



Impaired Driving in Canada

Background

Driving while impaired by alcohol or drugs remains the most prominent factor contributing to serious road crashes in Canada. Although significant progress has been made over the past three decades, impaired drivers continue to present a significant risk to the safety of all road users. In the 15-year period from 2000 through 2014, it is estimated over 12,000 people died in Canada as a result of a in motor vehicle crash involving a driver who had consumed alcohol.^{1,2}

In the past, the term “impaired driving” was typically interpreted as meaning impaired by alcohol. In recent years, however, the use of drugs by drivers has come to the public attention as a major contributor to serious crashes in Canada. This summary presents current data on the extent of both alcohol- and drug-impaired driving in Canada.

Impaired Driving Laws

Impaired driving is an offence under the *Criminal Code* of Canada. In addition, most provinces and territories also provide for additional sanctions within their respective highway traffic legislation for drivers with a blood alcohol concentration (BAC) lower than the 80 mg/dL limit specified in the *Criminal Code* or whose ability is affected by drugs.³ Novice drivers are typically prohibited from operating a vehicle with any amount of alcohol or drug in their body.

Criminal Code

It is an offence to operate a motor vehicle or vessel, or operate or assist in the operation of an aircraft or railway equipment, or have the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not:

- While one’s ability to operate the vehicle, vessel, aircraft or railway equipment is impaired **to any degree** by alcohol or a drug or both alcohol and a drug; or
- If one has a concentration of alcohol in one’s blood (i.e., blood alcohol concentration or BAC) that is equal to or exceeds 80 milligrams of alcohol in 100 millilitres of blood (80 mg/dL); or
- If one has a concentration of drug in one’s blood that is equal to or exceeds the concentration for the drug prescribed by regulation.

It is also an equivalent offence to fail or refuse to comply with a demand:

- To perform tests of physical coordination;
- To submit to an evaluation to determine drug influence; or
- To provide a sample of breath, blood, urine or oral fluid for analysis of alcohol and drug content.



Driving with a BAC in excess of 120 mg/dL is deemed to be an aggravating factor, which can result in more severe sanctions. If the commission of one of the offences listed above results in bodily injury to another person, the penalty can be up to 14 years in prison. An offence causing the death of another person can lead to life imprisonment.

Provincial and Territorial Laws

As noted previously, the provinces and territories have enacted legislation to supplement the provisions of the *Criminal Code*. These laws typically impose immediate short-term licence suspensions (24 hours up to 30 days) for drivers deemed affected by alcohol or a drug or with a BAC of 50 mg/dL or greater.³ Additional sanctions can include licence reinstatement fees, attendance at driver education or rehabilitation programs, vehicle impoundment and participation in an ignition interlock program. Jurisdictions also impose zero alcohol and drug limits for novice drivers.

Canadian Facts on Impaired Driving

There are a variety of sources of information on the extent of impaired driving in Canada. These include telephone surveys of the general population, roadside surveys of drivers, data on impaired driving charges and data on fatal crashes involving a driver who has been drinking or using drugs. Each of these data sources provides a different window on the problem; together they provide a comprehensive picture. Repeated cycles of measurement using consistent methods enable analysts to see trends as they emerge from the indicators over time.

General Population Surveys

From 2008 through 2012, the frequency of driving after using alcohol or cannabis has been assessed by the Canadian Alcohol and Drug Use Monitoring Survey (CADUMS).⁴ CADUMS is a survey of alcohol and drug use among Canadian residents age 15 and over. It includes data from over 10,000 respondents from all 10 provinces, but excludes residents of the territories.

