

ALCOHOL-IMPAIRED DRIVING IN THE UNITED STATES Results from the 2017 TIRF USA Road Safety Monitor

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This fact sheet summarizes the national results of the 2017 USA Road Safety Monitor (USA RSM) on alcohol-impaired driving. This USA RSM is the third annual public opinion survey conducted by the Traffic Injury Research Foundation USA, Inc. (TIRF USA) under sponsorship from Anheuser-Busch. 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 5,027 U.S. drivers completed the poll in September and October 2017.

This issue provides a general overview of key results obtained from the survey this year and compares them with results from previous years. Regional results are provided as well.

Background

What is the context of alcohol-impaired driving in the U.S.?

According to the National Highway Traffic Safety Administration (NHTSA), alcohol-impaired driving fatalities involving a driver with a blood alcohol concentration (BAC) of 0.08 or greater accounted for 28 percent of total motor vehicle crash fatalities in 2016, corresponding to 10,497 lives lost (see Figure 1). While this corresponds to a 1.7 percent increase compared to 2015 when the number of fatalities was 10,320¹, “[t]his 28 percent of overall fatalities is the lowest percentage since 1982 when NHTSA started reporting alcohol data” (NHTSA October 2017, p. 6). To illustrate, in 2015 it

¹ Note that in last year’s 2016 TIRF USA RSM fact sheet (Casanova Powell et al. 2016), the 2015 number of alcohol-impaired driving fatalities involving a driver with a BAC of 0.08 or greater was reported to be 10,265. This was based on official data available at that time. Since then, an adjustment was made to this number and published in the most recent NHTSA fact sheet (NHTSA October 2017), hence the change from 10,265 to 10,320 in our 2017 TIRF USA RSM fact sheet.

was 29 percent. To provide further context, the total number of fatalities increased by 5.6 percent from 2015 to 2016 while the fatality rate per 100 million Vehicle Miles Traveled (VMT) increased by 2.6 percent from 1.15 in 2015 to 1.18 in 2016 (NHTSA October 2017). In other words, proportionally speaking – compared to all fatalities – the situation in 2016 is better than in 2015. However, in absolute numbers it is not, as there were more alcohol-impaired driving fatalities in 2016 than in 2015. And, this is the second consecutive increase in the number of lives lost since 2014.

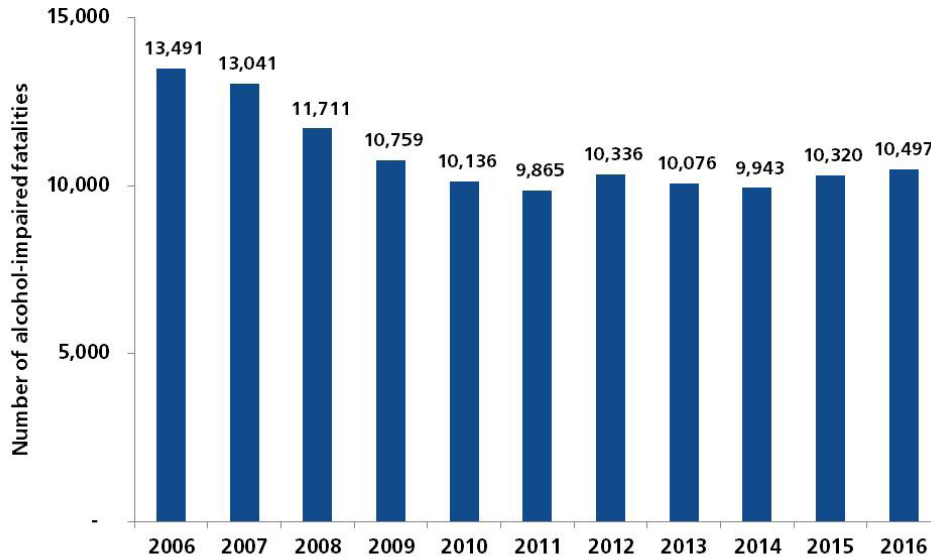
THE TRAFFIC INJURY RESEARCH FOUNDATION USA, Inc.

