2020

CAMH Monitor *eReport* 2020:
Substance Use, Mental Health and Well-Being Among Ontario Adults

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The 2020 CAMH MONITOR eREPORT

Executive Summary

The Centre for Addiction and Mental Health's *CAMH Monitor* is the longest ongoing population survey of adult substance use in Canada. The study, which spans **43 years**, is based on 34 cross-sectional probability surveys, conducted between 1977 and 2019. The 2020 cycle of the *CAMH Monitor* is based on quota sampling and a web panel survey with **3,033** adults aged 18 and older across Ontario. This summary presents the estimates of substance use and related harms, as well as mental health and well-being indicators among Ontario adults in 2019 (pre-COVID-19) and 2020 (during COVID-19). For comparison purposes, adjusted estimates are presented within the table and throughout.

Substance Use, Mental Health & Well-Being Indicators, 2019/2020 CAMH Monitor

Indicator	2019 (adjusted[1])			2020 (adjusted[1])		
	Tot %	M %	W %	Total %	M %	W %
Alcohol						
Percentage drinking alcohol - past 12 months	**81.5**	82.7	80.5	**79.1**	80.0	78.5
Percentage drinking daily - total sample	**5.9**	7.6	4.2	**9.4**[a]	12.0[b]	7.2[c]
- among drinkers	**7.4**	9.4	5.5	**11.7**[a]	14.5[b]	9.2[c]
Average number of drinks consumed weekly						
- among drinkers (mean)	**4.5**	5.9	3.3	**6.6**[a]	8.6[b]	4.8[c]
Percentage consuming 5 or more drinks on a single occasion weekly (weekly binge drinking)						
- total sample	**5.8**	8.4	3.5	**11.5**[a]	15.9[b]	7.6[c]
- among drinkers	**7**	10.1	4.3	**14.6**[a]	20.0[b]	9.5[c]
Percentage reporting hazardous or harmful drinking (AUDIT 8+) - total sample	**13**	18	8.4	**21.4**[a]	27.3[b]	16.2[c]
- among drinkers	**15.6**	21.5	10.1	**27.5**[a]	35.1[b]	20.5[c]
Percentage reporting symptoms of alcohol dependence (based on the AUDIT) - total sample	**7.1**	9.1	5.3	**14.2**[a]	17.3[b]	11.2[c]
Tobacco						
Percentage currently smoking cigarettes	**15.2**	18.6	12	**18.6**[a]	20.6	16.4[c]
Daily smoking	**11**	12.8	9.1	**13.8**[a]	14.8	12.7[c]
Average number of cigarettes smoked daily- among smokers (mean)	**10.5**	10.3	9.3	**9.6**	8.6	9.7
Percentage of daily smokers reporting high nicotine dependence - among daily smokers	**12.9**	15.6	5.9	**8.4**	5.1[b]	10.1
Percentage reporting electronic cigarette use - past 12 months	**12.3**	13.5	11.2	**15.5**[a]	17.7[b]	13.4
Cannabis						
Percentage using cannabis in lifetime	**54.3**	58.5	50.4	**52.1**	53.0[b]	51.2
Percentage using cannabis - past 12 months	**25.5**	30.8	20.5	**31.9**[a]	34.0	29.7

Percentage reporting moderate to high risk of cannabis problems (ASSIST-CIS 4+)						
- total sample	**13**	17.6	8.6	**17.2[a]**	19.6	14.5[c]
- among users	**53.2**	57.3	46.4	**56.2**	60.7	50.3
Percentage using cannabis for medical purposes - past 12 months	**10.2**	12.3	8.2	**13.6[a]**	12.9	13.9[c]
Cocaine						
Percentage using cocaine in lifetime	**11**	14.5	7.8	**14.8[a]**	17.4	12.4[c]
Percentage using cocaine - past 12 months	**2**	2.6	1.4	**3.5[a]**	4.3	2.7
Prescription Opioid Pain Relievers						
Percentage reporting any use (medical or nonmedical) of prescription opioid pain relievers - past 12 months	**23.5**	21.9	25.2	**33.5[a]**	32.3[b]	34.7[c]
Percentage using prescription opioid pain relievers for nonmedical purposes - past 12 months	**5.3**	5	5.6	**17.9[a]**	19.5[b]	16.4[c]
Driving[2]						
Percentage of drivers who drove after drinking two or more drinks in the previous hour - past 12 months	**3.7**	5.2	2.4	**4.7**	7.1	2.1
Percentage of drivers who drove after using cannabis in the previous hour - past 12 months	**3.1**	4.4	1.7	**2.7**	3.4	1.9
Percentage of drivers who reported texting while driving - past 12 months	**28.7**	29	27.9	**25**	27.5	22.7[c]
Mental Health						
Percentage reporting moderate to serious psychological distress during the past 30 days (K6/8+)	**16.9**	14.6	19.3	**34.9[a]**	31.0[b]	38.8[c]
Percentage reporting serious psychological distress during the past 30 days (K6/13+)	**6.2**	4.3	8.2	**14.4[a]**	12.0[b]	16.7[c]
Percentage using prescribed antianxiety medication - past 12 months	**13.7**	10.4	16.8	**19.5[a]**	16.0[b]	22.6[c]
Percentage using prescribed antidepressant medication - past 12 months	**11.6**	8.3	14.4	**16.3[a]**	12.2[b]	20.1[c]
Percentage reporting fair or poor mental health in general	**12.4**	10.6	13.9	**26.7[a]**	21.4[b]	31.5[c]
Percentage reporting frequent mental distress days (14+) during the past 30 days	**12.8**	8.9	16.6	**17.3**	12.9	21.6
Percentage reporting suicidal ideation - past 12 months	**3.8**	2.5	5	**7.7[a]**	7.8[b]	7.6
Physical Health						
Percentage reporting fair or poor health in general	**12.4**	13.8	10.9	**17.6[a]**	17.7[b]	17.6[c]
Percentage reporting frequent physically unhealthy days (14+) during the past 30 days	**11.7**	10.5	12.7	**12.9**	10.9	14.9

