



# Adult Substance Use & Harms in the SWPH Region

Alcohol

Health Status Report  
Southwestern Public Health  
July 2024

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#### **How to cite this document:**

Santos J. Adult substance use & harms in the SWPH region: alcohol. Woodstock, ON: Southwestern Public Health; 2024.

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# Summary

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The proportion of people in the Southwestern Public Health (SWPH) region who reported consuming 7 or more alcoholic drinks in the last week has been decreasing over time. However, as of 2019/2020, there has been little to no change among female residents. In 2021, female residents in the SWPH region also had a steep increase in the rate of mortality due to alcohol (with or without drug involvement).

Although the proportion of SWPH residents reporting risky drinking has decreased over time, more people are reporting being current alcohol drinkers.

This indicates that locally, there is an increasing number of residents who are at risk of health problems and premature death due to alcohol consumption.

# Substance Use & Harms Among Adults

## Alcohol use

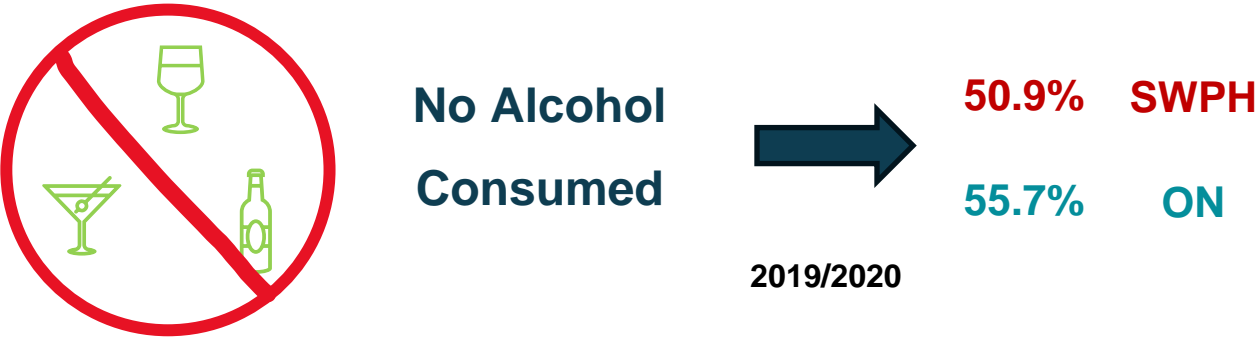
### Canada’s guidance on alcohol and health

Alcohol consumption is one of the four most common modifiable and preventable risk factors for non-communicable diseases and is the sixth most common cause of disability and death in Canada.<sup>1</sup>

The updated guidance on alcohol, released in 2023, is intended to reduce the health risks resulting from alcohol use by recommending that individuals living in Canada reduce their alcohol use. The guidelines categorize risk into four groupings, similar to the previous recommendations that it replaces. Essentially, with every increase in alcohol intake, the risk of various health conditions also increases. The guidelines state that the only safe amount of alcohol, associated with no risk, is no alcohol.<sup>2</sup>

### Abstained from alcohol in the last 7 days (0 alcoholic drinks) – No risk

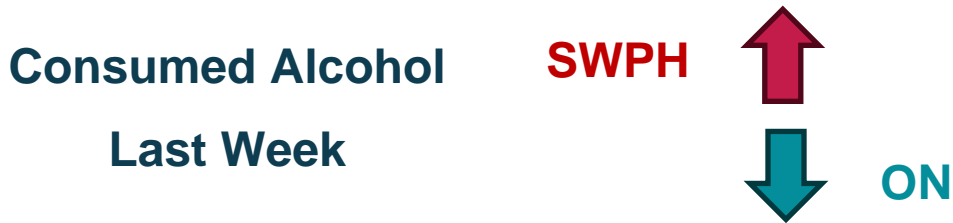
Since 2015/2016, there has been little change in the proportion of SWPH residents who drank alcohol in the last 12 months but who report not having any in the last week. This was 51% of respondents in the SWPH region and which was lower than the rest of the province (**Figure 1**).



### Drank alcohol in the last 7 days (1+ alcoholic drinks)

Residents who report having at least one drink in the last week are considered to have exceeded Canada’s guidance on alcohol and can be defined as current users. In 2019/2020, the proportion of SWPH residents who drank any alcohol in the last week was 60.3% compared

to 57.0% in 2015/2016. Although the difference over time for Ontario was also marginal, it is decreasing year over year rather than increasing, indicating that fewer residents are consuming any amount of alcohol in the last week (62.1% in 2015/2016 to 58.3% in 2019/2020).