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.



The knowledge source for safe driving

Figure 1: Alcohol-impaired driving fatalities from 2006 to 2016



Source: NHTSA Traffic Safety Fact Sheets

In this fact sheet national and regional results are described and discussed. Regions were defined in the analyses in accordance with the ten regions identified by NHTSA which are highlighted in Table 1 below.

Table 1: U.S. States and territories according to NHTSA regions

Region	States and Territories
1	Maine, Massachusetts, New Hampshire, Rhode Island and Vermont;
2	Connecticut, New Jersey, New York and Pennsylvania;
3	Delaware, District of Columbia, Kentucky, Maryland, North Carolina, Virginia and West Virginia;
4	Alabama, Florida, Georgia, South Carolina and Tennessee;
5	Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin;
6	Louisiana, Mississippi, New Mexico, Oklahoma and Texas;
7	Arkansas, Iowa, Kansas, Missouri and Nebraska;
8	Colorado, Nevada, North Dakota, South Dakota, Utah and Wyoming;
9	Arizona, California and Hawaii;
10	Alaska, Idaho, Montana, Oregon and Washington.

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

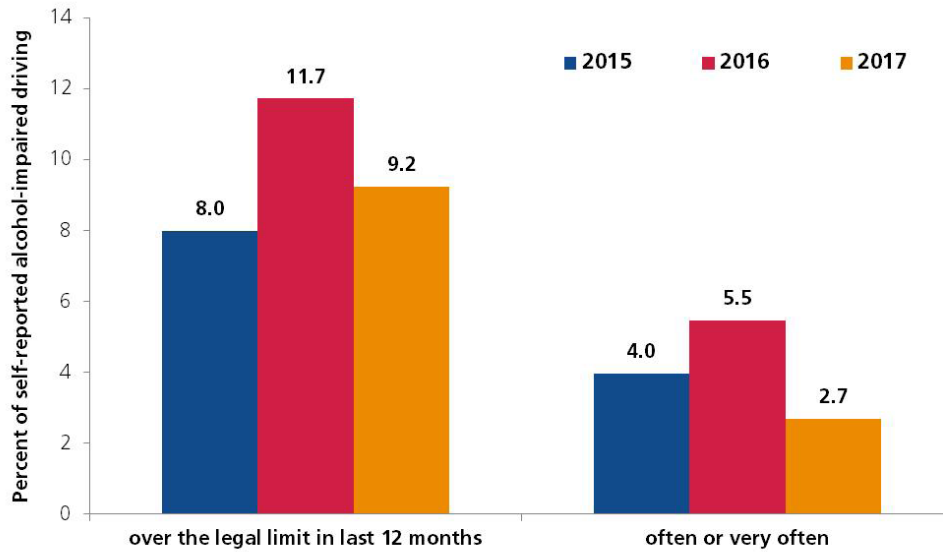
What are the self-reported alcohol-impaired driving behaviors of U.S. drivers? In Figure 2 the

self-reported alcohol-impaired driving behavior by U.S. drivers is shown. 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 show the percent of drivers who reported doing this one or more times. Second, respondents were asked how often they drive impaired on a scale from 1 (never) to 6 (very often). The results on the right-hand side show the percent of those who chose 5 or 6 on this scale.

As can be seen, in 2017 the percent of those reporting to drive when they thought they were over the legal limit decreased to 9.2 (down from 11.7 percent in 2016). Similarly, the percent of those indicating they drive impaired often or very often decreased to 2.7 (down from 5.5 in 2016). These two decreases were statistically significant ($p < 0.05$). The three years' worth of RSM data suggest that the number of U.S. drivers reporting this behavior was the highest in 2016, which

The number of alcohol-impaired driving fatalities increased in 2016. This is consistent with a higher percent of U.S. drivers reporting to drive when they thought they were over the legal limit in 2016.

Figure 2: Percent of U.S. drivers self-reporting alcohol-impaired driving in 2015, 2016 and 2017



is also the year with the highest number of alcohol-impaired driving fatalities.