Notes: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. [1]The 2019 and 2020 total estimates were adjusted for sex, age, education, region and immigration status. Sex-stratified estimates were adjusted for age, education, region and immigration status. [a] Significant difference between 2019 and 2020 among total sample; [b] Significant difference between 2019 and 2020 among men; [c] Significant difference between 2019 and 2020 among women at p<0.05; [2] estimates are based on licensed drivers.

Overall changes between 2019 and 2020

Overall, the 2020 adjusted estimates were significantly higher than the 2019 adjusted estimates for most indicators including:

- daily drinking
- average number of drinks consumed weekly
- weekly binge drinking
- drinking hazardously or harmfully
- symptoms of alcohol dependence
- current cigarette smoking
- daily smoking
- e-cigarette use in the past year
- cannabis use in the past year
- cannabis use problems
- cannabis use for medical purposes in the past year
- cocaine use during lifetime
- cocaine use in the past year
- any use of prescription opioids in the past year
- nonmedical use of prescription opioids in the past year
- moderate to serious psychological distress
- serious psychological distress
- use of antianxiety medication in the past year
- use of antidepressants in the past year
- fair or poor mental health
- suicidal ideation, and
- fair or poor general health

Subgroup Differences between 2019 and 2020

Among both men and women, 2020 estimates were significantly higher than 2019 estimates for the following:

- daily drinking
- average number of drinks consumed weekly
- weekly binge drinking
- drinking hazardously or harmfully
- symptoms of alcohol dependence
- any use of prescription opioids in the past year
- nonmedical use of prescription opioids in the past year
- moderate to serious psychological distress
- serious psychological distress
- use of antianxiety medication in the past year
- use of antidepressants in the past year
- fair or poor mental health
- fair or poor general health

There were also some significant differences between 2019 and 2020 among men that were not evident among women, and vice versa. Specifically,

- **Men** displayed **higher** percentage estimates in 2020 compared to 2019 for reporting electronic cigarette use, and suicidal ideation, and **lower** percentages for high nicotine dependence and lifetime use of cannabis.

- **Women** displayed **higher** estimates in 2020 compared to 2019 for currently smoking cigarettes, daily smoking, past year cannabis use, moderate to high risk of cannabis problems, medical use of cannabis in the past year, use of cocaine during lifetime, and **lower** percentages in reporting texting while driving in the past year.

Age group differences were observed between 2019 and 2020 for most substance use and mental health concerns. Among **18 to 29** year olds, a significant decline was observed for drinking alcohol in the past year, and significant increases for reporting symptoms of alcohol dependence, reporting moderate to serious psychological distress, serious psychological distress, reporting their mental health as fair or poor, and suicidal ideation.

Among 30 years and older respondents, the percentage reporting substance use or mental health concerns was significantly higher in 2020 compared to 2019 for the following:

- daily drinking (except 65+ year olds)
- average number of drinks consumed weekly
- weekly binge drinking,
- drinking hazardously or harmfully
- symptoms of alcohol dependence
- e-cigarette use in the past year (only among 40-49 and 50-64)
- cannabis use in the past year
- moderate to serious psychological distress
- serious psychological distress (except 30 to 39 year olds)
- past year use of antianxiety medication use (only among 50 to 64 year olds)
- past year use of antidepressants (only among 50 to 64, and 65+ year olds)
- fair or poor mental health
- suicidal ideation (only among 40 to 49 years old), and
- fair or poor general health (except 65+ year olds).

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1. INTRODUCTION

Population surveillance studies, such as the *CAMH Monitor*, describe the shifting pattern, character and social demography of substance use behaviour and mental health status in the general population. Knowledge derived from such surveys is essential to inform prevention programming, health and social planning and policy making, and any assessment of current and future treatment needs.

The ability of a given drug—be it alcohol, tobacco, medicinal or illicit substances—to cause harms to its users, their families, friends, and communities depends on at least three fundamental factors: (1) the **prevalence of use** in the population—what percentage use the substance; (2) its **dependence liability**—the ability of the drug to produce dependence; and (3) its **hazard liability**—the ability of the drug to produce lethal and other adverse consequences (Brands, Sproule, & Marshman, 1998). Thus, drug use prevalence in the population is only one factor in determining the harm potential of a given substance.