Historically, male residents in the SWPH region report consuming alcohol in the last week more often, compared to females. Male residents across all age groups had increases in any alcohol consumption in the last 7 days of about 7% between 2015/2016 and 2019/2020 (not shown).

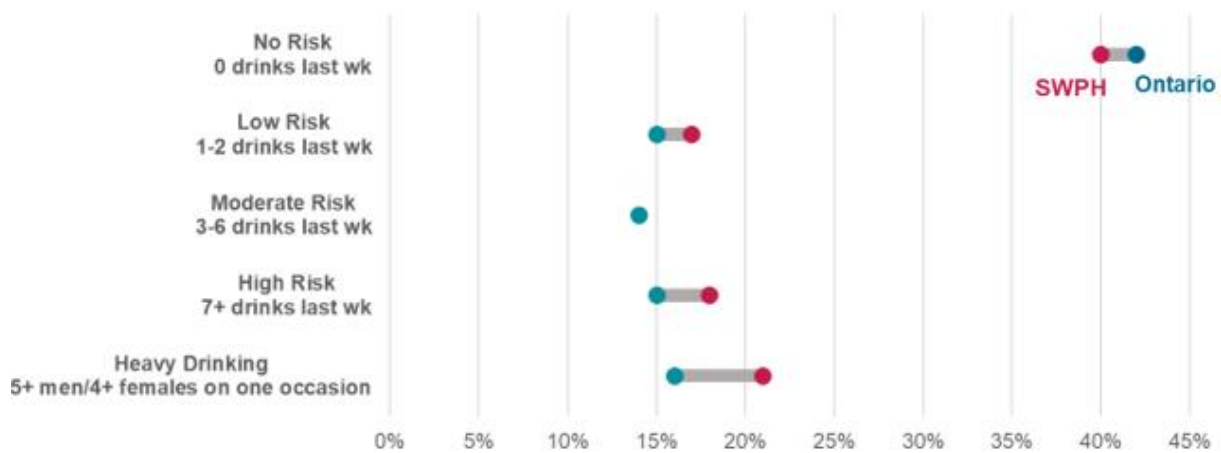
When it came to female residents, those between the ages of 19 and 44 reported having consumed at least one drink in the last week more often than females in other age groups and also had the largest increase over time of approximately 10%.

**Low risk (1 to 2 drinks), moderate risk (3 to 6), high risk (7+) drinking in the last 7 days**

In 2019/2020, SWPH residents reported having 1 to 2 drinks (low risk) and 7 or more drinks (increasingly high risk) in the last week more often when compared to Ontarians. (Figure 1).

**Figure 1**

**In 2019/2020, more SWPH residents reported high-risk and heavy drinking compared to Ontario residents.**



## Drank 7+ alcoholic drinks in the last week – High risk

Residents who reported having 7 or more drinks in the last week were categorized as “increasingly” high risk because every additional drink beyond 7 puts them at a greater risk of health problems.<sup>1</sup>

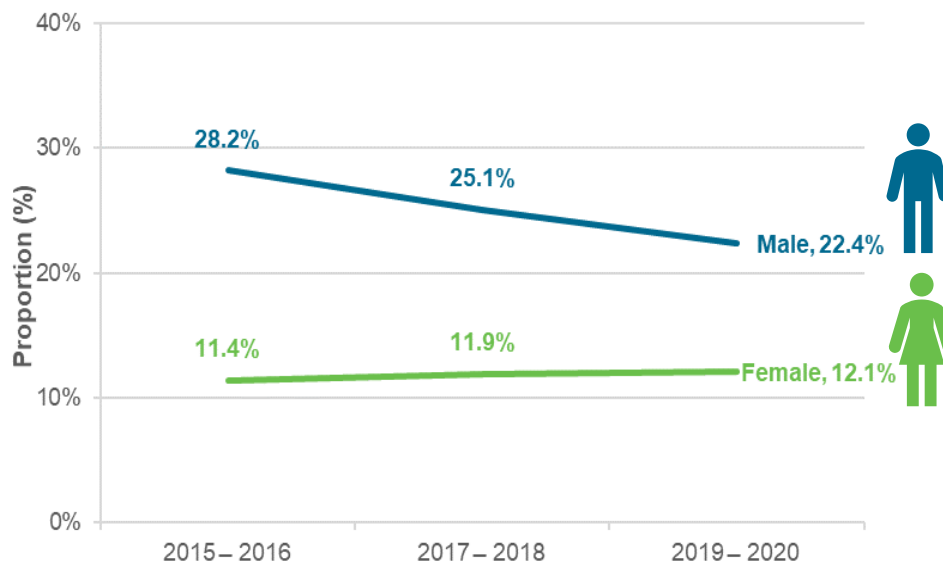
In 2019/2020, a higher proportion of SWPH residents reported having 7+ drinks in the last week (17.8%) compared to Ontario residents (14.9%) (**Figure 1**). However, the proportion of residents at increasingly high risk, both locally and provincially, decreased by approximately 3.0% over time since 2015/2016 (not shown).