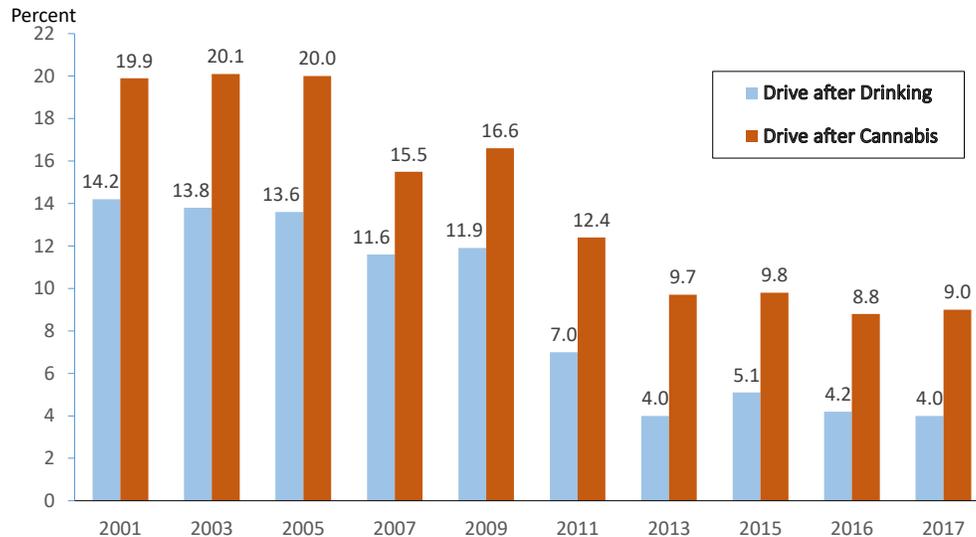
In each year of the survey, respondents were asked about driving within an hour after consuming two or more drinks and driving within two hours of using cannabis. The prevalence of these two behaviours did not change substantially over the five years of the survey. About 8% of drivers in each year reported driving after consuming alcohol and just under 3% reported driving after using cannabis.

Young Canadians (age 15–24) were more than twice as likely as older Canadians to report driving after using cannabis (5.0% vs 2.3%, respectively), but only slightly more likely to report driving after drinking (9.6% vs 8.0%, respectively). Males were about three times more likely than females to report driving after using cannabis and driving after drinking.

The Centre for Addiction and Mental Health has conducted surveys of Ontario students concerning alcohol and drug use and related harms since 1977.⁵ In 2001, questions about driving after using cannabis were added to the survey, which had previously focused on questions about driving after drinking. Figure 1 shows the percentage of high school students with a driver's licence who reported driving after drinking and driving after using cannabis.



Figure 1: Driving after Drinking and Driving after Cannabis Use among Ontario Students



Source: Boak, Hamilton, Adlaf, & Mann, (2017)

In every year the two questions were asked, students were more likely to report driving after using cannabis than driving after drinking. The reported prevalence of both behaviours has decreased substantially since 2001. Males were about twice as likely as females to report driving after drinking and driving after using cannabis.

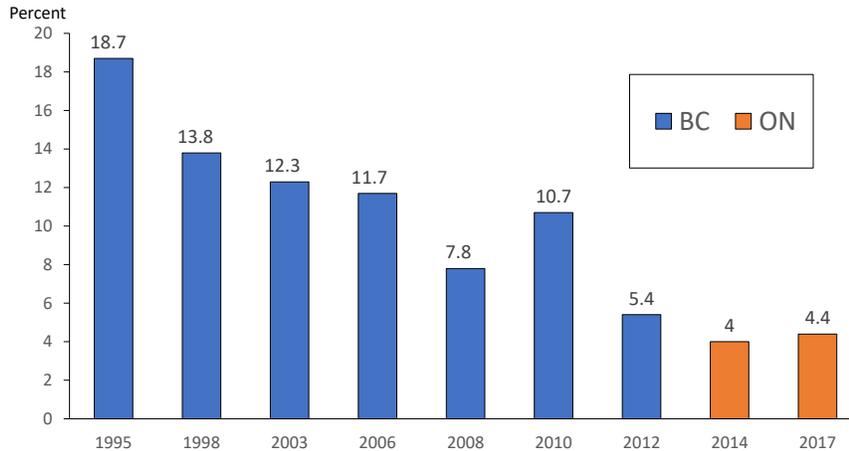
The National Cannabis Survey is being conducted by Statistics Canada every three months in 2018 and into 2019 to monitor cannabis consumption before and after legalization. Data from the first three iterations of the survey involving 18,900 participants across all 10 provinces reveal that among the 15.2% who reported using cannabis in the previous three months, 14.2% also reported having driven within two hours of using cannabis. Males were almost twice as likely as females to have driven after using cannabis, but there was no difference between those under 25 years of age (14.8%) and those 25 or older (14.0%).⁶

Roadside Surveys

Another approach to determining the prevalence of driving after drinking and driving after drug use is to collect voluntary breath and oral fluid samples from a random sample of nighttime drivers to test for the presence of alcohol and drugs. Breath testing surveys have been conducted periodically in British Columbia since 1995.⁷ Comparable surveys were also conducted in Ontario in 2014 and 2017.^{8,9} Figure 2 shows the percentage of drivers who tested positive for alcohol in roadside surveys conducted in British Columbia and Ontario from 1995 through 2018. The proportion of drivers testing positive for alcohol has decreased substantially over this period.



