### **ROAD SAFETY MONITOR**



### **Alcohol-Impaired Driving in the United States**

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This fact sheet summarizes the national results of the 2015 USA Road Safety Monitor (USA RSM) on alcohol-impaired driving. The USA RSM is the first 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 on the alcohol-impaired driving issue by means of an online survey of a random, representative sample of American drivers aged 21 years or older. A total of 5,009 Americans completed the poll in October and November of 2015.

This first issue provides a general overview of key results obtained from the survey. Subsequent fact sheets will be produced in the following months that will explore specific features of alcoholimpaired driving in greater detail.

### Background

### What is the context of alcohol-impaired driving

**in the US?** According to the National Highway Traffic Safety Administration (NHTSA), alcohol-impaired driving fatalities, involving a driver with a Blood Alcohol Concentration (BAC) of .08 or greater accounted for 31% of total motor vehicle crash fatalities in 2014 (2015), which makes this a priority road safety issue for Americans. In recent years, the average number of annual fatalities involving alcohol-impaired driving at this level has declined to approximately 10,000 in comparison to previous years, which recorded averages of 13,000 to 14,000 fatalities annually (Robertson

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et al. 2014). When using a longer lookback period, such drunk-driving fatalities have decreased 53% since 1982. Although this reveals progress in reducing the problem, NHTSA fatality numbers as shown in Figure 1 from 2004 through to 2014 suggest that these declines may have plateaued since 2010, which means that alcohol-impaired driving requires continued attention and action if further improvements are to be realized (NHTSA 2012, 2014, 2015).

## 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.



## FIGURE 1: Alcohol-impaired driving fatalities from 2004 to 2014



What are some of the characteristics of Americans who engage in alcohol-impaired driving? Males

represent a significant portion of impaired drivers generally and are estimated to account for as much as 70% to 80% of this population (Robertson et al. 2014). Although women represent a much smaller portion relative to men, estimates suggest that the proportion of female impaired drivers has been slowly increasing, from an estimated 10% in the 1990s to an estimated 20% in the 2000s (Wanberg et al. 2005; Schwartz and Rookey 2008). Arrest rates for women in the United States have also increased almost 30% since the late 1990s (Lapham et al. 2000; Schwartz & Rookey 2008).

In terms of age, most male impaired drivers are between the ages of 20 and 45 years old and almost half of this group is between 20 and 30 years old (Simpson and Mayhew 1991; Jonah and Wilson 1986; Jones and Lacey 2001; Wanberg et al. 2005). Female impaired drivers differ slightly in that the majority are between the ages of 20 and 40 years old; however, like males, there is increasing prevalence of alcoholimpaired driving among younger females.

Males who have a history of driving violations as well as other criminal offenses account for a significant number of the alcohol-impaired driver population (Simpson et al. 1996; Jones and Lacey 2001; Wieczorek and Nochajski 2005) and there is evidence that suggests these drivers also have a history of other unsafe driving behaviors (Beirness et al. 1997). Not enough research has been conducted on the relationship between criminal offenses and female impaired drivers although some initial research has revealed that a smaller number of female impaired drivers relative to males also have a history of other traffic or criminal offenses (Caldwell-Aden et al. 2009).

How do alternatives to alcohol-impaired driving, such as designated driver programs, impact the issue? Designated driver campaigns are programs that promote the use of people who agree to safely drive home their drinking companions. Some campaigns are supported by drinking establishments who may offer alcohol-free beverages at no cost to designated drivers.

A few of the designated driver programs that have been evaluated have demonstrated some positive effects among people including increased awareness and use of designated drivers. Although designated driver programs alone will not solve the problem, they can be a part of the solution.

## Alcohol-impaired driving behaviors as reported by Americans

What are the self-reported alcohol-impaired driving behaviors of Americans? The survey revealed that 4.0% of drivers admitted to driving impaired often or very often and 8.0% admitted to driving when they thought they were over the legal limit one or more times within the previous 12 months.





### FIGURE 2: Why respondents drove when they thought they were over the legal limit

Respondents were provided a number of different reasons to explain why they drove after drinking when they thought they were probably over the legal limit. As can be seen in Figure 2, the two most frequent reasons given, which represented more than half of all responses, corresponded to drivers who thought they were capable of driving under those circumstances: 44.0% of respondents thought they were okay to drive and 12.0% thought that they could drive very carefully.

What types of other dangerous driving behaviors are reported by drivers? To provide context regarding alcohol-impaired driving, the following figure shows how often Americans reported to engage in other dangerous driving behaviors. As can be seen in Figure 3, the most frequent behavior was to often or very often speed up through a traffic light (14.3%), followed by speed well over the limit (12.3%), drive tired or fatigued (9.6%), drive distracted (6.4%), and drive impaired (4.0%).