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

The proportion of increasingly high risk drinking among male residents has decreased marginally over time between 2015 and 2020 while the proportion among female residents has remained relatively unchanged (**Figure 2**). The difference between male and female residents has also decreased over time, with males reporting a proportion of high risk drinking 10.3% higher than females in 2019/2020; compared to 16.8% in 2015/2016.

**Figure 2**

**The proportion of female SWPH residents who reported high risk drinking has remained relatively unchanged over time, yet it decreased among males.**

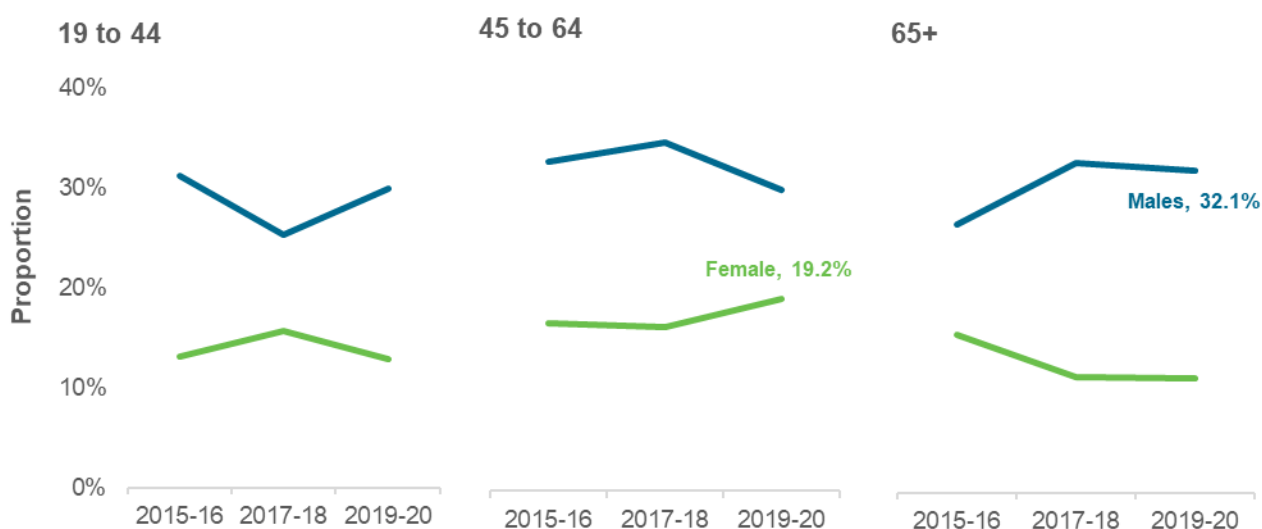


Of note, the local increase in current drinkers indicates that the number of residents in the SWPH region that are at risk for health problems continues to increase even though not all are reporting a high number of alcoholic beverages consumed on a single occasion or over the last week.

Females between the ages of 45 and 64 and males over the age of 65 were the subgroups that stood out the most among SWPH residents. Both of these subgroups reported higher proportions of increasingly high risk drinking in both of the most recent CCHS cycles (2017/2018 and 2019/2020) compared to 2015/2016. Aside from males between the ages of 19 and 44, who also reported an increase in 2019/2020 (25.3% up to 29.9%), all other subgroups saw decreases (Figure 3).