Similarly, population surveillance of mental health indicators is imperative for informed health planning and policy and for any informed treatment response. Screening instruments assessing compromised mental health can assist in identifying not only the prevalence of impaired mental and emotional functioning, but also the related determinants and risk factors (Tsuang & Tohen, 2002). These two domains—addiction and mental health concerns—have strong connections, and the ability to investigate their co-occurrence, risk profiles, and changes over time further their public health utility.

The *CAMH Monitor* (CM) is a substance use and mental health population survey of Ontario adults aged 18 and older. The main purpose of this report is 1) to examine the impact of COVID-19 on mental health concerns and substance use — alcohol, tobacco, cannabis and other drugs and

their attributable harms–, and indicators of health and mental health concerns—self-rated poor health, psychological distress, use of antianxiety and antidepressant medication and mental health-related quality of life indicators—as well as impaired and distracted driving among Ontario adults, 2) to compare the mental health and drug use outcomes between the CM2020 estimates (during the pandemic) and the recent pre-pandemic survey (2019).

The 2019 cycle of the *CAMH Monitor* is based on telephone interviews with **2,827** adults aged 18 and older across Ontario. While the 2020 cycle of the *CAMH Monitor* is based on web-based quota sampling survey with **3,033** adults aged 18 and older across Ontario. In the present report, we examine changes during the COVID-19 pandemic by comparing the 2019 and 2020 estimates[1] of substance use and related harms, as well as mental health and well-being indicators among Ontario adults.

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[1] Standardized estimates of mental health and other health measures using marginal standardization method.

2. METHOD

2.1 Sampling Designs

The 2019 CM survey employed a stratified (by six equally-allocated regions) two-stage (telephone number-respondents) dual-frame (list-assisted and cell-phone) random digit dialing (RDD) rolling quarterly probability sampling procedure. The detail description of the CM 2019 design is available in CAMH *Monitor* 2019 report.

In 2020, the CAMH *Monitor* employed non-probability samples. Although selecting a probability sample (e.g. RDD) has been the standard for decades for making inferences from a sample to a finite population, using data collected without a defined sampling frame (i.e. non-probability sampling) is becoming increasingly popular as large amounts of data can be collected faster and with fewer resources relative to most probability-based designs. Online panels, which are made up of volunteers who receive some sort of compensation to complete surveys, provide such non-probability samples.

Selection of online respondents

In order to obtain a sample of adults to complete the CAMH Monitor online, the web panel members of Leger Opinion were invited to participate the survey. LEO, short for Leger Opinion, is the largest proprietary panel in Canada. Leger Opinion recruits panel members largely through random selection using traditional telephone and cell phone methodologies through their own call centre.[2]

First, given that Leger Opinion can determine where panel members live, respondents were selected based on forward sortation area (i.e. the first three characters of their postal code) so that completed surveys could be distributed as evenly

as possible across the six regions. The counties and FSAs included in each of the six regions, as well as the number of online surveys by panel and region per cycle are detailed in appendix (Appendix Table A1-2).

Because non-probability sampling involves recruiting participants in a non-random fashion, there is the potential for selection bias, limiting the generalizability of the study findings. That is, those who participate in the study may share attributes that may be systematically different from the attributes of those who don't participate. For example, online panel respondents tend to be somewhat more experienced and comfortable in using computer technology. As noted by Fahimi and colleagues, these differences may or may not be relevant and affect the responses to survey questions (Mansour, Frances & Randall, 2018). In fact, pre-screened panel respondents who wish to regularly complete surveys may also be more committed to provide accurate answers to surveys which improves data quality.[3] Although selection bias cannot be completely eliminated when using non-probability sampling, it can be minimized by matching those who complete the survey to the characteristics of the population. To do this, quotas by were embedded within the questionnaire so that those who completed the survey approximated the distributions shown in Table 2.1.

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[2] https://leger360.com/wp-content/uploads/2019/12/Panel-book-LEO-EN.pdf

[3] https://www.qualtrics.com/experience-management/research/research-panels-samples/

Table 2.1: CAMH Monitor Quotas for the Panel Sample

AGE	
18-29 years of age	17%
30-44 years of age	29%
45-64 years of age	35%
65+ years of age	19%
	100%
SEX	
Male	50%
Female	50%
	100%
EDUCATION	
High school or less	20%
Some post-secondary	40%
Completed diploma/degree	40%
	100%
BORN IN CANADA	
Yes	85%
No	15%
	100%

Once a panel member agreed to participate (see Appendix C) and entered the survey, the first questions encountered were designed as 'screening' questions:

1. In what COUNTY or regional municipality do you live?
2. Are you male or female?
3. Please indicate what age group you fall into?
4. What is the highest level of education you have completed?
5. Were you born in Canada?