Figure 3 contains the same information for both questions from 2017, broken down by region. The bars on the right-hand side in Figure 3 represent the national average. Region 8 (Colorado, Nevada, North Dakota, South Dakota, Utah and Wyoming) is the lowest in terms of self-reported alcohol-impaired driving behavior when over the legal limit, whereas region 2 (Connecticut, New Jersey, New York, Pennsylvania) is the highest (significantly different, $p=0.004$). In terms of driving impaired often or very often, it is region 1 (Maine, Massachusetts, New Hampshire, Rhode Island

and Vermont) which scores the lowest and region 9 (Arizona, California and Hawaii) which scores the highest (significantly different, $p<0.0001$).



Figure 3: Percent of U.S. drivers self-reporting alcohol-impaired driving in 2017 by region

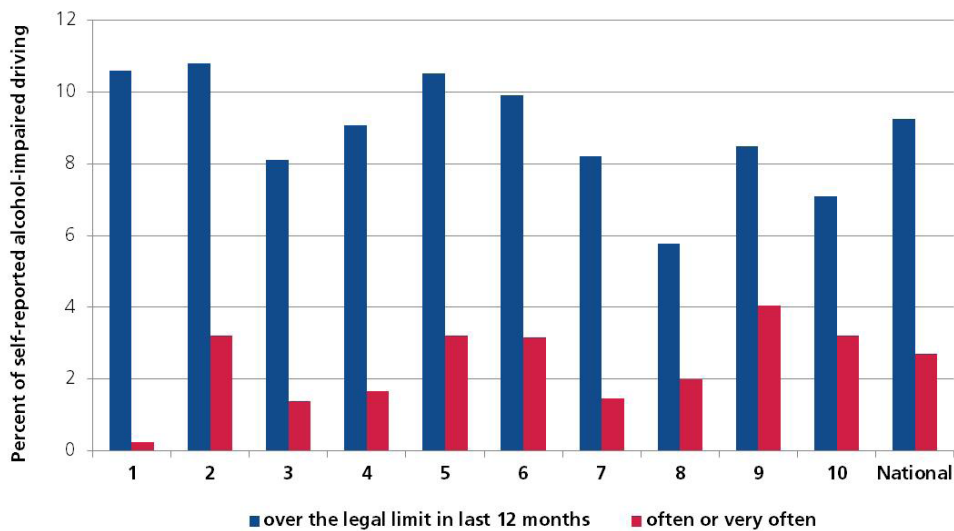
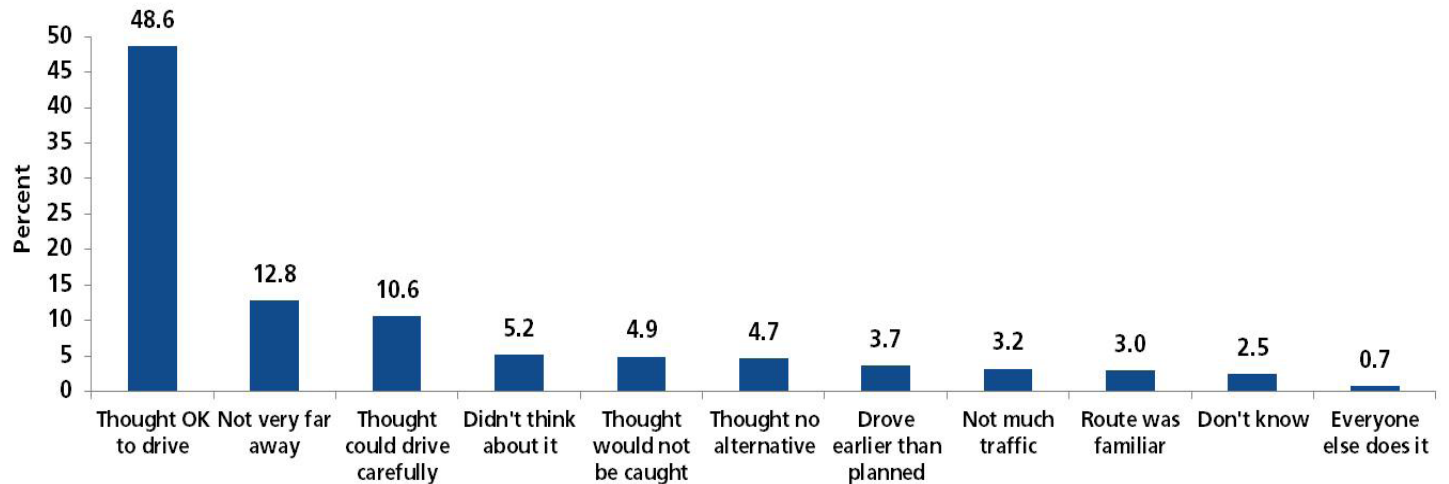


