

Road Safety Monitor 2023

Drinking & Driving in Canada

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KEY FINDINGS

- > 391 Canadians were killed in an impaired driving crash, accounting for 26.5% of all fatal road crashes in 2021.
- > 5.8% of drivers admitted driving when they thought they were over the legal limit which is a significant decrease from 10.5% in 2022.
- > 46.4% of respondents who drove when they thought they were over the legal limit did most of their drinking at their home.
- > One-third (36.7%) of drinking drivers did most of their drinking alone and 22.9% drank with a partner or family.
- > Female respondents were 51.3% less likely to report driving after consuming any amount of alcohol compared to males.

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Introduction

This fact sheet summarizes findings about drinking and driving in Canada from the 2023 Road Safety Monitor (RSM), a national public opinion poll on road safety issues. This annual survey is conducted by the **Traffic Injury Research Foundation (TIRF)** in partnership with **Beer Canada** and **Desjardins Insurance**. It takes the pulse of the nation on key road safety issues using an online survey of a random, representative sample of Canadian drivers. Data from **TIRF's National Fatality Database** exploring trends in the role of alcohol among fatally injured victims are also presented.¹

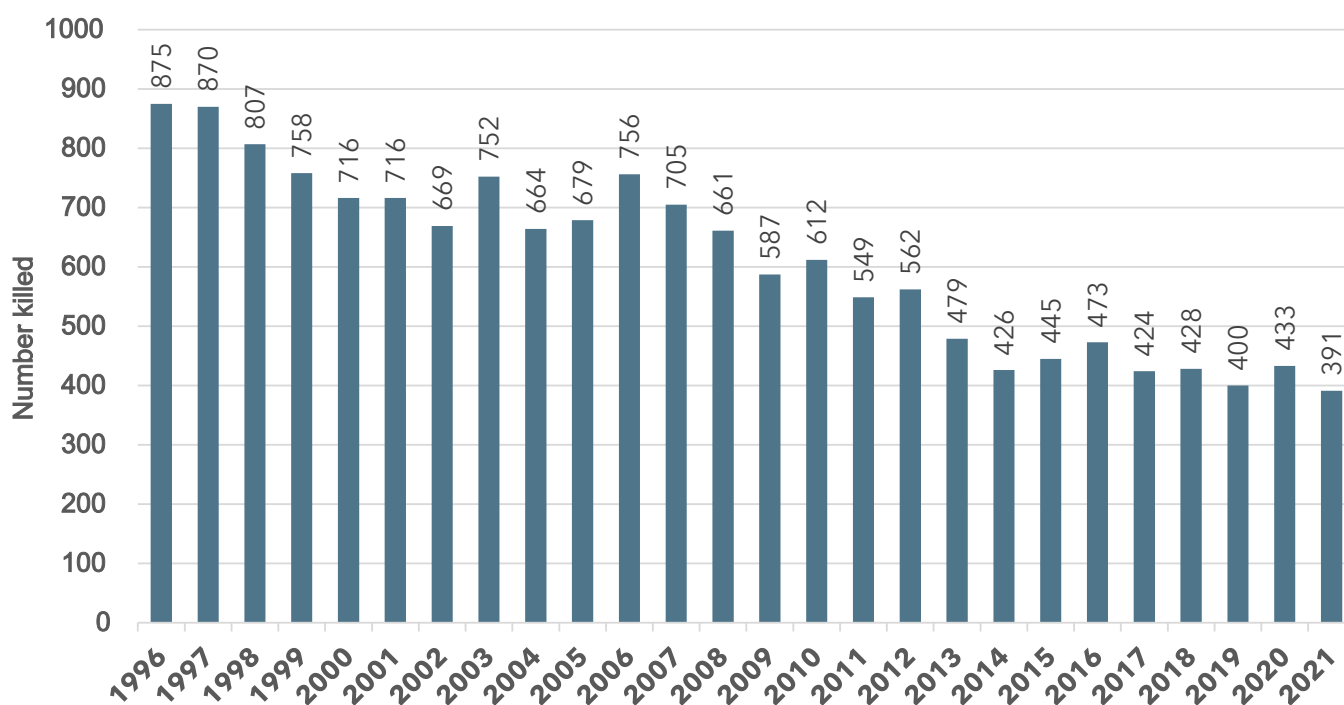
How many Canadians died in road crashes involving a drinking driver?

Almost 400 Canadians (391) were killed in a road crash involving a drinking driver in 2021; the most recent year for which data are available. These fatalities occurred within 12 months of crashes on public roadways across the country, excluding British Columbia (BC). Data from BC were not available at the time that the 2023 RSM was prepared; all fatality data from 1996 to 2021 have been recalculated consistently to enable accurate comparisons over time. As illustrated in Figure 1, the number of persons who died in crashes involving a drinking driver between 1996 and 2021 generally decreased from 875 to 391 fatalities (a 55% reduction).