**Figure 3**

**Female residents between 45 and 64 reported more high risk drinking over time compared to the other age groups of females and male residents.**



**Heavy drinking in the last week (5+ for men or 4+ for women alcoholic drinks on one occasion)**

Heavy drinking is defined by the Canadian Institute for Health Information (CIHI) as men who consume 5 or more drinks or women who consume 4 or more drinks on a single occasion at least once a month in the past year.<sup>2</sup>

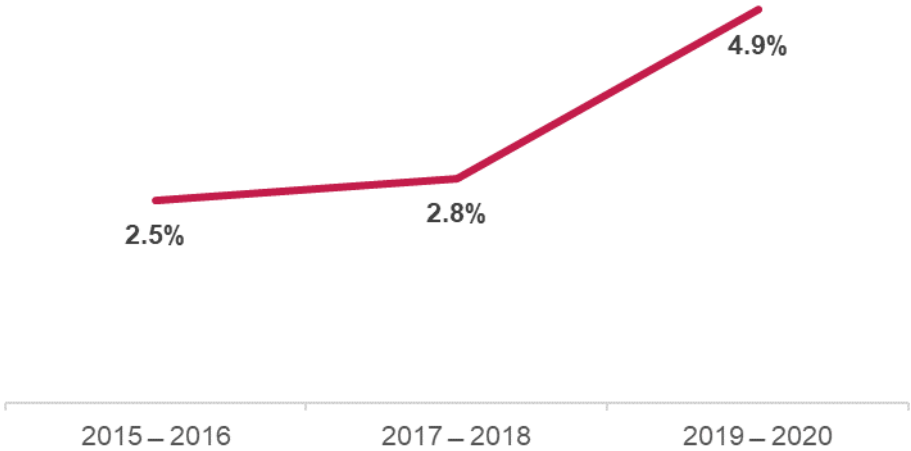


Heavy drinking has remained relatively consistent at approximately 20% in the SWPH region since 2015/2016. This was higher compared to Ontario residents, 15% of whom reported heavy drinking during the same period.

Unlike the local proportion, the provincial proportion decreased over time (not shown). As a result, the percent difference between the local and provincial proportions has nearly doubled between 2015/2016 and 2019/2020 (**Figure 4**).

**Figure 4**

**The difference between the proportion of residents reporting heavy drinking in the SWPH region and Ontario has grown larger over time, as heavy drinking increases in SWPH and decreases across Ontario.**

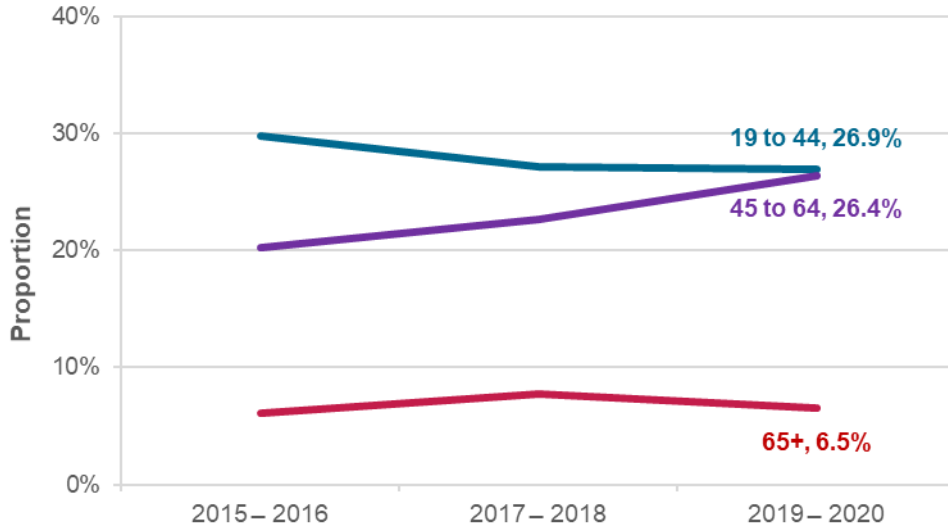


Similar to high risk drinking, male residents in the SWPH region reported proportions of heavy drinking that were approximately 7% higher compared to female residents each year.

Although heavy drinking has decreased overall, SWPH residents between the ages of 45 and 64 years reported more heavy drinking, increasing by nearly 10% between 2015 and 2020. By 2019/2020, residents in this subgroup were reporting nearly as much heavy drinking as residents between the ages of 19- and 44 years (**Figure 5**).