The responses to these questions were used to determine if that 'quota' had been filled or if more completed surveys were needed for that particular demographic. If for example, a 20 year old female living in Metro Toronto began the survey, but we had met the target for that particular demographic, she would receive the message 'Thank you for participating in the survey'.

The final distribution of online surveys completed by Region, Panel, Age, Sex, Education and Born in Canada is shown in Appendix Table A-2.

2.2. Data collection

Questionnaire Pretesting and Interviewing

Most of the questions used in the 2020 web panel survey had been used in previous versions of the CAMH Monitor. However, there were several new questions designed for the online survey to address the effect of the pandemic on Ontario residents. Overall, the average length of the survey was **14.1 minutes (13.2 minutes for Panel A and 14.5 for Panel B).** This mean survey time is much shorter than that of the telephone interview, which is common for online surveys especially those done among panel members who are very accustomed to the online survey format.

Participation

The use of the term "response rate" in the context of a non-probability panel survey can be misleading. Although the number of people who join the panel is usually known, the number of people who were exposed to the invitation, and the number of invitations to which they were exposed, are not known. The number of panel members invited to a particular survey, and the number who respond to the invitation and complete the survey, are known. This latter rate should not be referred to as a "response rate" because of the association of that term with probability samples. Following the AAPOR Task Force (2010) recommendation, the "participation rate," (defined as the number of respondents who have provided a usable response divided by the total number of initial personal invitations requesting participation) for the 2020 CAMH Monitor using a panel sample was **14%.** While **"the completion rate"** (defined as the number of respondents completed the survey divided by the estimated number of eligible respondents (invitation sent-quota full-screened) was **15.5%,** which is higher than commonly reported rates (10%) in online surveys (Baker, 2013).

2.3. Data Weighting

For many good reasons, most notably the control of precision, most sample surveys do not select respondents at a probability matching their representation in the population. Consequently, such data require sample or case weights attached to each respondent to ensure that their share of the sample equals their share of the population. The detailed description of the weights is available in the technical documents (Ialomiteanu, Elton-Marshall, Mann & Hamilton, 2020; Nigatu, Elton-Marshall, & Hamilton, 2021).

As in previous cycles, the final weights are the product of the household weights, region weights, and the age/gender weights. In this manner, the final weights take account of household size (for the panel sample, handled in effect by approaching individuals first rather than households first), regional population size, and age and gender population compositions. The use of the final weights assist in making the results more representative of the population with respect to these demographic characteristics. The final weight *samprhhagwgtall* sums to the sample (3,033) and *poprhhagwgtall* sums to the population (10,766,695).

2.4. Sample evaluation and characteristics of the CM2020 web sample

Although the CM2020 Monitor employed a non-probability sample, which may induce selection bias, it can still be minimized by matching those who complete the survey to the characteristics of the population. **Table 2.2** shows the weighted distribution (including post-stratification adjustments) of the CM2020 web sample compared to the 2016 Census. Note that these comparisons match closely because of the age by sex post-stratification adjustments applied to the selection weights (Appendix Table 3a-b). Additional demographic comparisons were available for marital status and region. There were significant differences between the Census and CM2020 figures only for marital status (data were available only for adults aged 20 and older). Compared to Ontario Census figures from 2016, the 2020 CM sample *overrepresented* those never married and *underrepresented* those widowed, divorced or separated. The sociodemographic characteristics of the CM2020 and CM2019 samples are provided in **Table 2.3.**

Table 2.2: Selected Demographic Characteristics: Post-adjusted Weighted CM2020 versus 2016 Census Figures, Ontario Population, Aged 18 and Older (or 20 and older)

	Unweighted (3,033)	CM2020[a] (*n*=3,033) (post-adjusted)				2016 Ontario Census (N= 10,766,695)
SEX						
Men	46.3	(46.2	**48.2**	50.1)		48.2
Women	53.7	(49.9	**51.8**	53.8)		51.8
AGE						
18–24	8.5	(9.8	**11.2**	12.7)		11.4
25–44	36.3	(30.4	**32.1**	33.9)		32.1
45–64	35.1	(33.8	**35.6**	37.5)		35.6
65+	20.1	(19.6	**21.1**	22.8)		20.9
REGION						
Toronto	16.7	(20.8	**21.1**	21.5)		21.8
Rest of Ontario	83.3	(78.5	**78.9**	79.2)		78.2
MARITAL STATUS (respondents aged 20 and older)						
Never married	25.8	(25.3	**27.0**	28.8)	*	22.8
Married/Living as married	61.1	(57.4	**59.3**	61.2)	*	61.6
Widowed/Separated/ Divorced	13.1	(12.4	**13.7**	15.1)	*	15.6

Notes: [a] CM data refer to: lower limit of 95% confidence interval, percentage estimate, and upper limit of 95% confidence interval; * indicates census figure is outside the bounds of the CM confidence interval.
Source: Statistics Canada. [On-line]. Available: http://www12.statcan.ca/english/census/index.cfm.