Figure 4: Why respondents drove when they thought they were over the legal limit in 2017



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

In Figure 4, answers from respondents are presented to the question why they drove when they thought they were over the legal limit. Almost half of respondents (48.6%) indicated they thought they were OK to drive. Another 13 percent (12.8%) indicated they did so because their destination was not very far away while approximately 11 percent (10.6%) thought they could drive carefully regardless. A variety of other reasons were somewhat common ranging from 0.7 percent (“everyone else does it”) to 5.2 percent (“didn’t think about it”). It appears that a large majority of U.S. drivers who report driving when they thought they were over the legal limit do not fully appreciate the dangers associated with this behavior and could benefit

from education. These results are similar to the 2016 RSM responses with one exception: the percentage of respondents who thought there was not an alternative to alcohol-impaired driving significantly decreased from 8.7% in 2016 to 4.7% in 2017 (p=0.02). This finding is interesting in light of the increased attention that has been devoted in the recent past to alternatives to alcohol-impaired driving, for example in the media and through educational campaigns.

While there is variation across the regions, as can be seen in Figure 5, the number one reason for driving while over the legal limit is because drivers thought they were OK to drive. This is similar to RSM results from 2015 and 2016, both at the national and the regional level.

Figure 5: Some reasons respondents drove when they thought they were over the legal limit in 2017 by region