What percentage of Canadians died in road crashes involving a drinking driver?

More than one in four (26.5%) people killed in a road crash on a public roadway were involved in a crash with a drinking driver in 2021. This percentage declined from a peak of 34.4% in 1996 and has since remained consistently below 34%, although with some fluctuation. The percentage of persons killed in road crashes involving alcohol increased in 2020 (30.2%) but then declined in 2021.

Figure 1 | Number of Canadians killed in road crashes involving a drinking driver



Has the percentage of drinking drivers on roadways increased?

More than one in 10 drivers (13%) admitted driving after consuming any amount of alcohol in the past 30 days. This represents a slight decline from 2022 at 13.5%. It warrants mentioning that this included drinking and driving after consuming lower levels of alcohol and levels below the legal limit or administrative limits (where they exist). There were some clear, albeit only mildly pronounced trends that emerged over the years as shown in Figure 3.

A piecewise linear regression model was fit to these data. From 2005 through to 2009, there was a statistically significant upward trend in the percentage of respondents who admitted to driving after consuming any amount of alcohol. This was followed by a downward trend from 2011 to 2015, although it was not statistically significant. The percentage increased significantly in 2016 followed by a statistically significant overall downward trend from 2017 to 2023.

In 2023, while just 5.8% of respondents admitted driving when they thought they were over the legal limit in the past 12 months, it should be noted this is among an estimated licensed driving population of 26 million drivers. This is a large and statistically significant decrease from 10.5% in 2022 ($p=0.000$). This reversed a trend starting in 2016 that showed a steady increase in drivers who admitted to driving when they thought they were over the legal limit. Continued monitoring is essential to see if the substantial decrease recorded in 2023 continues.

In 2023, the increasing trend among drivers who reported driving when likely over the legal limit which began in 2016 was reversed.

Figure 2 | Percentage of Canadians killed in road crashes involving a drinking driver

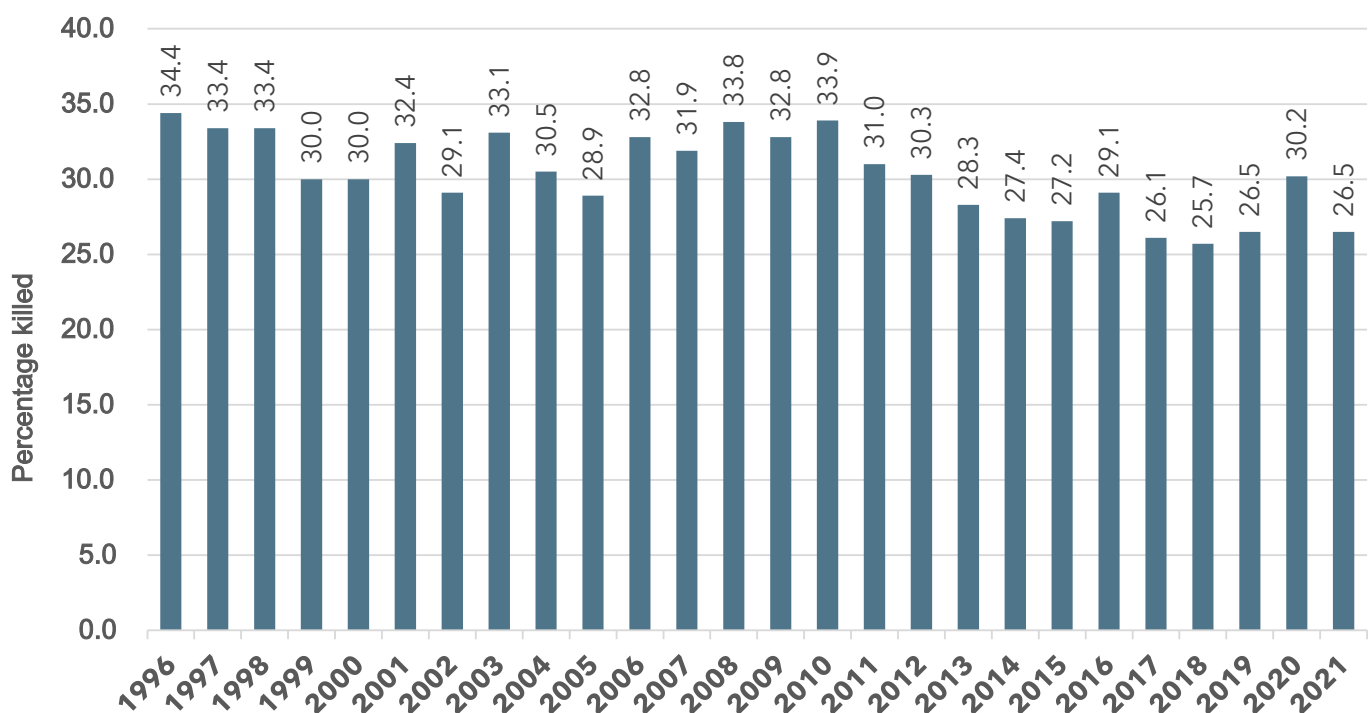


Figure 3 | Percentage of drinking drivers who drove after drinking any amount of alcohol

