INTERNATIONAL STRATEGIES

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The Sober Smart Driving education program is produced by the **Traffic Injury Research Foundation** with funding from **Beer Canada**. It shares knowledge and science to answer common questions about alcohol, its effects on driving skills, and impaired driving.

United States

Introduction

NHTSA has introduced the national campaign Drive Sober or Get Pulled Over. During holiday crackdowns, thousands of law enforcement officers conducted sobriety checkpoints and saturation patrols. The campaign focuses on educating individuals on alternative means of transportation, choosing a designated driver, and reporting impaired drivers to law enforcement. An impaired driving task force often involves multiple agencies that are impacted by drunk driving. Typical representatives include law enforcement, prosecutors and defence counsel, judges, treatment and probation agencies, licensing agencies as well as policymakers and/or politicians.

National Highway Traffic Safety Administration (NHTSA) crackdown

As part of the U.S. Department of Transportation's battle against impaired drivers, NHTSA launched the longest ever crackdown against impaired driving in 2002. Joined by the White House Office of National Drug Control Policy (ONDCP), Mothers Against Drunk Driving (MADD), the American Automobile Association (AAA), and state law enforcement agencies, the national campaign Drive Sober or Get Pulled Over was introduced. During holiday crackdowns, thousands of law enforcement officers conducted sobriety checkpoints and saturation patrols in all 50 states, the District of Columbia, and Puerto Rico.

The Drive Sober or Get Pulled Over campaign focused on educating individuals on alternative means of transportation, choosing a designated driver, and reporting impaired drivers to law enforcement.

In 2006, NHTSA introduced the enforcement program Drunk Driving: Over the Limit, Under Arrest. It was heavily promoted through the media during the Labour Day holiday period. The campaign was based on previous research showing that well-publicized, high-visibility enforcement can reduce alcohol-related crashes, fatalities, and injuries. The program included three main components: 1) DWI enforcement; 2) public awareness efforts; and 3) evaluation.

The program's message reiterated that police would arrest drivers if they were caught driving impaired. Eighteen nights of enforcement focused on apprehending intoxicated drivers; 48 states reported over 40,000 DWI arrests. National random sample telephone surveys conducted prior to and just after the campaign found that the media effort increased awareness of the enforcement crackdown.

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Case studies demonstrated that states can achieve a significant reduction in alcohol-related crashes when they engage in sustained high-visibility enforcement (Wells et al. 1991; Lacey et al. 1999; Zwicker et al. 2007; Johnson 2016; Yao et al. 2016). Several states accomplished sizable decreases in alcohol-related deaths due to their programs. For example, the number of alcohol-related fatalities on West Virginia's roadways declined consistently during the three years that they had an enforcement program in place. The numbers dropped from 179 in 2002, to 148 in 2003, to 136 in 2004, and to 118 in 2005 (Syner et al. 2008). The percentage of traffic deaths that were alcohol-related also declined over time, from 41% in 2002 to 32% in 2005.

Impaired driving task force

An impaired driving task force often involves multiple agencies that are impacted by drunk driving. Typical representatives include law enforcement, prosecutors and defence counsel, judges, treatment and probation agencies, licensing agencies as well as policymakers and/or politicians. These agencies identify priority issues and work cooperatively to evaluate existing practices and develop and implement new policies and programs to effectively resolve impaired driving problems. This type of strategy enables agencies to improve communication and concentrate their efforts in a more efficient manner. Task forces typically develop recommendations for their jurisdiction related to enhancement of government services, intervention strategies, and education programs to prevent impaired driving. While the task force approach has been widely used in the United States (e.g., Colorado, Minnesota, Tennessee, and Virginia) it is less common in Canada.

For more information on the work of an impaired driving task force, please review the following reports from the Working Group on DWI System Improvements and NHTSA:

DWI Working Group Report – 10 Steps to a Strategic Review of the DWI System: A Guidebook for Policymakers: View PDF

A NHTSA Guide for Statewide Impaired-Driving Task Forces: View PDF

Saturation patrols

Saturation patrols are designed to identify impaired drivers and unlike sobriety checkpoints, they are legal in all 50 states. Patrols consist of spot checks and routine police patrols, where officers focus their patrol on impaired driving in a given area for a certain period of time (Scopatz 2008). During the patrol, officers primarily concentrate on alcohol and related driving violations. The implementation of saturation patrols is an economical means of enforcing impaired driving laws as fewer resources are required for this strategy than sobriety checkpoints. The saturation of an area also makes it more difficult for impaired drivers to avoid detection, thereby increasing deterrent effects.