Figure 2: Percentage of Drivers Positive for Alcohol in Roadside Surveys in British Columbia (1995–2012) and Ontario (2014 and 2017)

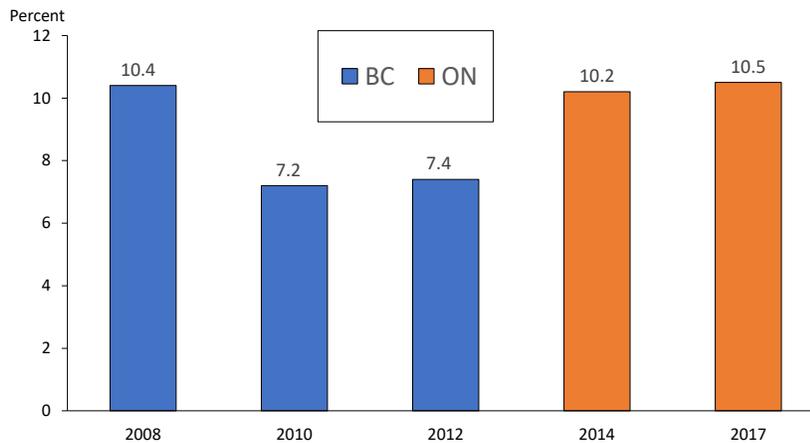


Note: Vancouver and Saanich only in B.C. surveys.

Sources: Beasley & Beirness (2012); Beirness, Beasley, & McClafferty (2015); Beirness & Beasley (2017)

Beginning in 2008, oral fluid samples were collected as part of the roadside survey procedure. These samples were sent to a toxicology laboratory to be tested for the presence of commonly used drugs. Figure 3 shows the percentage of drivers who tested positive for at least one psychoactive substance other than alcohol (i.e., cannabis, opiates, cocaine, amphetamines, methamphetamine or benzodiazepines) in the roadside surveys conducted in British Columbia and Ontario. Cannabis was the most commonly detected drug in all surveys, accounting for about half of all drugs detected. A comparison of Figures 2 and 3 clearly shows that in recent years, drug use among drivers surpasses that of alcohol.

Figure 3: Percentage of Drivers Who Tested Positive for Drugs in Roadside Surveys in British Columbia and Ontario



Sources: Beasley & Beirness (2012); Beirness, Beasley & McClafferty (2015); Beirness & Beasley (2017)

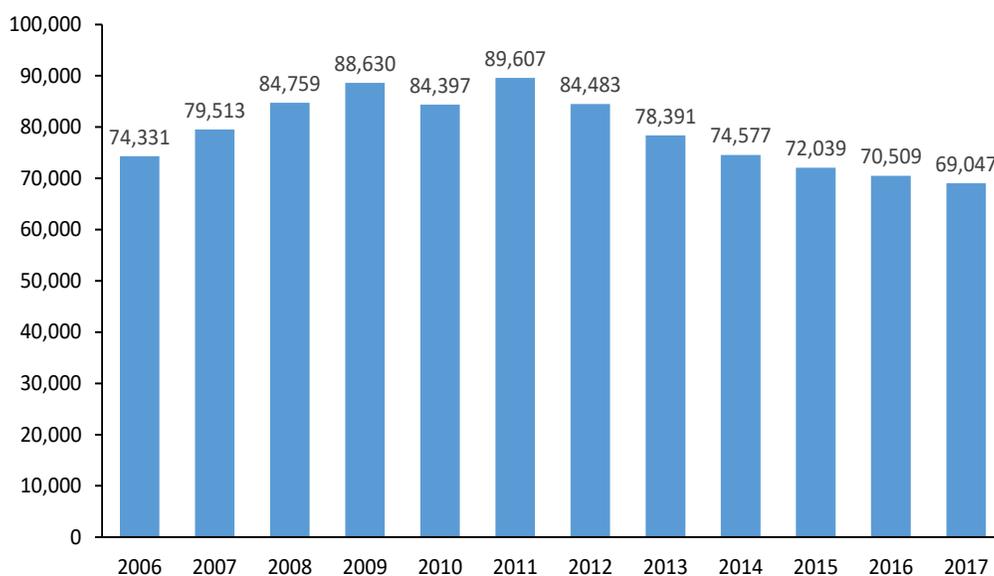


A similar survey conducted in the province of Ontario in 2014 found 10.2% of drivers tested positive for at least one drug other than alcohol.⁸ Cannabis was the most frequently detected drug. In this latter survey, only 4% of drivers were found to have been drinking.