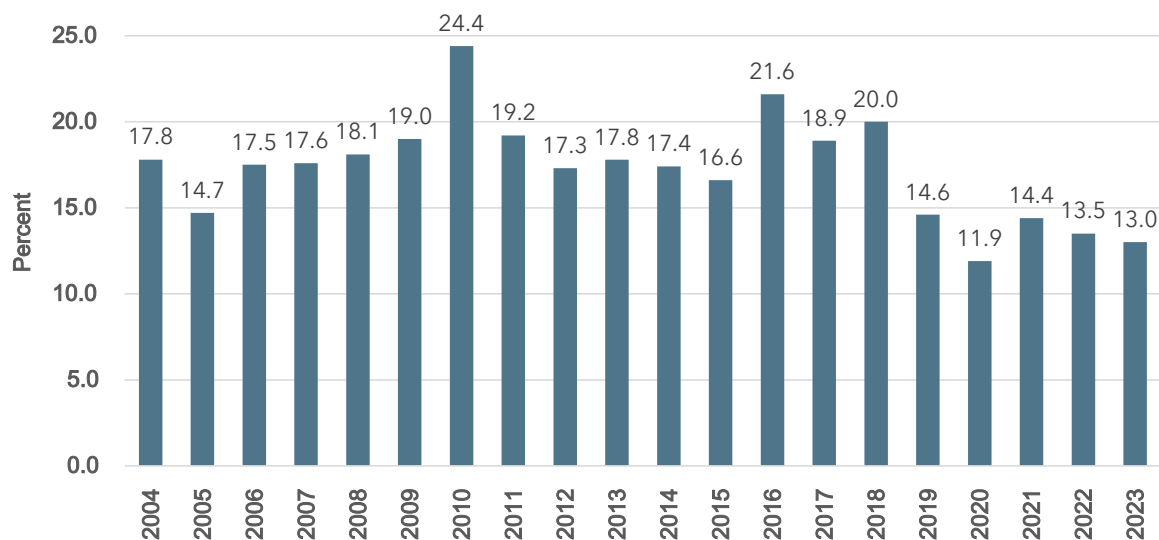


Figure 4 | Percentage that drove when they thought they were over the legal limit



Where did drivers do most of their drinking?

Respondents who admitted to driving when they thought they were over the legal limit were asked where they did most of their drinking. These findings are presented in Figure 5. In 2023, almost half (46.4%) of these respondents reported doing most of their drinking at their home before driving, compared to 38.5% in 2022 and 32.4% in 2021. Respondents who reported doing most of their drinking at a restaurant accounted for one-quarter of the total (24.5%) in 2023 compared to 22.2% in 2022. Those who reported doing most of their drinking at a friend's or relative's home accounted for one-fifth of the total (20.6%) in 2023 compared to 18% in 2022.

These results suggested that more persons who drove after drinking when they thought they were over the legal limit did so at their home, in a restaurant, or at the home of a friend or relative. Conversely, a much smaller proportion of persons who drove when they thought they were over the legal limit did their drinking at a party (1.4%).

These results suggest the trend among drivers who reported driving when they believed they were over the legal limit, which began during the COVID-19, to more often drink at home has continued post-

pandemic. According to the Spirits Business (Collins, 2023), 26% of US consumers were spending more money on alcohol to consume at home rather than going to bars due to the increased cost of living. Presumably, such drinking patterns may also exist in Canada given similar increases in the cost of living. To this end, several online guides suggest the elimination or reduction of *fun* expenses such as money spent in restaurants and bars as a strategy to reduce cost of living expenses. It is possible that, as a result, more persons are drinking at home to not only cut the costs of alcohol, but also the additional costs of safe rides to, and from, the drinking location (e.g., Uber or taxis) and any cover charge or coat checking fee a bar may require. Key messages to reach and influence these different groups should be tailored accordingly, particularly among drivers who drink at home.