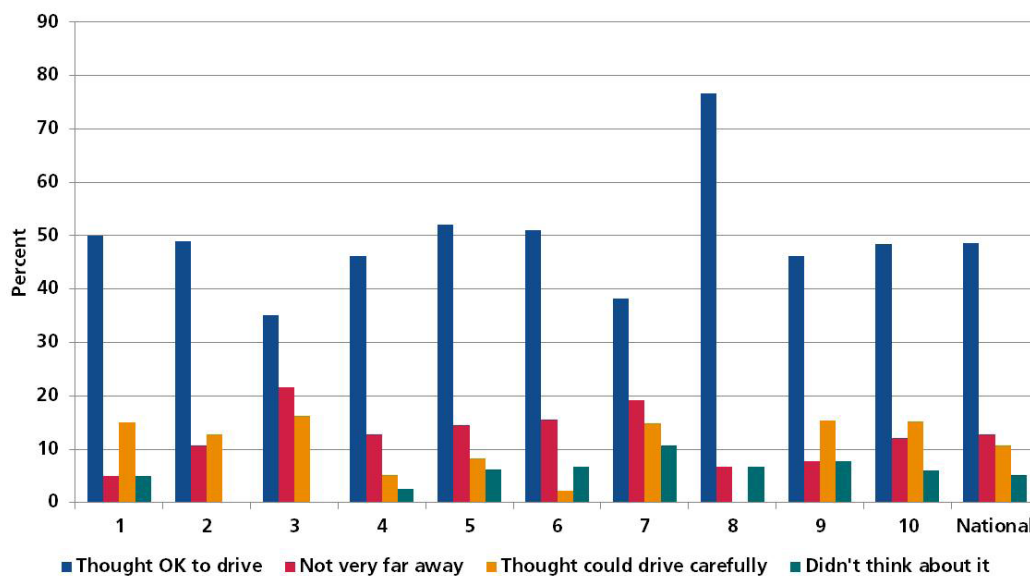
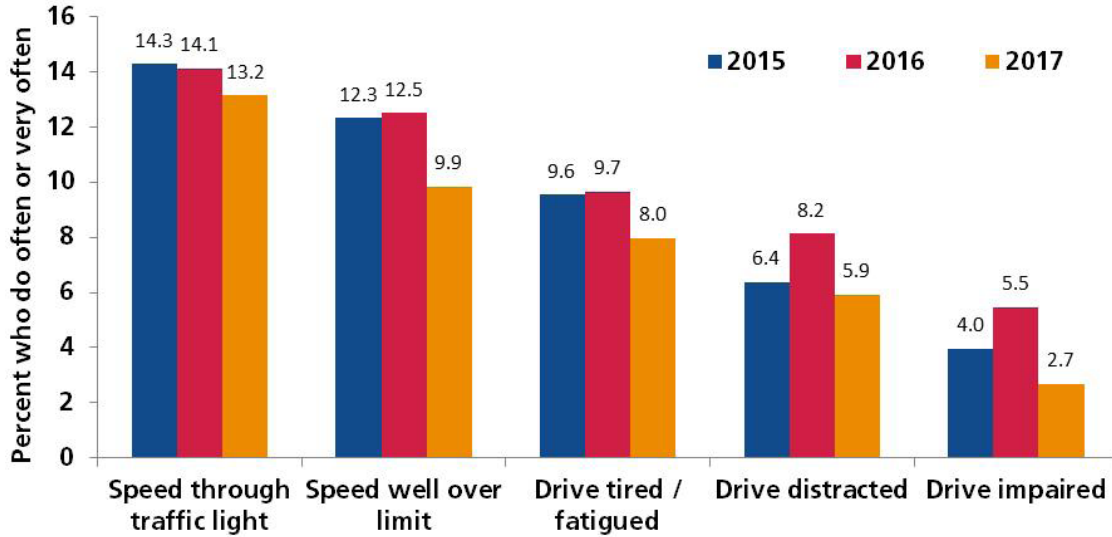


Figure 6: Percent of U.S. drivers who often or very often engage in dangerous driving behaviors in 2015, 2016 and 2017



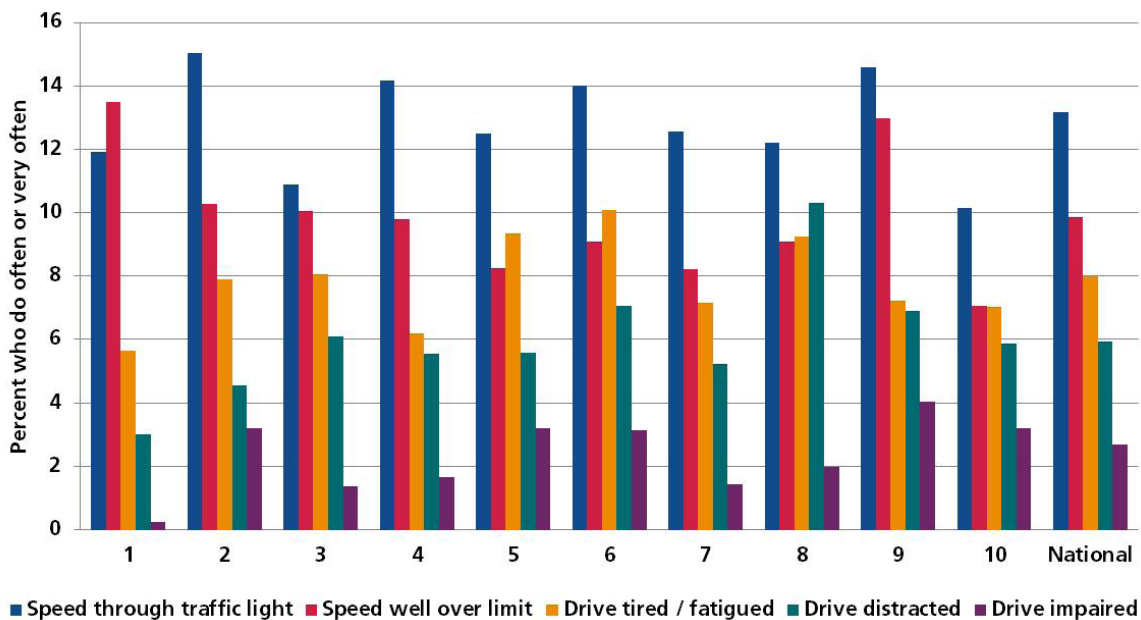
What types of other dangerous driving behaviors are reported by drivers?