## FIGURE 3: Percent of Americans who often or very often engage in dangerous driving behaviors



### 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 odds of males admitting to this behavior were 122.5% greater than for females. In terms of age, the odds of driving while they thought they were over the legal limit decreased by 26.3% for every ten year increase in age. For those drivers who had previously been injured in a collision, the odds were 61.0% greater than for those who had not been injured. Among drivers who had two or more traffic tickets in the last 12 months, the odds were 1,128.7% larger than for those who had only one or no tickets.

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

Among Americans who reported driving impaired often or very often, similar characteristics to those reported above were found. The odds of being a male and admitting to driving impaired often or very often were 340.8% larger than if the driver was female. For every ten year increase in age, the odds decreased by 40.0%. Americans having had two or more traffic tickets were 827.5% more likely to admit to this behavior.

Some of these results are consistent with existing literature (e.g., sex and traffic violations) and therefore reinforces the need to conduct targeted messaging and information to certain demographics of drivers, notably younger males with a history of offending.

51.5% have used a designated driver or alternative transportation; an estimated 103 million drivers.

## Designated drivers and anti-impaired driving campaigns

How do Americans view and make use of designated drivers as an alternative to alcohol**impaired driving?** Among Americans, 98.1% think that having a designated driver is important when planning to go out with friends where there will be drinking (see Figure 4). In contrast, there appears to be a significant difference between what they think they should do and what they actually do. To illustrate, 21.1% said they never use a designated driver when planning to drink with friends. This suggests there may be a gap since nearly everyone agreed that designated drivers were important but a large proportion admitted to rarely or never using this option. Equally concerning was that 5.3% of Americans admitted to riding in a vehicle with an impaired driver in the past 30 days. More research is required to determine the reasons contributing to decisions by many people to choose not to use a designated driver.



### FIGURE 4: Views and use of designated drivers

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Respondents were also asked other questions related to the use of designated drivers. The survey revealed that 69.9% of Americans reported that they had been a designated driver. In terms of using alternative transportation, 45.2% have used a designated driver and 27.8% have used some other form of transportation such as a taxi or bus. In absolute numbers, this corresponds to approximately 140 million drivers aged 21 years or older who have been a designated driver (69.9% of an estimated population of 200 million drivers aged 21 years or older), 90 million who have used a designated driver (45.2% of 200 million), and 56 million who have used some other form of transportation (27.8% of 200 million).

To provide a more general picture, 51.5% of Americans reported either using a designated driver or alternative transportation (an estimated 103 million drivers aged 21 years or older) and 77.9% reported using a designated driver, being a designated driver, or using alternative transportation (an estimated 156 million drivers aged 21 years or older).

### How aware are drivers of national anti-impaired

driving campaigns? To gauge the level of awareness among Americans regarding knowledge and education about alcohol-impaired driving, respondents were asked how often they saw or heard four different national anti-impaired driving campaigns (see Figure 5). "Buzzed Driving is Drunk Driving" was the campaign drivers most frequently reported seeing or hearing often or very often (46.8%), followed by "Drive Sober or Get Pulled Over" (44.8%), "Know When to Say When" (26.7%), and "Make a Plan to Make it Home" (15.5%).



### FIGURE 5: Percent of Americans who have often or very often seen or heard four anti-impaired driving campaigns



Some of these campaigns have been in operation for years yet the majority of American drivers do not report seeing or hearing these campaigns often. This may be due in part to the fact that some campaigns are conducted only at certain times of the year, such as Drive Sober or Get Pulled Over which runs in August through to the Labor Day long weekend. However, the results may also signal that there is a stronger need to, or more consistently, reach out to the public with more information and public education around anti-impaired driving messaging.

## Alcohol-impaired driving relative to other issues

Where does the issue of alcohol-impaired driving sit on the public agenda? Drivers were asked to rate how concerned they were about eight societal issues. Among Americans, 72.1% reported that they were very or extremely concerned about health care followed by alcohol-impaired driving at 65.5% and violent crime at 65.1% (see Figure 6). Respondents reported that they were very or extremely concerned about other issues to a lesser extent, including gun control (56.5%), road safety (55.6%), ObamaCare (55.0%), immigration (51.5%), and unemployment (48.4%). Although the issue of alcohol-impaired driving is not the top concern, it is a prevalent concern for the majority of Americans.