**Figure 5**

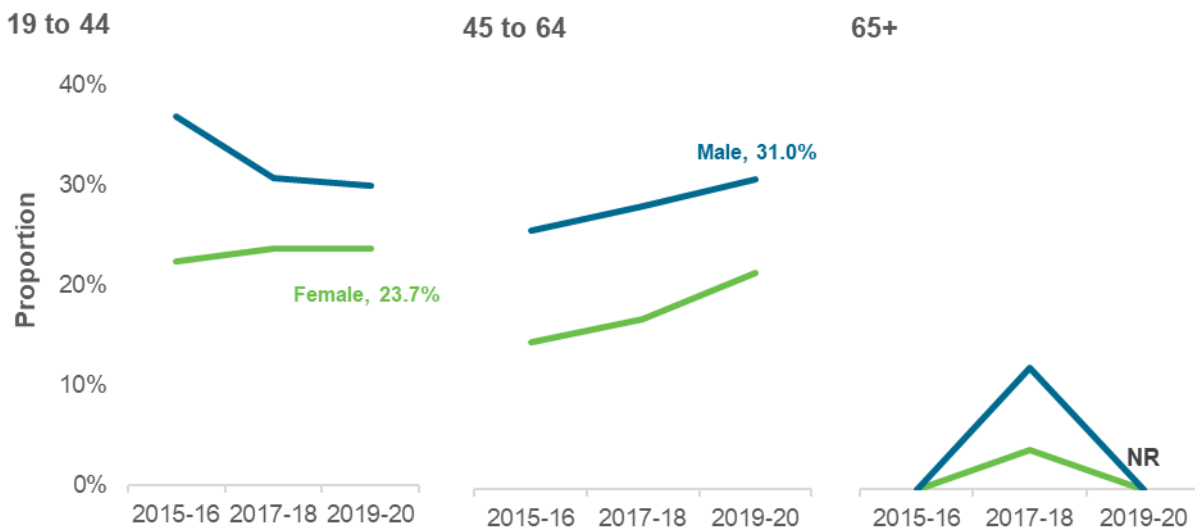
**Heavy drinking increased among SWPH residents between the ages of 45 and 64 while decreasing in residents in other age groups.**



Females aged 45 to 64 years, reported a slightly steeper increase (7%) over time compared to males (5%) of the same age (**Figure 6**).

**Figure 6**

**Heavy drinking among residents between the ages of 45 and 64 continues to increase for both male and female residents while other age groups decrease.**



NR= not reportable

# Alcohol-related harms

## Emergency department (ED) visits, Hospitalizations, & Mortality

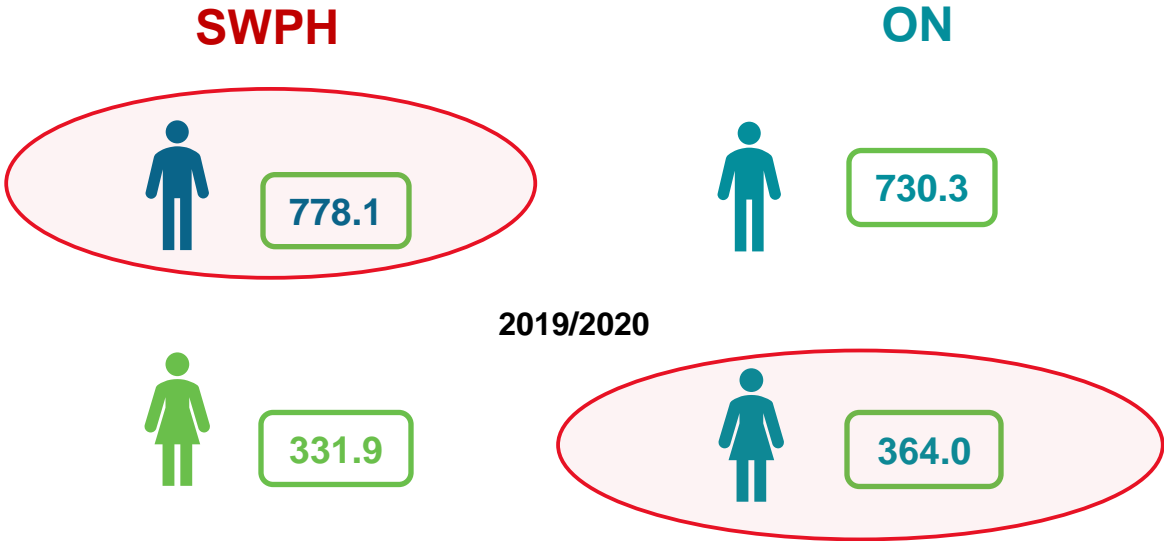
### Emergency department (ED) visits for conditions entirely attributable to alcohol

Overall, the local rate of emergency department (ED) visits per 100,000 population for conditions entirely attributable to alcohol (see **Appendix A**) among residents 15 and over has remained relatively consistent over time. As of 2021, the rate was 554.2 visits per 100,000 compared to 543.6 visits per 100,000 across Ontario (not shown).