Table 2.3: Demographic characteristics of the CM 2019 phone and CM 2020 web sample

	Telephone (2019)			Web sample (2020)		
	No. Interviews	Unweighted % (N=2,827)	**Weighted % N= 10,766,695)**	No. Respondents	Unweighted % (N=3,033)	**Weighted % (N= 10,766,695)**
Gender						
Men	1211	42.8	48.2	1405	46.3	48.2
Women	1616	57.2	51.8	1628	53.7	51.8
Age						
18–29	410	14.5	20.9	529	17.5	18.8
30–39	259	9.2	13.9	584	19.3	17.3
40–49	330	11.7	14.8	506	16.7	16.0
50–64	740	26.2	27.7	795	26.2	26.5
65+	1071	37.9	21.9	607	20.2	21.1
Missing	17	0.6	0.7	11	0.4	0.3
Marital Status						
Married	1351	47.8	49.4	1430	47.2	45.9
Living with a partner	210	7.4	8.2	412	13.6	13.0
Widowed	336	11.9	5.5	104	3.4	3.7
Divorced	222	7.9	5.4	204	6.7	7.4
Separated	78	2.8	2.4	87	2.9	2.6
Never Married	606	21.4	28.3	777	25.6	26.8
Missing	24	0.9	0.8	19	0.6	0.7
Regional Strata						
Toronto	487	17.2	21.7	506	16.7	21.1
Central East	464	16.4	17.4	507	16.7	17.5
Central West	466	16.5	26.9	517	17.1	26.7
West	470	16.6	12.3	488	16.1	12.7
East	467	16.5	14.0	536	17.7	14.0
North	473	16.7	7.6	479	15.8	8.0
Location of Household						
Rural	593	21.0	17.7	370	12.2	10.0
Non-rural	2234	79.0	82.3	2663	87.8	90.0
Highest Education						
High school not completed	249	8.8	7.0	76	2.5	2.2
Completed high school	590	20.9	20.3	419	13.8	14.5
Some college or university	1025	36.3	35.9	536	17.7	17.8
Graduated university	944	33.4	36.2	2002	66.0	65.5
Missing	19	0.7	0.6	0	0	0

Note: The 2019 telephone sample was weighted for household size, region, age and sex. In contrast, the 2020 sample was from a web panel and thus the weights for 2020 did not include adjustments for household size because individuals were approached directly. The quota targets for some socio-demographic characteristics by region were applied as closely as possible in obtaining this sample. The final weight adjusts the sample to the region proportions and the population figures for each age group and gender.

	Telephone (2019)			Web sample (2020)		
	No. Interviews	Unweighted % (N=2,827)	**Weighted % (N= 10,766,695)**	No. Respondents	Unweighted % (N=3,033)	**Weighted % (N= 10,766,695)**
Language spoken at home						
English	2547	90.1	88.5	2758	90.9	90.9
French	60	2.1	1.5	60	2.0	1.5
Other	215	7.6	9.8	204	6.7	7.1
Missing	5	0.2	0.2	11	0.4	0.5
Telephone Interview Mode						
Home phone/ Landline	1840	65.1	64.1	-	-	-
Cell phone	987	34.9	35.9	-	-	-
Ethnicity/Race						
White	2349	83.1	78.3	2392	78.9	77.0
Asian	182	6.4	9.2	318	10.5	11.9
Black	68	2.4	3.2	65	2.1	2.4
Indigenous	30	1.1	1.0	43	1.4	1.0
Middle Eastern	36	1.3	1.6	42	1.4	1.4
Latin American	21	0.7	1.2	26	0.9	0.9
Other/Mixed	108	3.6	3.7	128	4.2	4.7
Missing	33	1.2	1.4	19	0.6	0.7
Immigrant Status						
Born outside Canada	613	21.7	24.1	435	14.3	14.9
Born in Canada	2210	78.2	75.7	2577	85.0	84.4
Missing	4	0.1	0.3	21	0.7	0.7

Note: The 2019 telephone sample was weighted for household size, region, age and sex. In contrast, the 2020 sample was from a web panel and thus the weights for 2020 did not include adjustments for household size because individuals were approached directly. The quota targets for some socio-demographic characteristics by region were applied as closely as possible in obtaining this sample. The final weight adjusts the sample to the region proportions and the population figures for each age group and gender.

Methodology summary
for 2019 telephone survey

The Centre for Addiction and Mental Health's *CAMH Monitor* (CM) is an Ontario-wide telephone survey of adults aged 18 and older. This repeated cross-sectional telephone survey has been conducted over a period of 43 years: periodically from 1977 to 1989, annually from 1991 to 1995 and continuously since 1996. The 2019 CM is the 24th cycle conducted since the series became continuously fielded in 1996. The survey was conducted between January and December 2019.

The 2019 survey used a stratified (by six equally-allocated regions) two-stage (telephone number-respondents) dual-frame (list-assisted and cell-phone) RDD rolling quarterly probability sampling procedure. In total, **2,827 Ontario adults** completed the interview (1,840 interviews were completed on a landline or cable phone and 987 interviews on a cell-phone). Excluded from the selection were adults without a phone, those who were institutionalized, and those who were unable to complete the interview in English.

