

BULLETIN 6

# What are men's and women's driving behaviours after cannabis use?

March 2023

**In this bulletin we analyze data from Canadian respondents to Waves 2, 3 and 4 of the International Cannabis Policy Study (ICPS) collected between 2019 and 2021.**

This bulletin is part of a larger research and knowledge translation project about sex, gender and cannabis use led by the Centre of Excellence for Women's Health and funded by Health Canada. Information about the overall project is available on the [Sex, Gender and Cannabis Hub](#). This bulletin is the sixth in a series. The bulletins report on sex and gender-based analyses of surveys and other data to sharpen our understanding of whether and how sex and gender affect cannabis use.

## **CANNABIS USE, DRIVING AND BEING A PASSENGER**

The rate of driving shortly after cannabis use is higher among men, but there is mixed evidence on riding as a passenger after using cannabis. According to the Canadian Cannabis Survey, among those who used cannabis in the past 12 months, more males than females reported that they have driven within two hours (30% and 16%, respectively) [3]. In a US study of college students who reported past month cannabis use, 43.9% of males and 8.7% of females reported driving after cannabis use and more males than females reported riding as a passenger with someone who had used cannabis (51.2% vs. 34.8%, respectively) [2]. O'Malley and colleagues' analysis of US high school seniors also found that male students were more likely to report driving after smoking cannabis, but there were no gender differences in riding as a passenger after cannabis use [4].



## WHAT IS INCLUDED IN THIS BULLETIN?

In this bulletin we report on sex and gender differences in selected variables on cannabis use among Canadian respondents ( $n = 47,988$ ) from Waves 2, 3 and 4 (2019–2021) of the International Cannabis Policy Study (ICPS), funded by the Canadian Institutes of Health Research.

The sample size of past 12-month users is  $n = 16,015$ . For a full description of the survey and methods for the ICPS see: <http://cannabisproject.ca/methods>. For a description of our approach to analyzing sex and gender in Waves 1 to 4 of the ICPS data, see the [Methodology on the Sex, Gender, and Cannabis Hub](#).

In this bulletin we focus on the driving habits among past 12-month cannabis users in Waves 2, 3 and 4 of the ICPS, on the following questions:

- » IN THE PAST 12 MONTHS: Have you driven a vehicle (e.g., car, snowmobile, motor boat, or an off-road vehicle (ATV)) within 2 hours?
- » IN THE PAST 12 MONTHS: Have you been a passenger in a vehicle (e.g., car, snowmobile, motor boat, or an off-road vehicle (ATV)) driven by someone who had been using marijuana in the last 2 hours?

Weighted chi-square analyses were used to conduct a sex and gender-based analysis for cannabis outcomes to compare results between men and women. Analyses were conducted using SAS Version 9.4. A threshold of  $p \leq 0.05$  was used to denote statistical significance.

## DRIVING A VEHICLE WITHIN 2 HOURS OF USING CANNABIS

A significantly higher proportion of men (13.1%) compared to women (7.8%) reported having driven a vehicle (e.g., car, snowmobile, motor boat, or an off-road vehicle (ATV)) within 2 hours of using cannabis, in the past 12 months.

## BEING A PASSENGER IN A VEHICLE DRIVEN BY SOMEONE WITHIN 2 HOURS OF THEM USING CANNABIS

A significantly higher proportion of men (13.9%) compared to women (12.8%) reported having been a passenger in a vehicle (e.g., car, snowmobile, motor boat, or an off-road vehicle (ATV)) driven by someone who had been using cannabis in the last 2 hours, in the past 12 months.

## CONCLUSION

Data from the ICPS show that driving after cannabis use is a gendered activity, with a higher prevalence among men. Additionally, a higher proportion of men than women were passengers in a vehicle driven by someone within 2 hours of using cannabis. Driving under the influence of cannabis is a key public health issue, and both sex and gender related factors need to be addressed in order to promote tailored messages aimed at men and women, drivers and passengers.

## KEY MESSAGES

1. In the past 12 months, significantly more men than women reported having driven a vehicle (e.g., car, snowmobile, motorboat, or an off-road vehicle (ATV)) within 2 hours of using cannabis.
2. In the past 12 months, significantly more men than women reported having been a passenger in a vehicle (e.g., car, snowmobile, motorboat, or an off-road vehicle (ATV)) driven by someone who had been using cannabis in the last 2 hours.



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## References

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