When comparing alcohol-impaired driving to other dangerous behaviors over the past three years (see Figure 6), the data show

that drivers consistently engage more often in driving distracted (5.9% in 2017), driving tired or fatigued (8.0% in 2017), speeding well over the speed limit (9.9% in 2017) and speeding through a traffic light (13.2% in 2017). This is also true when the data are broken down by region (see Figure 7).

The data in Figure 6 further show a decrease in each of these self-reported behaviors in 2017 compared to 2016 (significant decreases with $p < 0.05$: speeding well over the speed limit, driving tired or fatigued, distracted and impaired driving). Future data can reveal whether this decrease is the beginning of a downward trend or not.

Figure 7: Percent of drivers who often or very often engage in dangerous driving behaviors in 2017 by region





Profile of people who drive impaired

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 sex, age, the distance they drive, the number of tickets issued, whether they have previously been injured in a collision, and their marital status. The results showed that the following characteristics were significant.

- As people aged, they were less likely to drive when they thought they were over the legal limit. To illustrate, among those aged 21-39, approximately 15% report this behavior, whereas among those aged 40-59, this dropped to approximately 6%, and to 3% for those older than 70.
- Males were more likely than females to report driving while probably over the legal limit (6% among females versus 16% among males).
- Persons who had been injured in the past in a motor vehicle crash were more likely to report driving when they thought they were over the legal limit compared to those who have not been injured before (13% among those injured versus 8% among those not injured).
- With respect to tickets received in the past 12 months, those who received two or more of them were more likely to report driving when they thought they were over the legal limit compared to those who received fewer than two tickets (64% versus 8%).

No differences were found in the profile when comparing this across regions.

What are the characteristics of respondents who reported driving impaired often or very often? The analyses to determine if there were any relationships between people who reported driving impaired often or very often and their demographics did not show many significant results. The only significant characteristic was that those who received two or more traffic tickets (violations) in the last 12 months were more likely to report driving impaired often or very often than those who received fewer than two tickets (42% versus 2%). This result was the same across regions, similar to the findings when looking at driving while drivers thought they were over the legal limit.