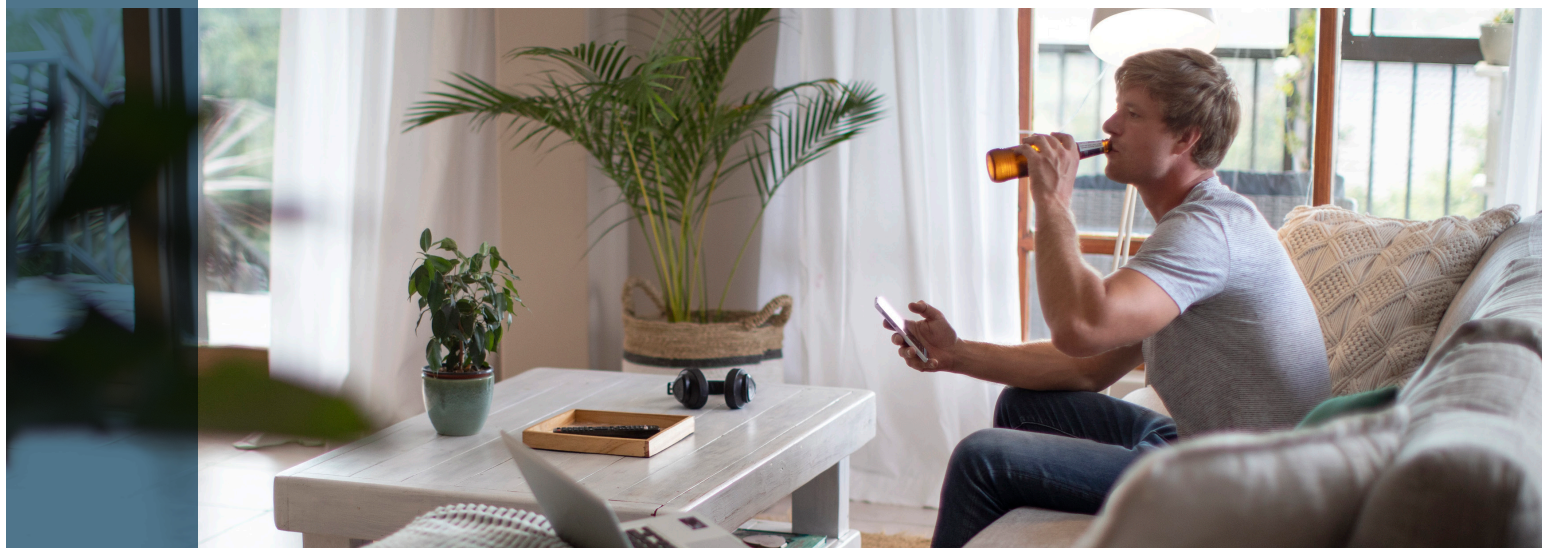
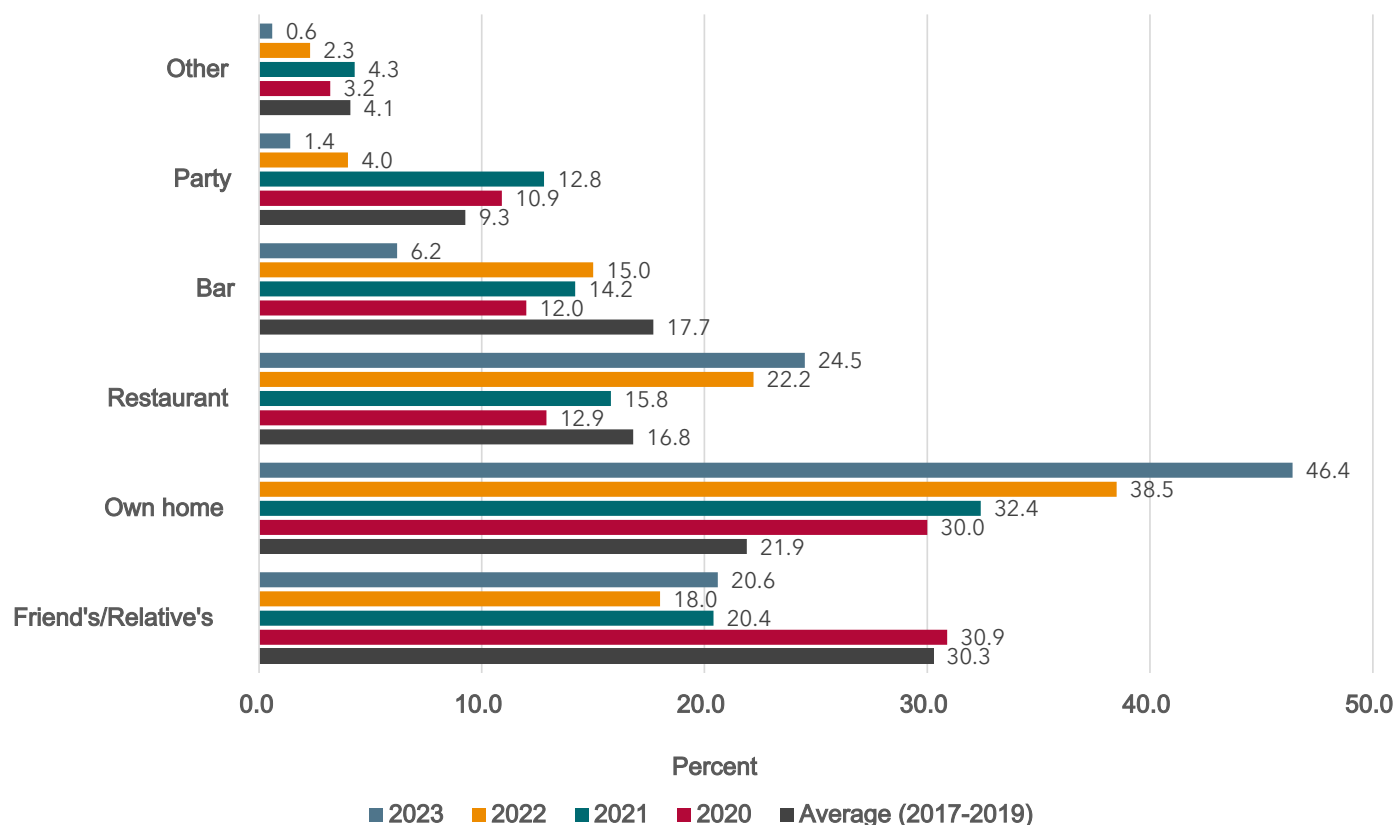