The 2019 CM was administered by the Institute for Social Research at York University. The 2019 sample of 2,827 respondents was weighted to better reflect characteristics of the population of 10,766,695 Ontarians aged 18 and older. The 2019 survey was weighted based on household size (where individuals were selected from within households), as well as regional population size, and age and gender population compositions from the 2016 Census.

Methodology summary
for 2020 web survey

The 2020 CM survey is the 25th cycle and was conducted for the first time using an online web panel. The 2020 survey utilized a quota-sampling approach by targeting respondents with particular demographic characteristics, and use poststratification adjustments (weights) to compensate for noncoverage and nonresponse. In total, **3,033 Ontario adults** aged 18 and older completed the survey between September 29 and December 18, 2020.

The sample data are weighted based on regional population size, and age and gender population compositions from the 2016 Census. Weights for the 2020 survey did not include adjustments for household size because individuals were approached directly. The use of the final weights assist in making the results more representative of the population with respect to these demographic characteristics.

The 2020 CM was administered by the Institute for Social Research at York University using a Leger Opinion web panel.

Please visit the CAMH Monitor webpage for reports and FAQs:

www.camh.ca/camh-monitor

2.5. Analyses and reporting

Our analyses offers several features:

- The characteristics of the sample for weighted/unweighted in 2019 and 2020 are presented in Table 2.2.

- In order to compare the 2019 and 2019 estimates, all 2019 and 2020 estimates were adjusted using regression modelling and a marginal standardization method in Stata 16, based on the *svy: logit* command[4], followed by *margins* command.

- Estimates were adjusted for age, sex, education, region, and immigration status. Marginal probabilities obtained from logit models reflect a weighted average over the distribution of the factors and are equivalent to estimates obtained by standardizing to the total population (Muller & MacLehose, 2014).

- One unique feature of complex survey analysis is the **estimation among subpopulations** (e.g., drinking problems among drinkers or drinking men; distress among women; driving while intoxicated among drivers). When such analyses are implemented by simply omitting observations outside the subpopulation (as is done with the use of conditional selection methods (e.g., *select if drinker*)) the software does not retain access to the full sampling error codes needed to properly compute degrees of freedom and variances,

thereby resulting in understated variances and overstated inferences.[5] In this report, all subgroup analyses employ **unconditional subclass analysis** by specifying a *SUBPOP* option ensuring the correct identification of design codes of the sampling structure.[6] All analyses are based on sample members who provided responses to *all* analysis variables (i.e., listwise deletion).

- In reporting the CM2019/2020 findings, we evaluated cross-time **change in the target population** by contrasting the adjusted estimates[7] of 2020 to the pre-pandemic estimates in 2019.

- In order to examine the impact of pandemic on drug use and mental health outcomes, we combined the 2019 and 2020 surveys, culminating in a data set with **5,860** respondents dispersed among 12 strata (6 regions × 2 survey years).[8]

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[4] The Stata *sampling error calculation model* used for this analysis was as follows: *svyset IDNUM [pweight = FWGHTWP], strata (REGION)*, where IDNUM represents respondents (the PSU codes); FWGHTWP represents the final normalized (or "sample-scaled") weight factor, whereas XWGHTWP represents the expansion "population-scaled" weights used to calculate population count estimates); and REGION represents the six area code based regions (stratum codes).

[5] This underestimation occurs because a conditional IF restriction removes all cases not satisfying the logical statement, *including their PSU and stratum codes*. Consequently, the correct denominator for the number of PSUs and strata for the full design, which are components of the calculation of the degrees of freedom and variances, are understated. The SUBPOP () option is especially critical for thinly sampled subpopulations.

[6] Such a procedure rather than removing respondents, assigns a weight of zero to all cases outside the subclass and retains the original weight for subclass cases thereby retaining the relevant design codes necessary for estimation (Heeringa et al., 2010; Korn & Graubard, 1999).

[7] We apply a logit transformation meaning that as percentage estimates near 0 or 100, CIs will not subceed 0 nor exceed 100.

[8] For trend analyses, we treat each survey as a stratum representing a distinct population. This allows us to assess changes in the population at different times (Korn & Graubard, 1999:287). Because we employed sample-scaled weights (rather than expansion population weights) there is no need to rescale these weights in the cumulated data file. Moreover, when one is estimating time differences using cross-sectional surveys administered on different occasions, the original sample-scaled weights are appropriate to use (Korn & Graubard, 1999: 278–79; 284).

3. RESULTS

An overview of substance use, mental health and well-being among Ontario adults is presented for the 2019 and 2020 survey years.

3.1. Alcohol Use

The past year drinking – the percentage consuming alcohol at least once during the 12 months before the survey – is an indicator of the relative size of the drinking population, and establishes the extent of potential exposure to alcohol-related problems.