Saturation patrols are viewed as the most effective method of apprehending offenders (Scopatz 2008). This effectiveness is created as a result of the ease of increasing patrols in areas where data has indicated that the most serious impaired driving problems have occurred. Within the identified area officers are able to identify potentially impaired drivers by observing driving performance and stopping those who exhibit signs of impairment. For this reason, the patrols have been shown to be an efficient and effective means of apprehending repeat offenders in particular (Scopatz 2008).

Sobriety checkpoints

Also known as a roadblock, a sobriety checkpoint involves police officers stopping all passing vehicles or a systematic selection of vehicles (e.g., every third vehicle) to evaluate the driver's level of impairment. Officers approach the vehicle and identify themselves to the driver, explain the purpose of the stop, and ask the driver a series of questions to gauge whether or not they have consumed alcohol. Those drivers who do not indicate that they have been drinking and do not show physical signs of impairment are able to continue on their way. Drivers that show signs of impairment are detained in a safe holding area where they are asked additional questions and may be asked to perform standardized field sobriety tests and/or a breath test. Based on the results of these tests, drivers will either be released or arrested for DWI.

Currently, 38 states as well as the District of Columbia, the Northern Mariana Islands, and the Virgin Islands allow the use of sobriety checkpoints. Eleven states prohibit their use because the state either has no authority to conduct them (i.e., Alaska) or they are considered illegal under state law (i.e., Idaho), or they violate the state's constitution (i.e., Michigan) (NHTSA 2002). In jurisdictions where sobriety checkpoints are not permitted, law enforcement can rely on other strategies such as saturation patrols. It should be noted that these checkpoints are not permitted in Canada but they are comparable to the RIDE program.

Research shows that sobriety checkpoints are one of the most effective approaches to deterring impaired driving among members of the general public (Lacey et al. 1999; Shults et al. 2001; Stuster and Blowers 1995). Checkpoints are most effective when they are highly publicized, highly visible, and frequently used (Fell et al. 2004). Study results reveal that:

- The use of sobriety checkpoints can reduce the number of alcohol-related crashes by up to 20%2 (Elder et al. 2002; Shults et al. 2001).
- Stuster and Blowers (1995) directly compared sobriety checkpoints with dedicated DWI patrols and found that alcohol-related crashes declined 28% in checkpoint communities compared to 17% in communities that used highly publicized, roving patrols.
- Checkpoints result in citations or arrests of drivers for impaired driving and other violations. A demonstration in Tennessee showed a 20% reduction in fatal crashes involving drivers with breath alcohol concentrations of 0.10% and above. A total of 882 checkpoints resulted in 773 DWI arrests, 347 seat belt citations, 465 child restraint citations, and 7,351 other traffic citations (Lacey et al. 1999).
- Checkpoints can also be effective in detecting offenders who continue to drive with a suspended or revoked license (Ross and Gonzales 1988).

> Low-manpower checkpoints3 can expand DWI enforcement in jurisdictions where additional funds are not available or where checkpoints are too costly or difficult to implement (Lacey et al. 2006).

Driving while impaired (DWI) courts

The impaired driving or DWI system was designed to identify and apprehend drunk drivers, remove them from the road, impose sanctions, and apply appropriate interventions designed to facilitate long-term behaviour change. A critical component in this system is the close monitoring/supervision of offenders to ensure compliance and ultimately reduce recidivism (Robertson et al. 2009).

The goal of DWI courts is to reduce drunk driving among hard core and repeat offenders by creating accountability among for behaviour (National Center for DWI Courts (NCDC) 2010). This is accomplished using a combination of close monitoring with appropriate sanctions and reinforcements. This approach is based on addressing and treating the underlying drinking problem in an effort to reduce impaired driving behaviour.