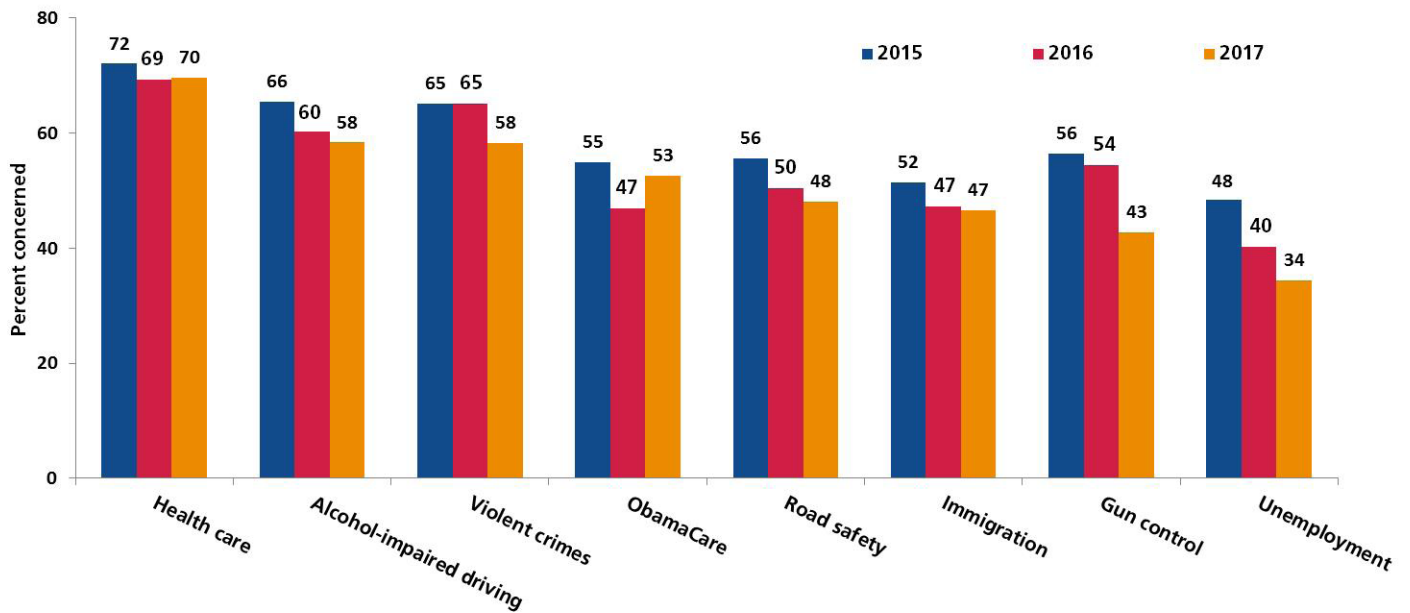
Alcohol-impaired driving relative to other issues

Where does the issue of alcohol-impaired driving sit on the public agenda? Figure 8 shows the percentage of U.S. drivers who were very or extremely concerned about eight societal issues. In 2017, 69.6% of U.S. drivers reported that they were very or extremely concerned about health care followed by alcohol-impaired driving at 58.4% and violent crimes at 58.3%. Respondents reported that they were very or extremely concerned about other issues to a lesser extent, including Obamacare (52.7%), road safety (48.0%), immigration (46.6%), gun control (42.7%), and unemployment (34.4%). Most of these percentages are significantly lower than those in 2016 ($p < 0.05$) except for concerns about health care, immigration ($p > 0.1$) and Obamacare (significantly higher, $p < 0.05$). Although the issue of alcohol-impaired driving is not the top concern, it remains a prevalent concern for most U.S. drivers.

58.4% of U.S. drivers were very concerned about alcohol-impaired driving and 72.6% think that alcohol-impaired driving is a serious problem.

Is alcohol-impaired driving a major road safety problem for U.S. Drivers? Figure 9 shows the percentage of U.S. drivers who think various road safety issues are a serious or very serious problem. The most serious problem identified by drivers was texting and driving at 87.4% followed by alcohol-impaired driving and young drivers impaired by alcohol at 72.6% and 67.5%, respectively. A number of other road safety

Figure 8: Percent of U.S. drivers who are very or extremely concerned about different societal issues in 2015, 2016 and 2017