Figure 5 | Locations where Canadian drivers indicate doing most of their drinking



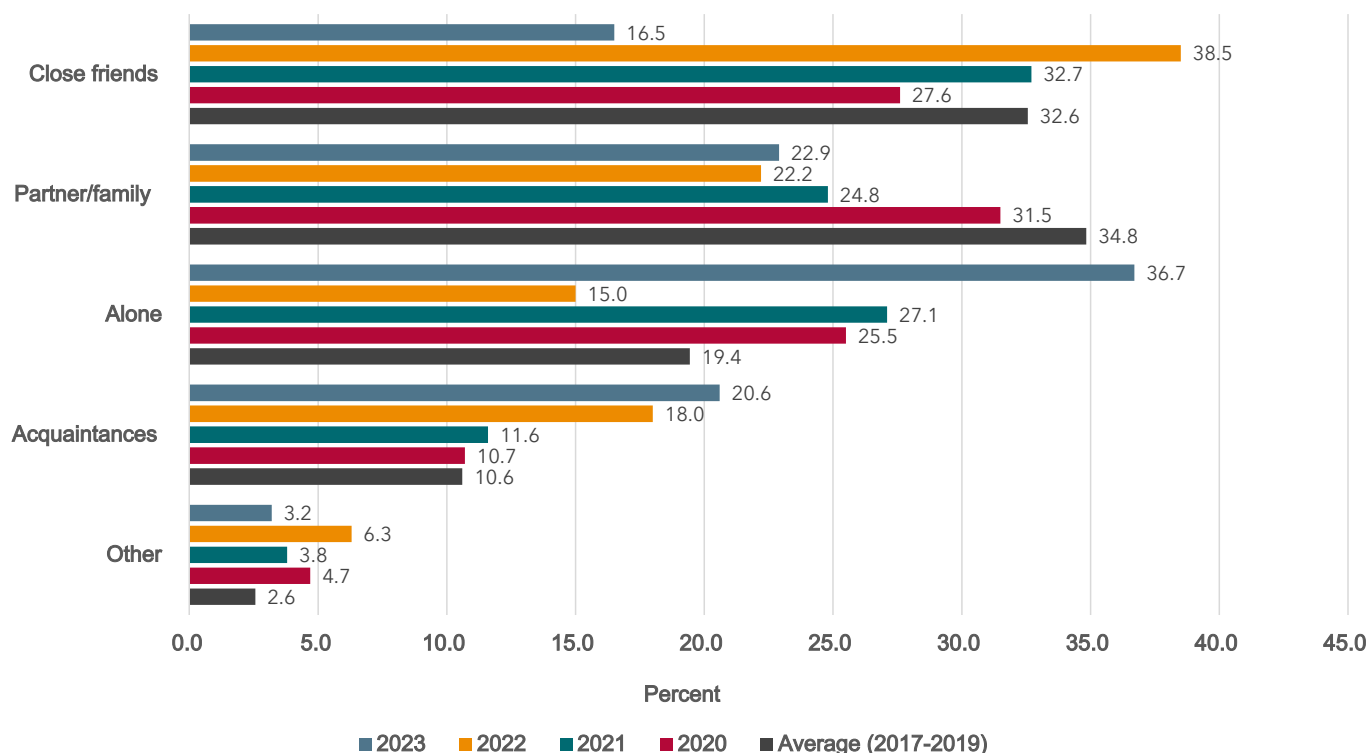
With whom did drivers do most of their drinking?