The courts rely on a team strategy. The team is led by the judge and other members of the team include prosecutors and defence counsel, probation officers, treatment professionals, and community services. The team works to develop a program based on offender risks and needs, accountability measures, and supervision (Robertson et al. 2008). As part of the court program, offenders are required to abstain from alcohol, and often are monitored using either an alcohol interlock or a transdermal alcohol monitoring device. The courts emphasize offender accountability and utilize both graduated sanctions and reinforcements. Swift responses to violations and non-compliance keep offenders accountable and positive reinforcement serves to encourage good behaviour (Robertson et al. 2008).

As of December 2017, NCDC reports that there are 192 DWI courts operating within the United States. Additionally, there are 354 hybrid DWI/drug courts in operation.

The National Highway Traffic Safety Administration promotes DWI courts as an important strategy to reduce impaired driving. Early studies of DWI courts have shown successful results; individual courts have evaluated their program to find a significant reduction in recidivism (NCDC 2010). DWI court participants are up to nineteen times less likely to get a new DWI offence than DWI offenders sentenced by a traditional court (NCDC 2010). In one of the first DWI courts, started in 1997, the recidivism rate was reduced by 45%. DWI courts are most useful for those who are unable to make wise choices because of their addiction.

Technologies

As mentioned in the first section, alcohol interlocks have become a popular tool to reduce impaired driving in light of the effectiveness of this device in reducing impaired driving recidivism. Currently, all states except for South Dakota and Alabama have enabling legislation for the implementation of an interlock device for impaired driving offenders. Previously noted, SCRAM is the most commonly known and utilized transdermal alcohol monitoring technology in the United States as numerous jurisdictions (more than 40 states) have begun to implement it as a sanction. For further information on alcohol ignition interlocks please visit the Alcohol Interlock Curriculum for Practitioners at: **http://aic.tirf.ca**.

Europe

Introduction

Located in Brussels, the ETSC is an independent, not-for-profit organization that is committed to reducing the number and severity of transport crash injuries in Europe. It provides advice on transport safety matters to the European Commission, the European Parliament, and member states. ETSC maintains its independence through funding from a variety of sources including membership subscriptions, the European Commission, and public and private sector support for various activities.

European Transport Safety Council (ETSC)

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A source of many projects, ETSC's initiatives to reduce impaired driving include:

Sober Mobility Access Road Transport (SMART). The SMART project aims to contribute to the reduction of alcohol-related road deaths and injuries through the identification and promotion of best practice in both policy and advocacy. The project will cover three main topics related to alcohol and drink driving:

- rehabilitation programmes for recidivists and first-time high-level drink driving offenders;
- alcohol at the work place; and,
- best practices in addressing drink driving.

Several events at national and European level will be organised in order to discuss the phenomenon of alcohol behind the wheel. SMART aims to reach all relevant stakeholders to raise awareness on the importance of sober driving.

European Police Traffic Network (TISPOL)

The TISPOL organization was established by the traffic police forces in Europe in an effort to improve road safety and law enforcement throughout the continent. The primary goal of the organization is to reduce the number of deaths and serious injuries on Europe's roadways (TISPOL 2019). In an effort to accomplish this goal, TISPOL encourages education and training to develop effective and targeted programs. The organization also oversees and coordinates Pan-European traffic safety and enforcement campaigns and initiatives.

TISPOL encourages education and training to develop effective and targeted programs.

The Summer Drink Driving Program organized by TISPOL runs for one week in June each year and involves police officers across Europe. The campaign encourages ongoing surveillance of impaired drivers. TISPOL organized a similar campaign in 2017 in which 700,000 drivers were breath-tested in 21 European countries. For more information, please visit: www.tispol.org

Denmark

The Safe and Sober campaign is a Danish initiative designed to prevent drink driving. The Danish Minister of Justice outlined the government's plans to tighten drink driving legislation, including a greater use of alcohol interlocks in programs for drink driving offenders. The campaign also included measures relating to education (effective information campaigns), enforcement (random breath testing) and engineering advancements (alcohol interlocks). It was also recommended that imprisonment be among the primary forms of punishment for any offender driving above the legal BAC limit.