### FIGURE 6: Percent of Americans who are very or extremely concerned about different societal issues



Is alcohol-impaired driving a major road safety problem for Americans? Drivers were also asked to report the extent to which they viewed different road safety issues to be serious problems. The most serious problem identified by drivers was texting and driving at 88.3% (see Figure 7). Given the rise and prevalence of cell phone technology, it is perhaps not surprising



to see this problem was deemed as the most serious issue. Nonetheless, alcohol-impaired driving and young drivers impaired by alcohol were considered the next two most serious issues at 78.6% and 74.4%, respectively, demonstrating that this topic is still considered an important problem by many drivers. A number of other road safety issues also continued to be a concern for the majority of Americans such as talking on hand-held devices (71.1%), young drug-impaired drivers (69.1%), drug-impaired drivers in general (68.4%), and excessive speed (62.3%).

# FIGURE 7: Percent of Americans who think various road safety issues are a serious or very serious problem



**About the poll.** These results are based on 5,009 drivers who responded to the 2015 TIRF USA RSM in October and November of 2015, an annual public opinion survey developed and conducted by TIRF USA. Results can be considered accurate within plus or minus 1.4%, 19 times out of 20. The data were stratified and weighted by sex, age, and region. The majority of the questions were answered using a scale from one to six where six indicated high agreement, concern, or support and one indicated low agreement, concern, or support, as well as numerous yes/no questions. All of the respondents completed the survey online.

### References

Beirness, D.J., Mayhew, D.R., & Simpson, H.M. (1997). DWI Repeat Offenders: A Review and Synthesis of the Literature. Ottawa: Traffic Injury Research Foundation.

Blomberg, R., Peck, R., Moskowitz, H., Burns, M., & Fiorentino, D. (2009). The Long Beach/Fort Lauderdale relative risk study. *Journal of Safety Research*, 40(4), 285-292.

Caldwell-Aden, L., Kaczowka, M., & Balis, N. (2009). Preventing First-Time DWI Offenses. First–Time DWI Offenders in California, New York and Florida: An Analysis of Past Criminality and Associated Criminal Justice Interventions. DOT HS 811 074. Washington, D.C.: U.S. Department of Transportation.

Jonah, B.A., & Wilson, R.J. (1986). Impaired drivers who have never been caught: Are they different from convicted impaired drivers? Society of Automotive Engineers Technical Paper Series, 86-195.

Jones, R., & Lacey, J. (2001). Alcohol and Highway Safety 2001: A Review of the State of Knowledge. DOT HS 809 383. Washington, D.C.: U.S. Department of Transportation.

Lapham, S.C., Skipper, B.J., Hunt, W.C., & Chang, I. (2000). Do risk factors for re-arrest differ for female and male drunkdriving offenders? Alcoholism: Clinical and Experimental Research, 24(11), 1647-1655.

National Highway Traffic Safety Administration (NHTSA) (2012). Traffic Safety Facts. 2011 Data: Alcohol-impaired Driving. DOT HS 811 700. Washington, D.C.: U.S. Department of Transportation.

National Highway Traffic Safety Administration (NHTSA) (2014). Traffic Safety Facts. 2012 Data. DOT HS 812 016. Washington, D.C.: U.S. Department of Transportation.



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National Highway Traffic Safety Administration (NHTSA) (2015). 2014 Crash Data Key Findings (Traffic Safety Facts Crash: Stats. Report No. DOT HS 812 219). Washington, DC: U.S. Department of Transportation.

Robertson, R.D., Wood, K.M., and Holmes, E.A. (2014). Impaired Driving Risk Assessment:: A Primer for Practitioners. Ottawa, ON: Traffic Injury Research Foundation.

Simpson, H.M., Mayhew, D., & Beirness, D. (1996). Dealing with the Hard Core Drinking Driver. Ottawa: Traffic Injury Research Foundation.

Simpson, H.M., & Mayhew D.R. (1991). The Hard Core Drinking Driver. Ottawa: Traffic Injury Research Foundation.

Syrcle, J., & White, W. (2006). The Illinois DUI Risk Reduction Project: ASUDS-RI Pilot Phase I (Statistical Summary). Springfield, IL: Center for Legal Studies, University of Illinois-Springfield.

Schwartz, J., & Rookey, B.D. (2008). The narrowing gender gap in arrests: Assessing competing explanations using self-report, traffic fatality, and official data on drunk driving, 1980-2004. Criminology, 46(3), 637-671.

Wanberg, K., Milkman, H., & Timken, D. (2005). Driving With Care: Education and Treatment of the Impaired Driving Offender. Strategies for Responsible Living and Change. "New York: Sage Publishing.



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