Respondents who reportedly drove when they thought they were over the legal limit were also asked with whom they did most of their drinking. Figure 6 shows that in 2023, one-third (36.7%) of respondents reported doing most of their drinking alone compared to 15% in 2022. One-fifth of respondents reported doing most of their drinking while with a partner or family (22.9%) or acquaintances (20.6%). The increase in persons who drank alone is perhaps due to the increased loneliness felt as a result of residual effects of pandemic social distancing and isolation and the move to remote work. The World Health Organization (WHO) declared loneliness a global health priority, going so far as to declare loneliness a global epidemic in 2023 (Christensen, 2023). Based on a survey taken across 142 countries, WHO cites nearly one in four adults reported feeling very or fairly lonely (Christensen, 2023).

In fact, since 2017, there has been a steady decline in drinking with partners and family, from more than one-third (34.8%) to less than one-quarter (22.9%) in 2023. At the same time, there has been an increase in drinking with acquaintances, from 10.6% in 2017-2019 to 20.6% in 2023.

While increases in drinking alone at home may be partially attributed to the lack of other social opportunities, close attention must be paid to this notable change as it could have long-term impacts on drinking and driving behaviours and strategies adopted to effectively tackle this issue.

Figure 6 | Persons with whom Canadian drivers reported doing most of their drinking



Are certain groups of drivers more likely to drive after drinking than other drivers?

As mentioned earlier, 13% of respondents admitted to driving after consuming any amount of alcohol in the past 30 days in 2023. A logistic regression analysis was conducted to assess the impact of sex and age on this behaviour. Compared to males, female respondents were 51.3% less likely to report driving after consuming any amount of alcohol (OR: 0.48, CI: 0.28-0.82, $p=0.007$). This corresponds with data on fatally injured drivers showing males have historically been far more likely to test positive for alcohol than female drivers (Brown et al. 2021). For every 10-year increase in age, the odds of drivers reporting driving after consuming any amount of alcohol decreased by 11% (OR: 0.89, CI: 0.78-1.00, $p=0.061$), but this is not statistically significant. These results were consistent with previous RSMs and those results were statistically significant.

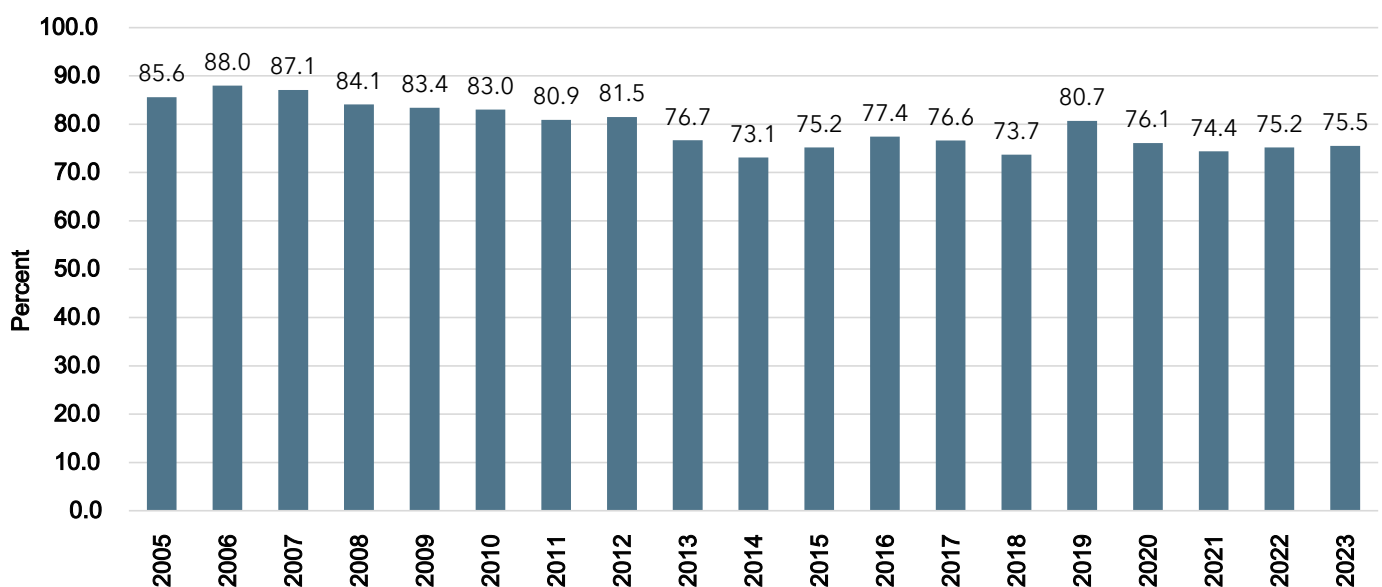
Among survey respondents, 5.8% admitted to driving when they thought they were over the legal limit in the past 12 months in 2023. Results from a logistic regression analysis showed that, compared to males, female respondents were 59.0% less likely to report driving when they thought they were over the legal limit (OR: 0.41, CI: 0.24-0.69, $p=0.001$). Age was also a significant factor in this behaviour. For every 10-year increase in age, the odds of drivers reporting driving when they thought they were over the legal limit decreased by 25% (OR: 0.75, CI: 0.66-0.85, $p=0.000$).