United Kingdom

The Think! campaign in the United Kingdom is designed to remind all drivers of the personal consequences that can result from drink driving and how a drink driving conviction can ruin one's life (THINK! Road Safety 2010). This U.K. campaign focuses on the 'moment of doubt', when drivers are considering whether or not to have another drink. The campaign launched a 30 second drink drive TV ad warning that it takes less alcohol than one might think to impair their driving (THINK! Road Safety 2010).

Think! has two major drink drive campaigns every year, one in the summer and one at Christmas. The two campaigns target those drivers who consume one to three drinks with a focus on young men age 17-29. They also aim to:

- increase awareness of the consequences of impaired driving convictions such as losing your licence or vehicle impoundment for at least 12 month;
- encourage the belief that consuming one or two drinks before driving is too many and not worth the risk; and,
- reinforce and build the social stigma around drinking and driving.

Australia & New Zealand

Introduction

Australia has a comprehensive drink-driving regime that has had a significant impact on the levels of drink-driving across the country. Depending on the severity of the impaired driving offence and prior offence history, reinstating a licence after an impaired driving suspension can include remedial education, assessment for alcohol problems, and treatment.

Remedial programs

Victoria, Australia has a comprehensive drink-driving regime that has had a significant impact on the levels of drink-driving in the State. It consists of licence penalties and rehabilitation courses that are supported by ongoing efforts in public education (Arrive Alive Victoria 2017).

Most drivers must stay under a BAC of 0.05%. However, a zero-BAC limit applies to impaired driving offenders who are required to apply for a licence restoration for the first three years when they get their licence back (Arrive Alive Victoria 2017).

Depending on the severity of the offence and prior offence history, reinstating a licence after an impaired driving suspension can require the following:

- completion of a remedial education course (about 9,000 enrol each year);
- assessment for alcohol problems and referral to treatment if needed (approximately 3,600 people are required to undertake assessments); and,
- applying to VicRoads for a new licence.

An example of a remedial program is the one offered by the Victorian Association of Drink and Drug Driver Services (VADDS). This is a networking and consultative body that supports members involved in the drink-driving community on all issues relating to drink-driver services (VADDS 2010). They provide training and education materials to agencies involved with the treatment of impaired drivers. VAADS also designs educational materials to enhance drink-driver education programs and offers training to agencies and individuals to expand and better their rehabilitation services.

Demerit point offences

In terms of penalizing an impaired driving offender, the State of Victoria (AU), has incorporated a demerit points penalty for traffic violations. Impaired driving offenders who have been convicted of driving with a BAC between 0.05%-0.07% will automatically lose 10 demerit points (VicRoads 2013). Police can also impose a fine along with the removal of demerit points, as well as suspending the offender's licence prior to, or after demerit points have been revoked.

Alcohol interlock programs

The Australian government endorsed the introduction of interlock programs in their National Road Safety Action Plan for 2015/2017 (Arrive Alive Victoria 2002). The following Australian states currently have alcohol interlock programs in place for impaired driving offenders:

- Australian Capital Territory;
- Northern Territory;
- New South Wales;
- Western Australia;
- Queensland;
- Tasmania;
- South Australia; and, implemented.

Information about interlock programs in Australia can be found online at the Austroads website

Arrive Alive Campaign (New Zealand)

During Labour Day, when families and visitors are travelling, New Zealand law enforcement urges all drivers to drive safely and "Arrive Alive". Speed patrols, alcohol consumption, seat belt use, car seat restraints as well as careless driving and following too closely are the main focus of attention.

Throughout evening hours, alcohol and drugged driving offenders are a greater focus for police staff. During the day and night police also target speeding drivers, those who do not comply with seatbelt laws, drivers who run red lights and/or stop signs, those who follow too closely, and drivers exhibiting careless behaviour.

Brewers Association of Australia and New Zealand (BAAN)

Since 1993, Australian brewers have supported classroom education on drinking and driving by providing teaching materials throughout the territories and states. The classroom kits titled Rethinking Drinking: You're in Control include lessons, student workbooks, and roleplaying on DVD (BAAN 2007). Australian brewers also support independent health research and advisory programs concerning impaired driving. For more information about BAAN, please visit: **https://www.brewers.org.au/**

Impaired Driving in North America

How many people die in motor vehicle crashes involving a drinking driver each year in Canada?

