides in 2020, as Vanlaar et al. (2020) demonstrated a decrease in the use of both public transit and ridesharing during the pandemic. It is possible this decrease in 2020 was due to the reticence to use a shared mode of transportation for fear of getting infected, however continued monitoring of this indicator is necessary to determine if this decrease continues or whether it returns to pre-pandemic levels.

## Conclusions

Data from 2020 revealed a significant decrease in self-reported alcohol-impaired driving and a decline from a concerning peak observed in 2019. While this decrease is promising, it remains the second-highest percentage observed in this indicator. More data are needed to determine whether it continues to decrease or remains as a net increase from previous years, and whether this decrease will be reflected in the number of alcohol-impaired driving fatalities once more fatality data is available.

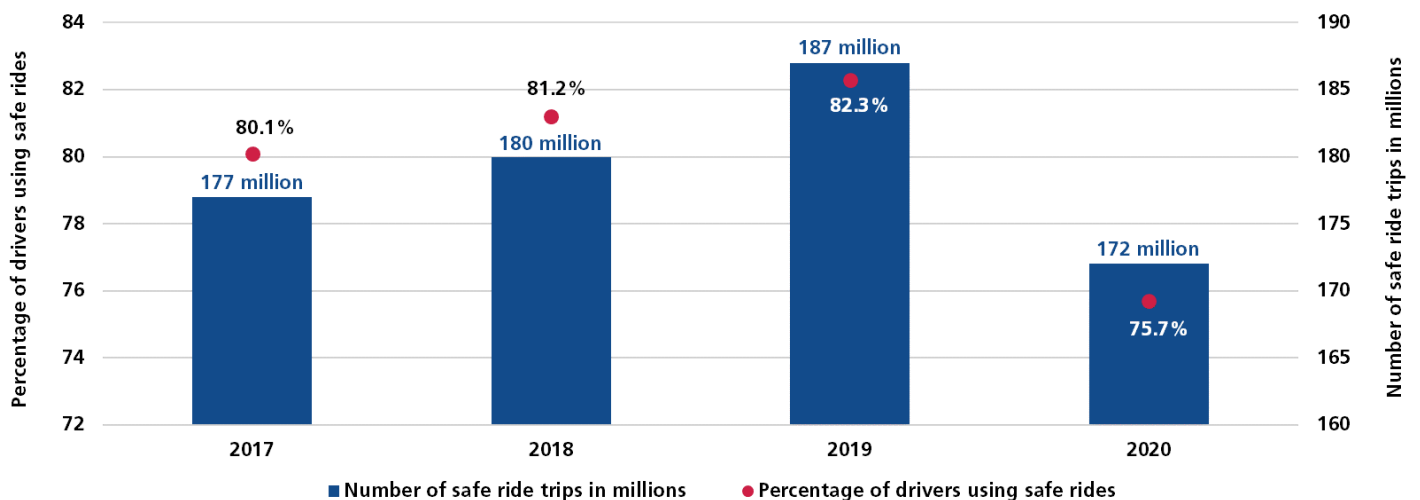
Concern about alcohol-impaired driving remained high and was equal to concern about the COVID-19 pandemic. Preliminary data about the effects of COVID-19 on road safety indicates there has been an

increase in impaired driving and speeding, as well as serious crashes (Hughes et al. 2020; Thomas et al. 2020; Carter et al. 2020). Not surprisingly, respondents were more likely to regard alcohol-impaired driving and speeding as serious road safety problems in 2020, as compared to 2019, possibly because they were already witnessing the effects of the pandemic on the roads.



Despite this high level of concern about alcohol-impaired driving, a large proportion still reported driving when they thought they were over the legal limit, and doing so often. The primary reason for drivers reporting this behavior was they believed they were okay to drive. Positively, this percentage dropped by 19.5% in 2020, perhaps indicating greater awareness of the impairing effects of alcohol. Nevertheless, there remains a significant proportion of drivers who do not recognize the impairing effects of alcohol or do not understand how alcohol affects their driving abilities. Interestingly, the second reason most often reported in 2020 was a lack of alternative options for transportation. This may be due to the effects of COVID-19 on the use of public

Figure 5: Trends in the use of safe rides 2017-2020



transportation and rideshares, as significant decreases were observed in the use of both, likely as a result of the hesitancy to be in close proximity to others (Vanlaar et al. 2020).

The pandemic also had an impact on risky driving behaviors, with a notable proportion of drivers reporting they were more likely to drive within 2 hours of consuming alcohol, as well as excessively speed during COVID-19, compared to before the pandemic. Some drivers also reported they were more likely to drive distracted, drive under the influence of marijuana, or drive without a seatbelt during the pandemic. The large majority of respondents indicated their behavior did not change, and most positively, a smaller proportion reported they were less likely to engage in these risky driving behaviors. Reported dangerous driving behaviors irrespective of the pandemic also supported these findings, as the prevalence of all these behaviors decreased in 2020. This may be due to the proportion of drivers indicating they were being more careful and, thus, less likely to engage in risky driving behaviors during COVID-19.



Reductions in the reliance on alternative transportation options to driving impaired was concerning, and possibly due to the ongoing pandemic. In particular, the number decreased from 187 million drivers in 2019 indicating they had been a designated driver, used a designated driver, used a taxi or public transportation or ridesharing, to 172 million in 2020. In light of this decrease, further monitoring is essential to determine if the decline continues or use returns to pre-pandemic levels.

The full impact of the COVID-19 pandemic on road safety is presently unknown but it has had a concerning impact on drinking and driving according to these survey results. These data can complement crash and

fatality data, and eventually offer a more in-depth understanding of how the pandemic has affected road safety, and how continued restrictions may affect driver behavior. Specifically, these data indicate the need for enforcement strategies to reduce and prevent alcohol-impaired driving that are adapted accordingly, as a small but notable proportion of drivers were more likely to drive within two hours of consuming alcohol. This may be a new group of drivers who were previously not engaging in this behavior, the same group of drivers who became even more prone to driving alcohol-impaired, or a combination of both. Regardless, adapted strategies may be needed.

In conclusion, the proportion of drivers reporting driving while impaired decreased, as did the percentage of drivers often reporting this. These findings are in line with the decrease in alcohol-impaired driving fatalities observed by NHTSA in 2019. However, the current findings demonstrating a decrease in self-reported alcohol-impaired driving are coupled with a small but notable percentage of drivers who said they were more likely to drive under the influence of alcohol and engage in other risky behaviors during COVID-19. Most notably, there was a concerning decrease in the percentage of drivers stating they relied on safe rides as an alternative strategy to avoid alcohol-impaired driving. As an increasing amount of resources are being focused on the health of Americans during the pandemic, targeted education and enforcement efforts to reduce and prevent impaired driving are essential to lessen the burden of the issue, especially in light of the current road safety climate.

**In light of the current road safety culture during the COVID-19 pandemic, targeted education and enforcement efforts to reduce and prevent impaired driving are essential.**



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