



# Adult Substance Use & Harms in the SWPH Region

Cannabis

Health Status Report  
Southwestern Public Health  
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# Summary

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Cannabis use has increased across the SWPH region after the introduction of the *Cannabis Act* in 2018.

In 2019/2020, a higher proportion of SWPH residents reported being worried about certain aspects of their cannabis use (i.e. being out of control, missing a dose) or finding it difficult to stop using cannabis compared to Ontarians.

Even after local cannabis use increased, the rate of hospitalizations due to cannabis poisonings decreased at the beginning of the COVID-19 pandemic. However, the trend reversed in 2021 and began to increase, which was not the case for the provincial trend, which remained relatively unchanged over time.

It will be important to continue to monitor local cannabis use and the associated harms over time.

# Substance Use & Harms Among Adults

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## Cannabis use

### Health Risks of Cannabis Use

Frequent and intense cannabis use (such as daily use or continued use over a long period of time), is one of the stronger predictors of developing health concerns, including mental health problems or cannabis use disorder. Cannabis use is also associated with an increased risk of other public health concerns, such as impaired driving resulting in injury or death, poor educational outcomes and impaired perception or memory.<sup>1</sup>

### Cannabis Legalization & Data Collection

In October 2018, the Government of Canada passed the *Cannabis Act* as a framework to control the production, distribution, and possession of cannabis in Canada.<sup>2</sup>

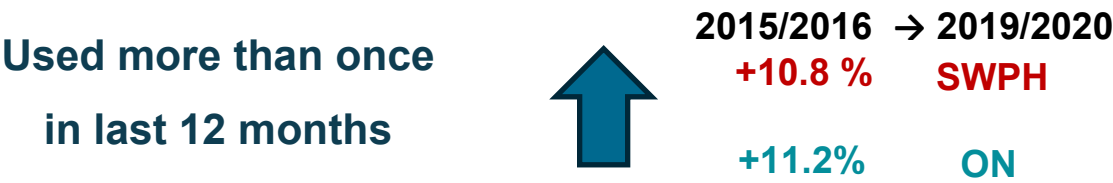
After the *Cannabis Act* was passed, and cannabis use was legalized, it became essential to understand how increased access may have impacted self-reported use by residents across Ontario. To address this need, Statistics Canada created a new module for the Canadian Community Health Survey (CCHS) regarding cannabis use that was included in the 2019/2020 cycle of the survey. In the 2015/2016 and 2017/2018 cycles of the survey, cannabis use was included in the illicit drug module. Therefore, it is important to note that in this time, residents may not have felt comfortable enough to report using cannabis.

### Cannabis use in the last year

The proportion of SWPH residents who reported that they used cannabis more than once in the last 12 months has increased over time and has remained higher than the proportion reported across Ontario in 2019/2020 (45.4% versus 41.3%, respectively).

Between the 2015/2016 and 2019/2020 CCHS cycles, the proportion of local residents who reported using cannabis more than once in the last 12 months increased substantially from 34.6% to 45.4%. This increase was also evident across Ontario; 41.3% of Ontarians reported

having smoked cannabis more than once in the last 12 months in 2019/2020 compared to 33.0% in 2015/2016.



Locally, at least 2 in 5 (40%) males report using cannabis more than once in the last 12 months, which is historically higher compared to females.

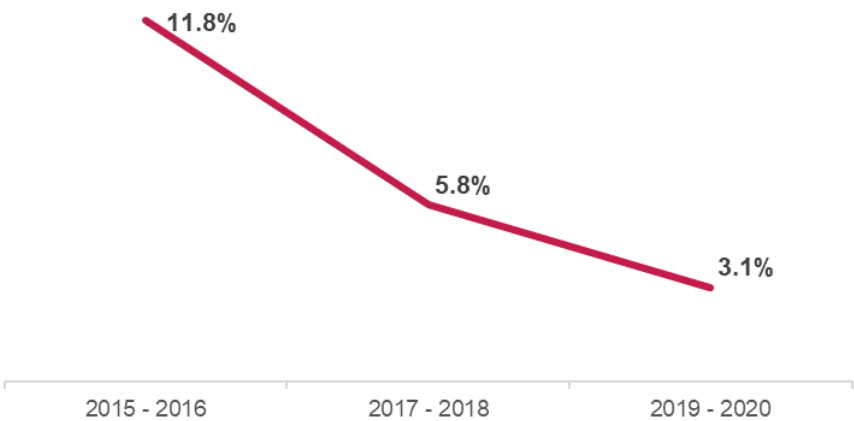
However, the proportion of females reporting using cannabis more than once in the last 12 months increased by more than 15% between 2015 and 2020. In comparison, the proportion among males only increased by 7%. This resulted in the difference in the proportion of cannabis use between males and females substantially decreasing over time (**Figure 1**). As of 2019/2020, females reported using cannabis more than once in the last 12 months nearly as much as males (44.2% versus 47.3%, respectively).