The number of motor vehicle deaths resulting from crashes involving a drinking in Canada steadily declined since the 1980s to early 2000s. More recently progress has diminished and the number of fatalities has risen.

At the time of publication, coroner data from British Columbia were not yet available for all of the years included in this analysis. Thus, reported fatality data for Canada excludes British Columbia. The number of motor vehicle deaths involving a drinking driver due to road crashes decreased from 706 in 2007 to 424 in 2014. However, between 2014 and 2016 the total number of deaths involving a drinking driver rose to 476 in 2016.

a) What is the percentage of motor vehicle deaths involving a drinking driver on Canadian roadways?

Another way to understand the drinking driving problem is to look at the percentage of total deaths on the nation's roadways that occurred due to the involvement of a drinking driver. The percentage of drinking driver-related deaths in Canada generally rose from 32.0% in 2007 to 34.0% in 2010. It then decreased to 27.1% in 2015 before increasing to 29.3% in 2016.

The following table presents the number of motor vehicle deaths involving a drinking driver and the percentage of all road crash fatalities involving a drinking driver:

Table 1: Canada

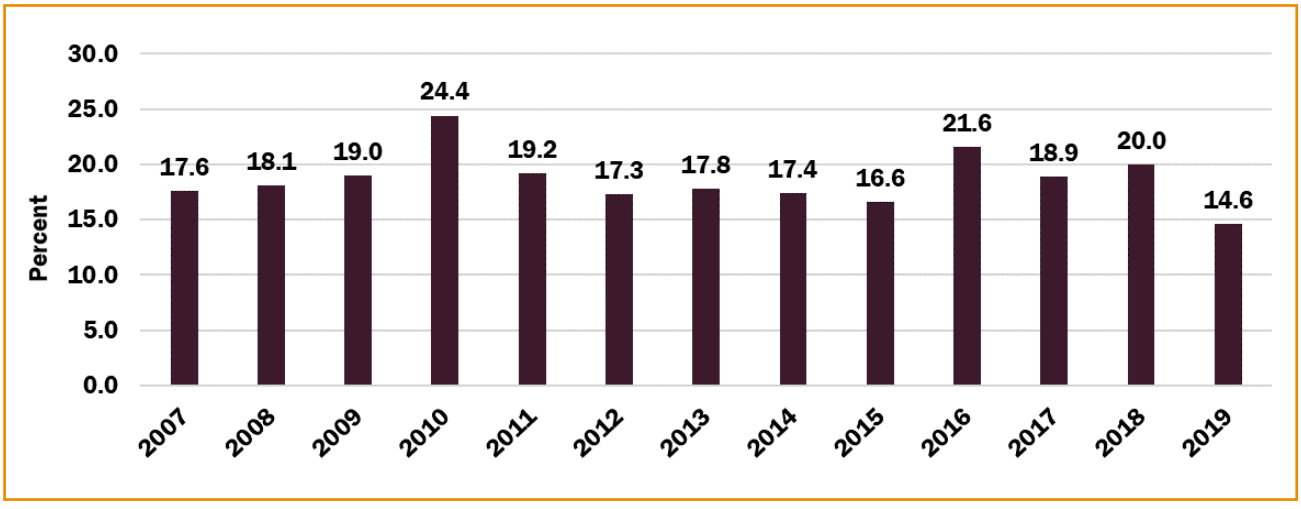
Year	Total number of deaths*	Number of alcohol-related deaths**	% of total alcohol-related deaths***
2007	2,205	706	32.0
2008	1,955	660	33.8
2009	1,790	587	32.8
2010	1,804	613	34.0
2011	1,771	550	31.1
2012	1,856	562	30.3
2013	1,690	477	28.2
2014	1,559	424	27.2
2015	1,633	442	27.1
2016	1,622	476	29.3

* Excluding British Columbia.
** Note: These numbers are estimates based on the percent of deaths for which information was available to determine alcohol use. Only deaths occurring on public roadways using principal vehicle types were included. The number of deaths include those in which the victim died within 30 days of the crash.
*** (Brown, Vanlaar, and Robertson 2020)

b) How frequently do Canadians drink and drive?