However, the rate among males in the SWPH region increased over time, going from 706.2 visits per 100,000 in 2017 to 778.1 visits per 100,000 in 2021. This was higher in comparison to males across Ontario (**Figure 7**).

**Figure 7**

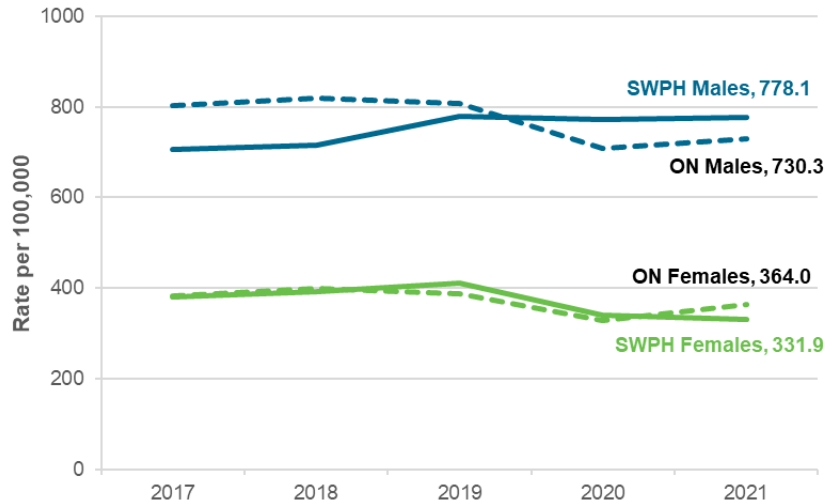
**In 2019/2020, males in the SWPH region visited the ED for alcohol-related conditions more than males in Ontario.**



The rate among local females increased until 2019, reaching a peak of 411.6 per 100,000. It then dropped below the provincial rate in 2021, decreasing to 331.9 visits per 100,000. This trend is similar to what is reported among females across Ontario, but females provincially saw an increase in 2021 (**Figure 8**).

**Figure 8**

The rate of alcohol-related ED visits among male residents in the SWPH region surpassed the provincial rate in 2020.

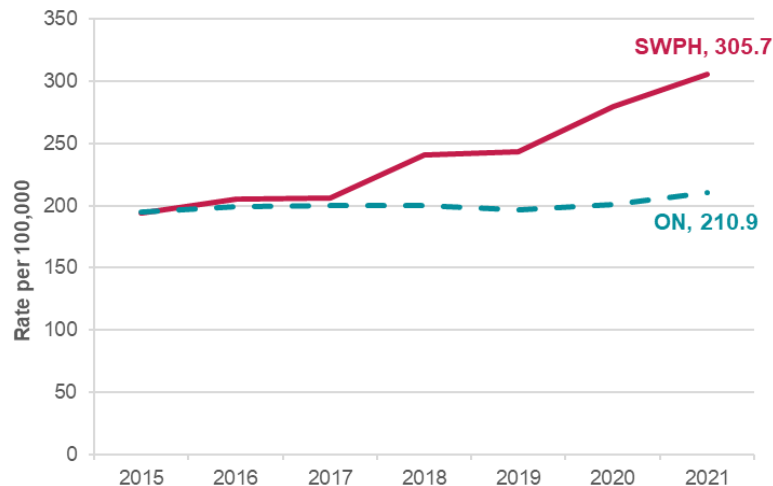


### Hospitalizations for conditions entirely attributable to alcohol

Overall, the local rate of hospitalizations per 100,000 population for conditions entirely caused by alcohol has increased over time (see **Appendix A**), while the rate across Ontario has increased only marginally. As of 2021, the rate per 100,000 in SWPH was 1.4x higher than the rate across Ontario (305.7 per 100,000 vs. 219.0 per 100,000, respectively). This was the largest difference between the local and provincial hospitalization rate to date (**Figure 9**).

**Figure 9**

The SWPH alcohol-related hospitalization rate has remained higher than Ontario since 2017 and is increasing over time while the rate remains consistent over time in Ontario.