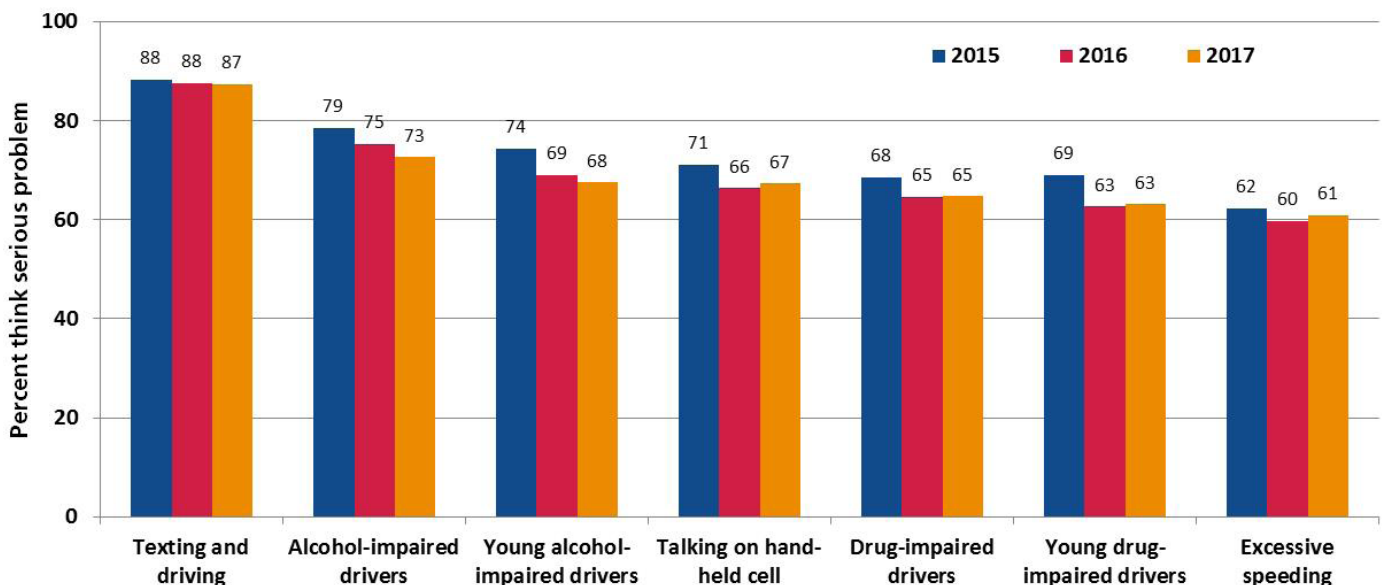


issues also continued to be a concern for the majority of U.S. drivers such as talking on hand-held devices (67.3%), drug-impaired drivers (64.7%), young drug-impaired drivers (63.1%), and excessive speed (60.9%). Except for the case of alcohol-impaired drivers, these percentages are similar to those in 2016 ($p > 0.05$). The percentage of U.S. drivers who think alcohol-impaired driving is a serious or very serious problem,

steadily decreased from 78.6% in 2015 to 75.2% in 2016 and 72.6% in 2017 ($p < 0.05$). This is concerning considering there were two consecutive increases in alcohol-impaired driving fatalities since 2014.



Figure 9: Percent of U.S. drivers who think various road safety issues are a serious or very serious problem in 2015, 2016 and 2017



Conclusions

The three years' worth of RSM data collected to date (2015, 2016 and 2017) show that the number of U.S. drivers reporting to drive while impaired by alcohol was the highest in 2016, which is also the year with the highest number of alcohol-impaired driving fatalities. In fact, since 2014, there have been two consecutive increases in this number from 9,943 in 2014 to 10,320 in 2015, and to 10,497 in 2016. These increases have taken place in a context of decreasing concern about the issue, both measured in relation to other societal topics as well as other road safety topics. This is concerning. On the other hand, perhaps there is also some good news as the 2017 RSM data reveal decreases in the prevalence of alcohol-impaired driving in comparison to 2016. While there is no perfect correlation between self-reported behavior and its consequences, our data do suggest there might be a decrease in alcohol-impaired driving fatalities in 2017. This will have to be monitored and continued attention will have to be devoted to this problem behavior in the form of suitable countermeasures.

Upon closer examination of the profile of those driving while impaired, and their reasons for doing so, it becomes clear it is mostly a lack of appreciation of the dangers associated with this behavior that explains it. To illustrate, the main reason drivers reported driving when they thought they were over the legal limit was because they believed they were OK to drive, with almost half alluding to this reason. This is consistent with data from previous years. On a more positive note, a smaller percentage of drivers in 2017 thought they had no alternative to alcohol-impaired driving in comparison with previous years. This may indicate that drivers are learning about alternatives to alcohol-impaired driving, which has been hailed as a promising countermeasure.

References

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