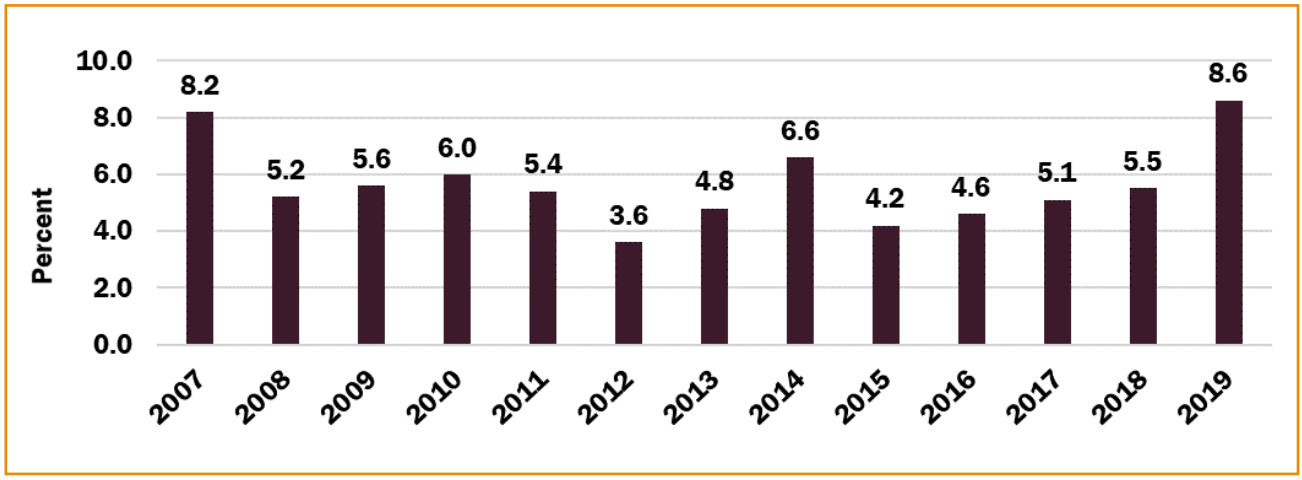
When asked about driving after consuming any amount of alcohol in the past 30 days, an estimated 14.6% of Canadians admitted to driving after drinking in 2019. This represents a decrease from 2010 when 24.4% of Canadians admitted to drinking and driving.

Figure 1: Percentage of drivers who drove after drinking any amount of alcohol



When asked about driving when they thought they were over the legal limit in the last 12 months, 8.6% of Canadians admitted to doing this in 2019. From 2007 to 2015 there was a general decrease in the percentage of drivers who admitted to this behaviour. However, from 2015 to 2017 the percentage increased steadily from 4.2% in 2015 to 8.6% in 2019. Continued monitoring is necessary.

Figure 2: Percentage that drove when they thought they were over the legal limit*



* (TIRF 2008; TIRF 2009; TIRF 2010; TIRF 2011; TIRF 2012; TIRF 2013; TIRF 2014; TIRF 2015; TIRF 2016; TIRF 2017; TIRF 2018; TIRF 2019)

How does the problem of motor vehicle deaths involving a drinking driver in Canada compare to the United States?

Similar to the reduction in the number of motor vehicle fatalities involving a drinking driver in Canada, the United States has seen comparable trends in recent years. The number of persons killed in crashes involving a drinking driver (i.e., the driver's blood alcohol concentration (BAC) was equal to or greater than .01) in the U.S. has steadily decreased. To illustrate, the number of fatalities in crashes involving a drinking driver decreased from 15,534 in 2007 to 12,514 in 2016; the number of fatalities involving an alcohol-impaired driver with a BAC greater than 0.8 decreased from 13,491 in 2007 to 10,497 in 2016.

In Canada and the United States, deaths involving at least one drinking driver account for approximately one-third of the total deaths on roadways.