Impaired Driving Incidents

Data on impaired driving incidents are compiled annually by Statistics Canada from the Uniform Crime Reporting Survey, which collects data on all criminal incidents reported to Canadian police services.¹⁰ The survey does not provide a count of all crimes, but only those that are reported to and substantiated by the police. The prevalence of alcohol- and drug-impaired driving greatly exceeds the capacity of police to detect and charge offenders, so there are many more instances of the behaviour than ever come to the attention of the police. Hence, the data on impaired driving incidents are strongly influenced by the level of enforcement: the higher the level of enforcement effort, the higher the number of impaired driving incidents reported.

Figure 4: Number of Reported Impaired Driving Incidents in Canada (2006–2017)



Source: Allen, (2018)

Figure 4 presents the number of impaired driving incidents reported to police from 2006 through 2017. Over this period of time, the overall number of incidents reached a peak in 2011 and has since fallen. However, drug-impaired driving incidents have continued to rise. In 2017, there were 3,498 reported incidents of drug-impaired driving, a 15% increase from 2016. This increase may be partly attributable to an increased capacity of police to detect impairment by drugs and may not necessarily reflect an increase in the behaviour.

Fatally Injured Drivers

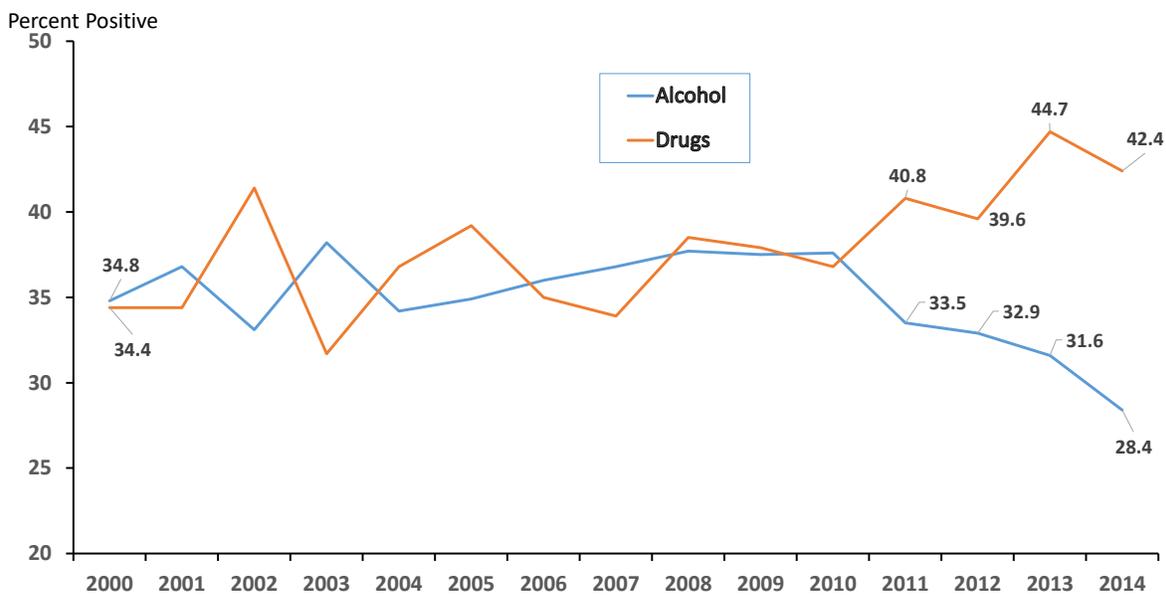
The results of tests for alcohol and drugs on drivers who die in crashes provide an indicator of the extent to which alcohol and other drugs are involved in fatal crashes. Over many years, tests for



alcohol have become commonplace with over 80% of fatally injured drivers being tested by coroners and medical examiners. Drug testing is becoming more common, with testing rates rising from 37% in 2000 to 82% in 2014.¹