**Data source:**  
Canadian Community  
Health Survey  
(CCHS). StatsCan.  
2015 – 2016  
2017 – 2018  
2019 – 2020

**Figure 1**

**The difference in the proportion of local males and females who use cannabis is decreasing over time, as the proportion of females that use cannabis increases.**



The largest increase in cannabis use in the last 12 months was reported among residents between the ages of 45 and 64 years. There was an 11% increase between 2015/2016 and 2019/2020 (from 28.2% up to 37.6%).

Respondents in the other age groups (ages 20 - 44 and 65+) increased by only 4 to 6%. Those between the ages of 20 and 44 remained relatively unchanged between 2017/2018 and 2019/2020 at around 56%.

## Severity of Dependence Scale (SDS)

Following the 2018 *Cannabis Act*, the measurement of harmful consequences associated with cannabis use over time became crucial. In the 2019/2020 cycle, the CCHS included a severity of dependence scale (SDS) module to allow for monitoring consequences related to cannabis, such as addiction and potential risk factors for associated harms.<sup>2</sup>

The SDS module is comprised of 5 items, which can be combined into an overall score to indicate the degree of psychological dependence of respondents. These items included:

**Data source:**   
Canadian Community  
Health Survey (CCHS).  
StatsCan.  
2019 – 2020

- Being worried that cannabis use was out of control in the last 12 months
- Being worried about missing a dose of cannabis in the last 12 months
- Being worried about use of cannabis in the last 12 months
- Wished to stop using cannabis in the last 12 months
- Having difficulty stopping cannabis use in the last 12 months

Respondents were asked each of these questions in terms of how many times it had occurred (frequency-based). However, for the current report, they were each re-categorized into “yes” or “no/never” rather than frequency-based responses.

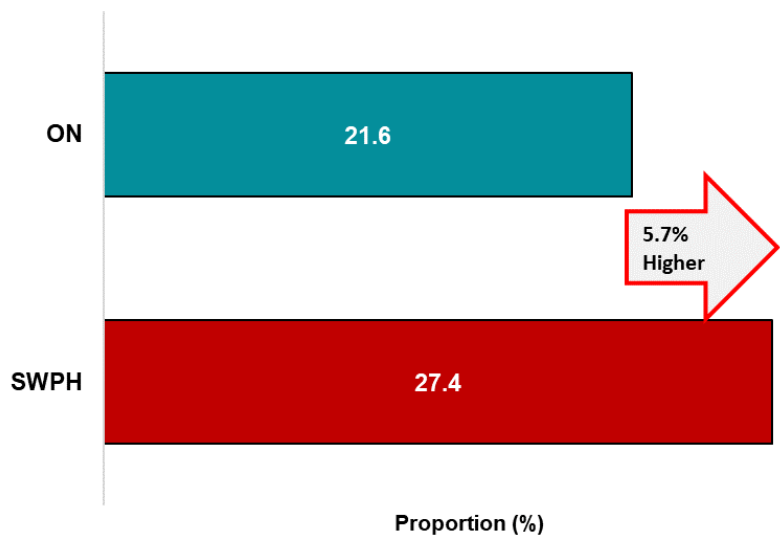
They were then combined to understand any dependence of respondents, potentially indicating signs of addiction, rather than the degree of dependence. Therefore, if respondents stated that they were worried or had difficulty with any of the 5 questions, they were considered “dependent”.