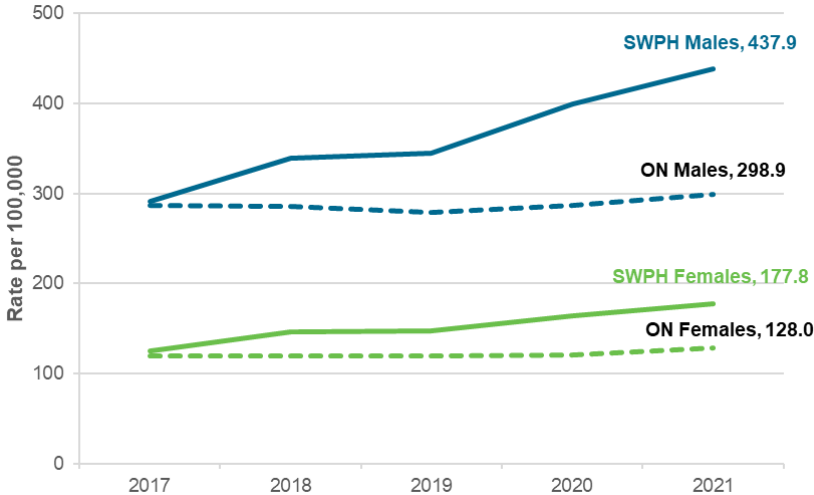


Both males and females in the SWPH region had increased rates of hospitalizations, with males increasing at a faster rate compared to females. In 2019, the hospitalization rate among male residents was 344.2 per 100,000, and then it increased by over 25%, reaching 437.9 hospitalizations per 100,000 in 2021. However, this same rapid increase was not evident among males in Ontario, whose alcohol-related hospitalization rate only increased marginally over time (Figure 10).

The hospitalization rate among SWPH female residents increased by only 20% between 2019 and 2021 (147.2 vs. 177.8 per 100,000, respectively). This trend was comparable to females across Ontario (Figure 10).

Figure 10

Since 2019, the rate of hospitalizations for conditions entirely caused by alcohol has increased more steeply for males in the SWPH region compared to females.



**Mortality from alcohol (with and without drug involvement)**

Locally, the rate of deaths due to alcohol (with and without drug involvement) has been on an upward trajectory between 2019 and 2021, more than doubling to reach 3.4 deaths per 100,000 in 2021.

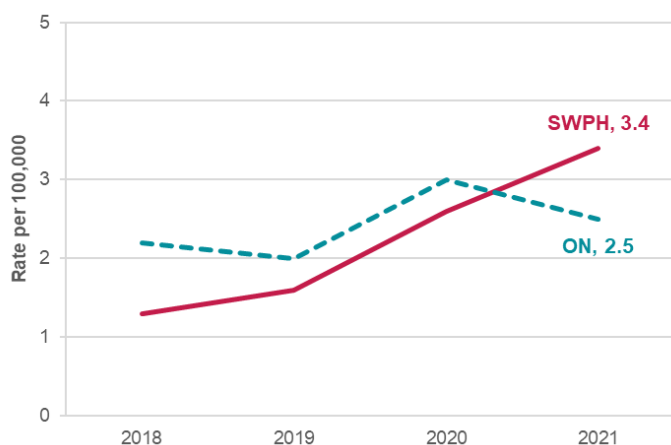
Provincially, the rate decreased to 2.5 deaths per 100,000 in 2021; however, this was still higher than pre-pandemic, where the rate was 2.0 deaths per 100,000 (Figure 11).

In comparison to males, local female residents experienced a sharper increase in alcohol-related mortality from 2019 onwards, reaching 3.3 deaths per 100,000 in 2021. This was nearly as high as the male residents (3.5 deaths per 100,000), who historically had a higher mortality rate (**Figure 12**).

The trend among local female residents was unique compared to females across Ontario, who did not increase at such a high rate (1.3 deaths per 100,000 in 2018 to 1.6 deaths per 100,000 in 2021) (**Figure 12**).