In 2020, the adjusted percentage of Ontario adults who have used alcohol in the 12 months before the survey is **79.1%** (95% CI: 77.0% to 80.8%). This estimate was not significantly different from the pre-pandemic estimate in 2019 (81.5%). A similar pattern was observed among men and women subgroups (Table 3.1). However, we found a significant decline in the proportion reporting past year alcohol use among those aged 18 to 29 years old, and increase among those aged 65 years and older (Figure 3.1).

Figure 3.1: Past year alcohol use by age and year among total sample
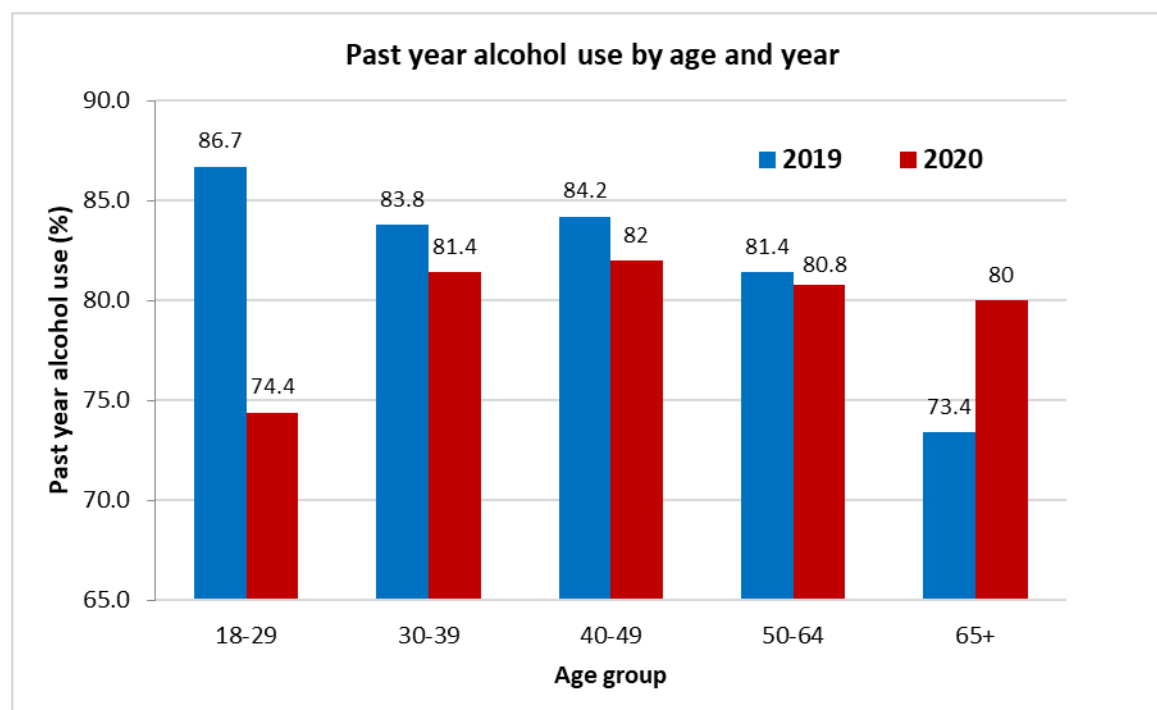
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 18 to 29, and 65+ year olds, (p<0.05).*

3.2. Daily Drinking

The percentage drinking alcohol on a daily basis is an indicator of a regular pattern of drinking.

In 2020, the adjusted percentage reporting daily drinking is **9.4%** (95% CI: 8.3% to 10.5%). This estimate significantly increased from a pre-pandemic (2019) adjusted estimate of **5.9%** (95% CI: 5.0% to 6.8%). Significant increases were found among men (from 7.6% in 2019 to 12.0% in 2020), and women (from 4.2% in 2019 to 7.2% in 2020).

Significant increases were also observed among those 30 to 39, 40 to 49 and 50 to 64 years old (Figure 3.2).

Among drinkers, daily drinking increased significantly from 7.4% in 2019 to 11.7% in 2020. Significant increases were also found among both male drinkers (from 9.4% in 2019 to 14.5% in 2020), and female drinkers (from 5.5% in 2019 to 9.2% in 2020), and among 30 to 64 years old (Figure 3.3).