With regard to the total number of motor vehicle deaths, the percentage of deaths involving a drinking driver has remained stable with slight increases and decreases. The percentages have consistently fallen between 35-38% over the past 10 years. It is important to note that while the U.S. has far more motor vehicle deaths involving drinking drivers than Canada (due to differences in population size), the percentages are still comparable. In each country, deaths involving at least one drinking driver account for approximately one-third of the total deaths on roadways. Furthermore, in both countries, while there was a decrease in the percentage of alcohol-related fatalities between 2007 and 2014, there has been a slight increase in the past two years.[1]

1. Vanlaar, W., et al. (2016). "Fatal and serious injuries related to vulnerable road users in Canada." Journal of Safety Research 58: 67-77.

The following table illustrates the magnitude of the drinking and driving problem in the U.S. using two indicators. Alcohol-related deaths are those resulting from crashes in which at least one driver had a BAC of .01 or greater. Alcohol-impaired deaths are those resulting from crashes in which at least one driver had a BAC of .08 or greater.

Table 2: United States

Year	Total number of deaths*	Number of alcohol-related deaths (driver BAC .01+)**	% of total alcohol-related deaths***	Number of alcohol-impaired deaths (driver BAC .08+)**	% of total alcohol-impaired deaths***
2007	41,259	12,,731	37.6	13,041	31.6
2008	37,423	13,826	36.9	11,711	31.3
2009	33,883	12,731	37.6	10,759	31.8
2010	32,999	11,906	36.1	10,136	30.7
2011	32,479	11,527	35.5	9,865	30.4
2012	33,782	12,118	35.9	10,366	30.6
2013	32,893	11,918	36.2	10,084	30.7
2014	32,744	11,743	35.9	9,943	30.4
2015	35,485	12,257	34.5	10,320	29.1
2016	37,461	12,514	33.4	10,497	28.0

* The table depicts the estimated number of deaths, estimated number of drinking and driving-related deaths, and the percent of drinking and driving-related deaths from 2007 to 2016 based on FARS data. Note: Total number of deaths from motor vehicle crashes includes fatalities in crashes in which there was no driver or motorcycle rider present.

** (NHTSA 2018)

*** (Brown, Vanlaar, and Robertson 2020)

What types of vehicles are involved in drinking driver crashes in Canada?

In Canada in 2016, of all the fatally injured drinking drivers (i.e., drivers with a BAC of .01 or greater), almost one-half (47.1%) were in an automobile; 25.7% were light truck drivers (e.g., pick-up trucks); 16.1% were motorcycle drivers; and 8.2% were van drivers.

Note that in 2016, the highest incidence of drinking was found among light truck drivers. In fact, over two-fifths (41.9%) of light truck drivers in fatal crashes had been drinking, and 75.0% of them had an illegal BAC, compared to tractor-trailer drivers among whom only 10.0% had been drinking.

Pedestrians are also at an increased risk of being hit by a vehicle if they have consumed alcohol (Vanlaar et al. 2016). To illustrate this, during 2016 there were 282 pedestrians fatally injured and 192 of them were tested for the presence of alcohol. Among those tested, 34.9% had a BAC of .01 or greater.

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What does the Sober Smart Driving Education Program (SSD) contain?

The Sober Smart Driving Education Program contains facts to help Canadians learn about the risks associated with drinking and driving and encourages everyone to speak up and talk about why they choose not to drink and drive.

Key topics discussed on this site include:

- Drinking and its effects on driving
- Magnitude & characteristics of drinking & driving
- Basics of the impaired driving system
- Impaired driver programs & penalties
- Myths & misconceptions about drinking and driving

Each of these topics contains a series of fact sheets structured in a question and answer format which are available for free download and sharing (with attribution). These resources are designed to support the education and prevention efforts of communities, schools, health and road safety professionals and advocacy organizations.

To view more fact sheets, or to get more information about alcohol, its effects on driving skills, and impaired driving, visit **SoberSmartDriving.tirf.ca**.

Traffic Injury Research Foundation

The mission of the Traffic Injury Research Foundation (TIRF) is to reduce traffic-related deaths and injuries. TIRF is a national, independent, charitable road safety research institute. Since its inception in 1964, TIRF has become internationally recognized for its accomplishments in a wide range of subject areas related to identifying the causes of road crashes and developing programs and policies to address them effectively.

Email: **tirf@tirf.ca**

Website: **tirf.ca**

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