Is drinking and driving a major road safety issue for Canadians?

Canadians were asked how concerned they were with various public agenda priorities. Respondents rated their concern ranging from 1 (not concerned at all) to 6 (extremely concerned); for scoring purposes, respondents were coded as being concerned about an issue if they chose 5 or 6.

Approximately three out of four Canadian drivers (75.5%) cited drinking and driving as an issue of concern on the public agenda. Drugged drivers were similarly ranked by Canadians, with 74% reporting concern. Impaired drivers were not the greatest concern among Canadians, however, as 82.5% reported concern about drivers using cellphones (either handheld or hands-free). As apparent in Figure 7, while there were fluctuations over time in the percentage regarding drinking drivers as a serious problem, generally the percentage today is lower compared to most earlier years.

Figure 7 | Percentage of Canadians who regard drinking drivers as a *very or extremely* serious problem

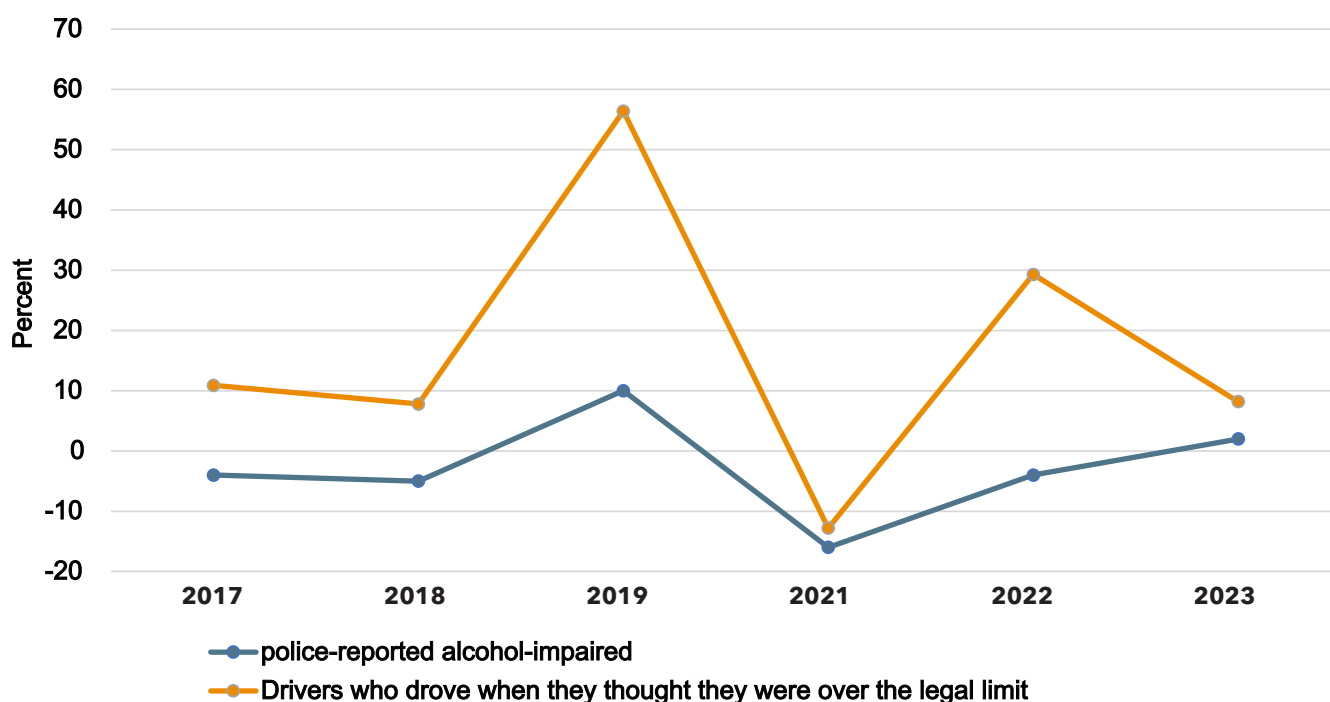


Police reported alcohol-impaired driving

Data were obtained from Statistics Canada to examine the trends in police-reported alcohol-impaired driving from 2017-2022. The data show reported alcohol-impaired driving increases and decreases over time were similar to the differences in drivers who drove when they thought they were over the legal limit.

Increases in police-reported alcohol-impaired driving aligning with increases in the percentage of drivers reporting driving when they thought they were over the limit makes sense, as there would be an increased number of impaired drivers on the roads for police to pull over. The substantial drop in 2020 is likely due to the COVID-19 pandemic, which saw a decrease in impaired driving in addition to a decrease in roadside stops due to safety concerns and shifting enforcement priorities. The increase in 2021 may be attributed to pre-pandemic habits returning, in addition to a shift in enforcement again, as social distancing is a much lesser concern among police officers conducting roadside stops.

Figure 8 | Percent difference in police-reported alcohol-impaired driving and drivers who drove when they thought they were over the limit



Conclusion

Significant progress has been achieved in Canada to combat drinking and driving according to recent trends in the number of alcohol-related road deaths as well as the percentage of total road deaths attributed to drinking drivers. Between 1996 and 2021, there was a 55.3% decrease in the number of Canadians (excluding BC) who died in road crashes involving a drinking driver. Despite an increase in 2020, there was a 9.7% decrease from 2020 to 2021. On the other hand, there was a steady increase from 2015 to 2022 in the percentage of Canadians who reported driving when they believed themselves to be over the legal limit, but this decreased in 2023 to 5.8%. When exploring the correlation between such fatalities and self-reported drinking and driving behaviour, it suggests an increase in alcohol-related crashes might occur following an increase in the proportion of drivers admitting to driving while they thought they were over the legal limit.² This is further evident in that there are increased police reports of alcohol-impaired driving in years where more respondents reported driving when they thought they were over the legal limit. As such, further monitoring of both sources of data will help inform efforts to prevent and reduce alcohol-impaired driving in Canada.