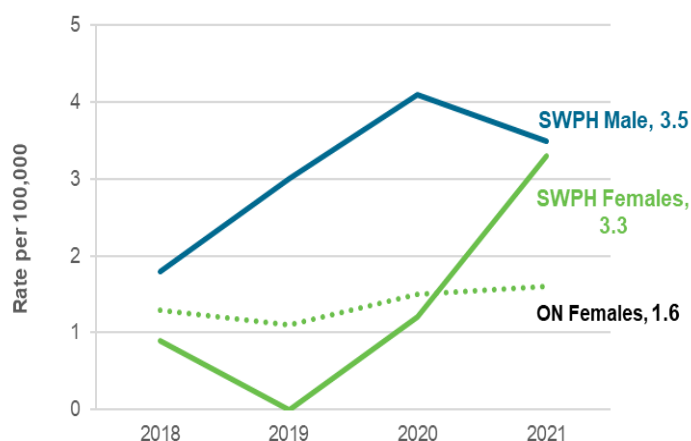
**Figure 11**

**The rate of alcohol-related mortality in SWPH doubled between 2019 and 2021, where ON decreased in 2021.**



**Figure 12**

**The rate of alcohol-related mortality among females in SWPH has increased over time to nearly match males in 2021.**



## Conclusion

Although the proportion of SWPH residents reporting risky drinking has decreased over time, more people are reporting being current alcohol drinkers. This indicates that locally, there is an increasing number of residents who are at risk of health problems and premature death due to alcohol consumption.

# References

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1. Global burden of 87 risk factors in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet* (London, England). 2020;396(10258):1223-49.
2. Canadian Centre on Substance Abuse. Canada's Guidance on Alcohol and Health. 2023. Available from: <https://www.ccsa.ca/canadas-guidance-alcohol-and-health>
3. Canadian Institute for Information. Indicator Library. Heavy Drinking. Accessed May 14, 2024. Available from: <https://www.cihi.ca/en/indicators/heavy-drinking>

# 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: alcohol use snapshot: [Internet]. Toronto, ON: King's Printer for Ontario; 2015-2020 [modified 2023 May; cited 2024 May 23]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Substance-Use/Alcohol-Use>
3. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: alcohol harms. Toronto, ON: King's Printer for Ontario; 2018-2021 [modified 2023 Oct 30; cited 2024 May 23]. Available from: <https://www.publichealthontario.ca/en/Data-and-Analysis/Substance-Use/Alcohol-Harms>

# Appendix A

## Technical appendix – ICD-10 codes

### ED visits for conditions entirely caused by alcohol (15+ years old)

- Unscheduled ED visits only
- 3-digit All Dx ICD code
  - F10 (mental and behavioural disorders due to use of alcohol. i.e. acute intoxication, harmful use, withdrawal),
  - K70 (alcoholic liver disease),
  - T51 (toxic effect of alcohol),
  - X45 (accidental poisoning by and exposure to alcohol),
  - X65 (intentional self-poisoning by and exposure to alcohol),
  - Y15 (poisoning by and exposure to alcohol, undetermined intent)
- 4-digit All Dx ICD code
  - E24.4 (alcohol-induced pseudo-Cushing syndrome),
  - G31.2 (degeneration of nervous system due to alcohol),
  - G62.1 (alcoholic polyneuropathy),
  - G72.1 (alcoholic myopathy),
  - I42.6 (alcoholic cardiomyopathy),
  - K29.2 (alcoholic gastritis),
  - K85.2 (alcohol-induced acute pancreatitis),
  - K86.0 (alcohol-induced chronic pancreatitis),
  - O35.4 (maternal care for (suspected) damage to fetus from alcohol),
  - Q86.0 (fetal alcohol syndrome (dysmorphic)),
  - R78.0 (finding of alcohol in blood)

### Hospitalizations for conditions entirely caused by alcohol (15+ years old)

- Acute care facilities only
- 3-digit All Dx ICD code = F10, K70, T51, X45, X65, Y15
- 4-digit All Dx ICD code = E24.4, G31.2, G62.1, G72.1, I42.6, K29.2, K85.2, K86.0, O35.4, Q86.0, R78.0
- DSM-IV Axis I Primary or DSM-IV Axis I Sec Dx or DSM-IV Axis I Tert Dx or DSM-IV Axis I Quat Dx or DSM-IV Axis II Other Primary Dx or DSM-IV Axis II Other Sec Dx = 291.0, 291.1, 291.2, 291.3, 291.5, 291.81, 291.82, 291.89, 291.9, 303.00, 303.90, 305.00
- DSM-5 Psychiatric Dx A or DSM-5 Psychiatric Dx B or DSM-5 Psychiatric Dx C or DSM-5 Psychiatric Dx D or DSM-5 Psychiatric Dx E or DSM-5 Psychiatric Dx F = 291.0, 291.1, 291.2, 291.81, 291.82, 291.89, 291.9, 303.00, 303.90, 305.00, F10.0, F10.1, F10.2, F10.3, F10.4, F10.5, F10.6, F10.7, F10.8, F10.9





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