Psychological dependence on cannabis in the last year

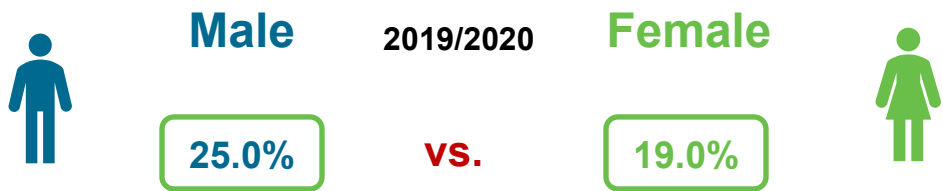
Approximately 5.7% more SWPH residents reported having difficulty with at least one item of the SDS for cannabis (listed above) compared to respondents across Ontario (Figure 2). This will be of interest to monitor in coming CCHS cycles to detect an increase in risk for dependence on cannabis over time.

Figure 2

Local respondents report being more psychologically dependent on cannabis in the last 12 months compared to respondents across Ontario.



Similar to cannabis use in the last 12 months, males in the SWPH region reported that they were more psychologically dependent on cannabis compared to females.



More SWPH residents between the ages of 45 and 64 also reported being worried about some aspect of their cannabis use compared to respondents of other age groups (not shown). It is important to note that the proportion among residents 65 and over was very small and therefore, not reportable.

# Cannabis-related harms

## Emergency department (ED) visits and hospitalizations

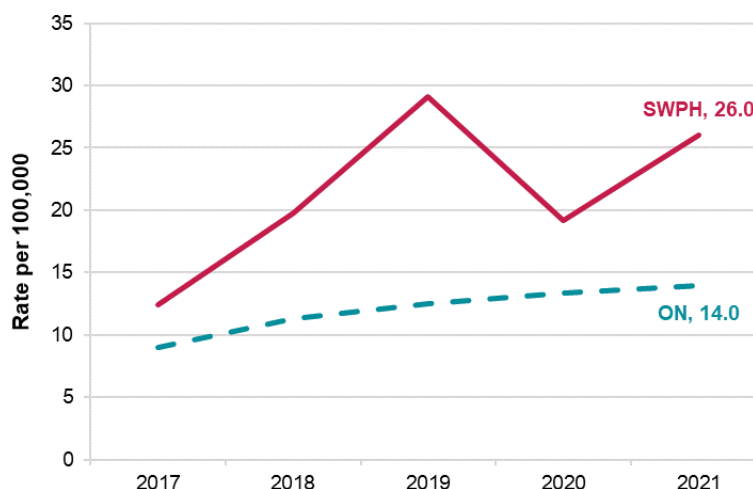
### Emergency department (ED) visits for cannabis-related poisonings

Overall, the local rate of emergency department (ED) visits for cannabis-related poisonings (see **Appendix A**) was on an upward trend pre-COVID, increasing sharply in 2019. After a decrease in 2020, the local ED rate increased significantly in 2021. At the same time, the provincial rate only increased marginally (**Figure 3**).

As of 2021, the ED rate for cannabis-related poisonings was 26.0 per 100,000 across the SWPH region compared to 14.0 per 100,000 across Ontario (**Figure 3**).

**Figure 3**

**Locally, after a decrease in the rate of ED visits for cannabis poisonings in 2020, the rate increased steeply in 2021 whereas provincially, the rate only marginally increased.**

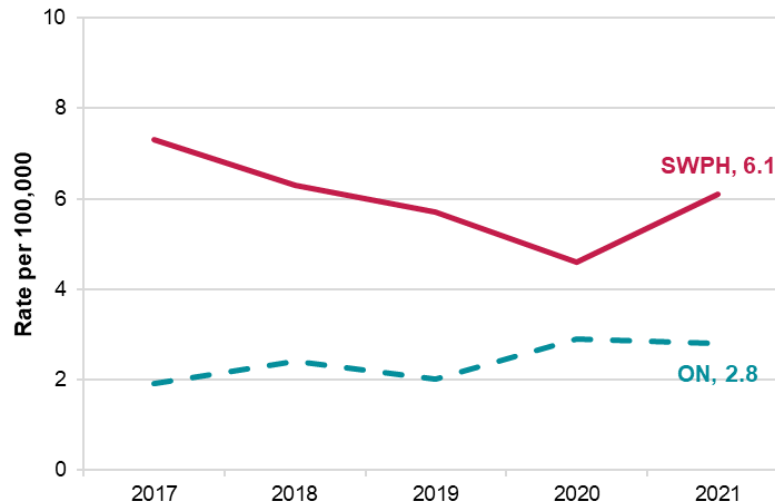


### Hospitalizations for cannabis-related poisonings

Overall, the local rate of hospitalizations for cannabis-related poisonings (see **Appendix A**) was decreasing year over year into 2020, even after the legalization of Cannabis in 2018. However, in 2021 it began to increase, reaching a rate of 6.1 per 100,000 which was more than 2x the provincial rate (**Figure 4**). Provincially, the rate decreased marginally to 2.8 per 100,000 in 2021.