The percentage of fatally injured drivers of highway vehicles who test positive for alcohol or drugs is a commonly used indicator of the magnitude of the alcohol and drug driving problem. Figure 5 presents these data for the years 2000 through 2014.¹ The percentage of fatally injured drivers who tested positive for alcohol varied between 33% and 38% until 2010 and thereafter has decreased substantially, reaching a low of 28.4% in 2014. Fatally injured drivers testing positive for drugs have increased in recent years, averaging over 40% per year since 2010. As is evident in Figure 5, the percentage of fatally injured drivers who test positive for drugs now exceeds that for alcohol. About 15% of drivers test positive for both alcohol and drugs. As noted previously, however, the rate of testing for drugs has also increased dramatically over the past several years. Hence, the apparent increase in drug-involved driver fatalities could be at least partly attributable to the increased rate of testing for drugs.

Figure 5: Percentage of Fatally Injured Drivers Positive for Alcohol or Drugs According to Year



Note: Data from British Columbia are not included.
Source: Canadian Council of Motor Transport Administrators (2017)

International Activities

Recent attention to impaired driving, and in particular drug-impaired driving, is not unique to Canada, but is an issue of international interest and concern. In October 2017, the Canadian Centre on Substance Use and Addiction (CCSA), in partnership with the United States National Institute on Drug Abuse International Program, the European Monitoring Centre for Drugs and Drug Addiction, and the New Zealand Drug Foundation, sponsored the third international symposium on drug-impaired driving to share information, discuss evidence and promote international cooperation to better understand the issues and work towards developing programs and policies to deal with it effectively.¹¹



Looking Forward

In Canada, the legalization of non-medical cannabis was accompanied by new legislation on impaired driving. Amendments to the *Criminal Code* include per se limits of two and five ng/mL for the use of cannabis by drivers, limits of zero for eight other substances, oral fluid drug screening at roadside, allowing blood samples to be drawn by a qualified technician and mandatory alcohol screening.¹²

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- 1 Brown, S., Vanlaar, W., & Robertson, R. (2017). *Alcohol and drug-crash problem in Canada: 2014 report*. CCMTA Road Safety Report Series. Ottawa, Ont.: Canadian Council of Motor Transport Administrators.
 - 2 British Columbia Coroners Service. (2018). *Motor vehicle incident deaths 2005–2016*. Burnaby, B.C.: Ministry of Justice, Office of the Chief Coroner.
 - 3 Canadian Centre on Substance Use and Addiction. (2019). *Short-term administrative sanctions for alcohol and drug use by drivers*. Ottawa, Ont.: Author.
 - 4 Health Canada. (2012). *Canadian Alcohol and Drug Use Monitoring Survey (CADUMS)*. Ottawa, Ont.: Author.
 - 5 Boak, A., Hamilton, H. A., Adlaf, E. M., & Mann, R. E., (2017). *Drug use among Ontario students, 1977-2017: Detailed findings from the Ontario Student Drug Use and Health Survey (CAMH Research Document Series No. 46)*. Toronto, Ont.: Centre for Addiction and Mental Health.
 6. Statistics Canada (2018). *National Cannabis Survey, 3rd quarter 2018*. The Daily, Thursday October 11, 2018. Ottawa, Ont.: Statistics Canada.
 - 7 Beasley, E.E. & Beirness, D.J. (2012). *Alcohol and drug use among drivers following the introduction of immediate roadside prohibitions in British Columbia: Findings from the 2012 Roadside Survey*. Victoria: Ministry of Justice, Office of the Superintendent of Motor Vehicles. Retrieved from www2.gov.bc.ca/assets/gov/driving-and-transportation/driving/publications/bc-roadside-report2012.pdf .
 - 8 Beirness, D.J., Beasley, E.E. & McClafferty, K. (2015). *Alcohol and drug use among drivers in Ontario: Findings from the 2014 roadside survey*. Toronto, Ont.: Ontario Ministry of Transportation.
 - 9 Beirness, D.J. and Beasley, E.E. (2017). *Alcohol and drug use among drivers in Ontario: Findings from the 2017 roadside survey*. Toronto, Ont.: Ontario Ministry of Transportation.
 - 10 Allen, M. (2018). Police-reported crime statistics in Canada, 2017. *Juristat*. Statistics Canada Catalogue no. 85-002-X Ottawa: Canadian Centre for Justice Statistics, Statistics Canada.
 - 11 European Monitoring Centre for Drugs and Drug Addiction. (2018). *Q&A policy briefing on cannabis and driving*. Lisbon, Portugal: Author.
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