Some trends such as increased rates of drinking at home and alone are likely largely related to social factors, including the increased cost of living and shared feelings of loneliness. As the economy stabilizes, there may be a future increase in drinking at bars and restaurants as more people increase their budgets and time with friends.

It is essential to tailor key messages to reach the subgroup of Canadians who are drinking at home alone and then getting behind the wheel. Moreover, during the COVID-19 pandemic and its aftermath, enforcement strategies and information campaigns designed to reduce and prevent alcohol-impaired driving may need to be adapted to reduce alcohol-impaired driving and other risky behaviours.



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Fatality Database Disclaimer

Data from TIRF's National Fatality Database may be subject to change as the closure of cases is ongoing. As such, there may be minor differences in this document compared to previous documents reporting on the same topic.

About the poll

These results are based on the RSM, an annual public opinion poll developed and conducted by TIRF. A total of 1,500 Canadians completed the poll in September of 2023. Results can be considered accurate within plus or minus 2.5%, 19 times out of 20. 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.

About TIRF's National Fatality Database

TIRF's National Fatality Database is the only Canadian road safety database that includes both police-reported collision data and coroners'/medical examiners' data (Simpson et al. 1978). It includes population data on victims, crashes and vehicles from seven Canadian jurisdictions since 1973 and from all Canadian jurisdictions since 1987. Comprehensive toxicological data on alcohol and drug use are based on chemical tests of body fluid samples, typically blood.

¹ When comparing this fact sheet with those published in previous years, slight differences in the data reported may be observed as fatality data from British Columbia are not included.

² A modest, significant correlation coefficient ($\rho=0.64$, $p=0.01$) exists between the number of alcohol-related fatalities from TIRF's National Fatality Database and self-reported drinking and driving when probably over the legal limit from TIRF's RSM. Due to changed travel patterns as a result of the pandemic, this correlation is based on data up to, and including 2018.

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The vision of the Traffic Injury Research Foundation (TIRF) is to ensure people using roads make it home safely every day by eliminating road deaths, serious injuries and their social costs. TIRF's mission is to be the knowledge source for safe road users and a world leader in research, program and policy development, evaluation, and knowledge transfer. TIRF is a registered charity and depends on grants, awards, and donations to provide services for the public. Visit <https://linktr.ee/tirfcanda>.

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