**Figure 4**

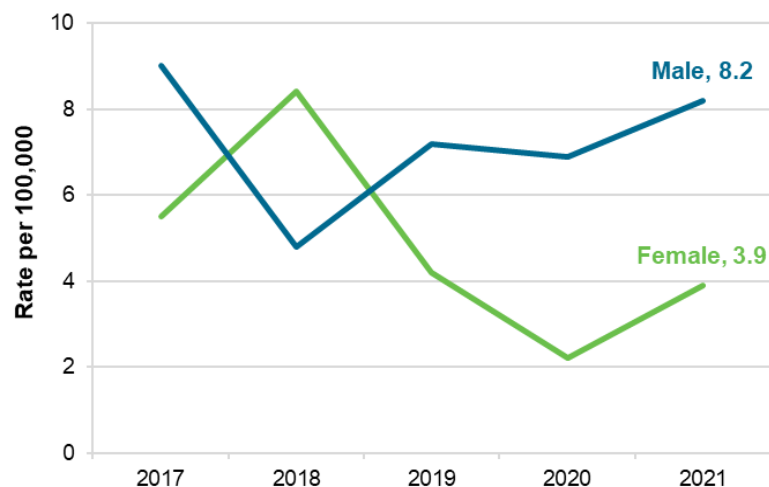
Following a downward trend for several years, the local rate of hospitalizations due to cannabis poisonings increased substantially to 6.1 per 100,000 in 2021 where there was only a marginal increase provincially.



Both males and females in the SWPH region experienced increased rates of hospitalizations in 2021 (reaching 8.2 per 100,000 versus 3.9, respectively). However, for males this is following a sharp increase in 2019 where females had been on a downward trend (**Figure 5**).

**Figure 5**

Male residents in the SWPH region had a hospitalization rate due to cannabis poisonings that was more than double the rate for female residents in 2021.



# Conclusion

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Cannabis use has increased across the SWPH region after the introduction of the *Cannabis Act* in 2018. However, it is important to note that prior to this, residents may not have felt comfortable enough to truthfully report using cannabis.

In 2019/2020, a higher proportion of SWPH residents reported being worried about certain aspects of their cannabis use (i.e. being out of control, missing a dose) or finding it difficult to stop using cannabis compared to Ontarians. There has also been an increase in some cannabis-related harms.

It will be important to continue to monitor local cannabis use and the associated harms over time.

# References

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1. Fischer, B., Russell, C., Sabioni, P., van den Brink, W., Le Foll, B., Hall, W., Rehm, J. & Room, R. (2017). Lower-Risk Cannabis Use Guidelines (LRCUG): A Comprehensive Update of Evidence and Recommendations. *American Journal of Public Health*, 107(8). DOI: 10.2105/AJPH.2017.303818.
2. Government of Canada. Cannabis Act. October 2018. Accessed on 27 May 2024. Available from: <https://laws-lois.justice.gc.ca/eng/acts/C-24.5/>
3. Statistics Canada. Using the severity of dependence scale to examine cannabis consumers with impaired control in Canada. 21 June 2023. Available from: <https://www150.statcan.gc.ca/n1/pub/82-003-x/2023006/article/00001-eng.htm>

# Data sources

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1. Canadian Community Health Survey (2015-2016, 2017-2018, 2019-2020), Statistics Canada, Share Files, Ontario; MOHLTC.
2. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: cannabis harms snapshot: indicator title in sentence case [Internet]. Toronto, ON: King's Printer for Ontario; 2017-2021 [modified 2024 Apr 08; cited 2024 Jun 07]. Available from: <https://www.publichealthontario.ca/en/data-and-analysis/substance-use/cannabis-harms>

# Appendix A

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## **ED visits for cannabis related poisonings (all ages)**

- Unscheduled ED visits only
- Excludes suspect/query diagnosis
- 4-digit All Dx ICD code
  - T40.7 (poisoning by narcotics and psychodysleptics, cannabis)

## **Hospitalizations for cannabis related poisonings (all ages)**

- Acute care facilities only
- Excludes suspect/query diagnosis
- 4-digit All Dx ICD code = T40.7



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