Figure 3.2. Daily drinking by age and year among total sample
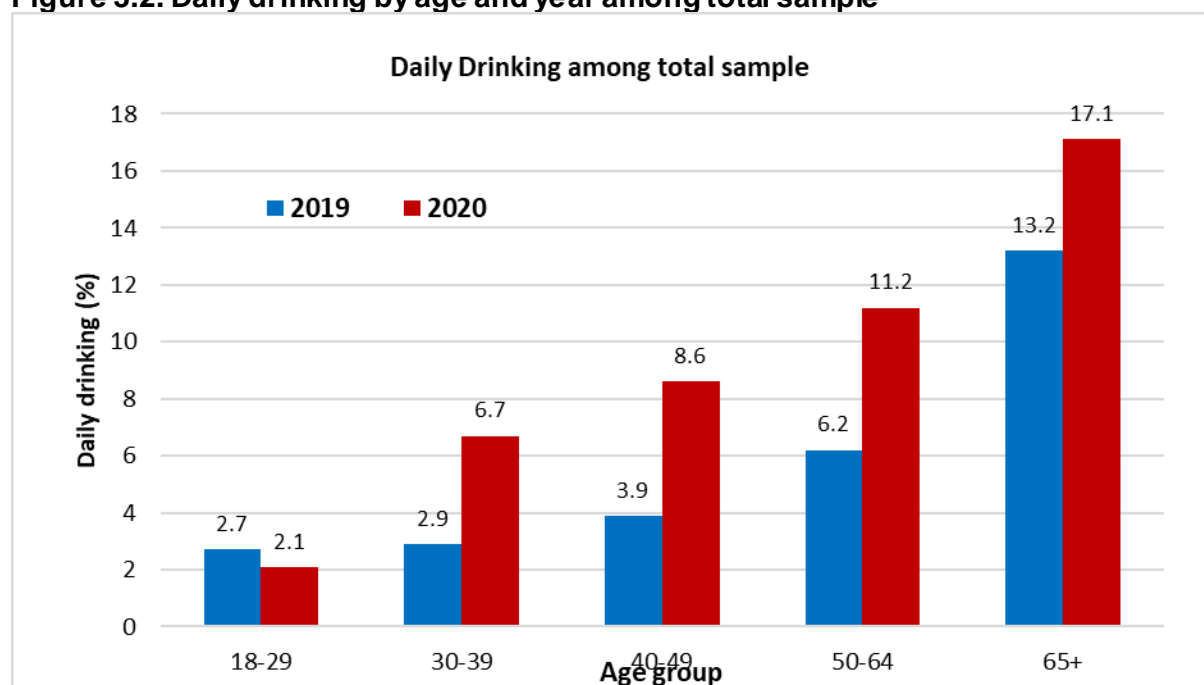
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 30 to 39, 40 to 49, and 50 to 64 years old, (p<0.05).*

Figure 3.3: Daily drinking by age and year among past year drinkers
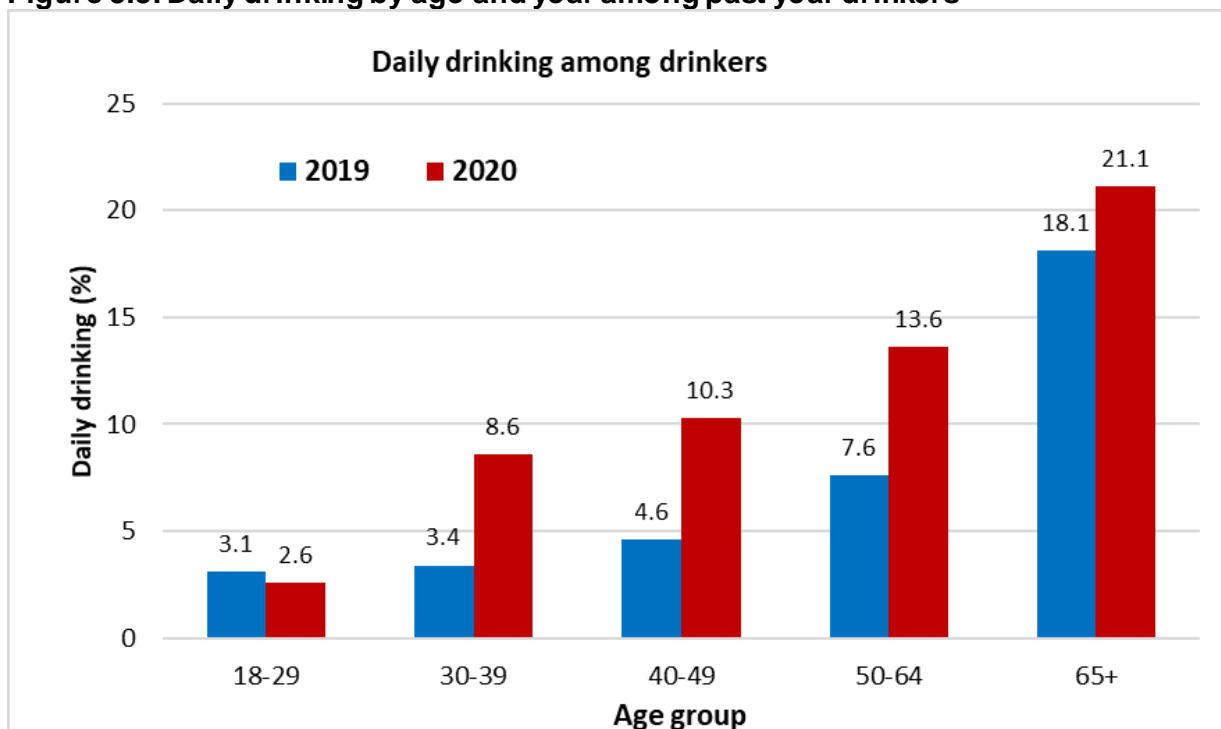
Daily drinking among drinkers

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 30 to 39, 40 to 49, and 50 to 64 years old, (p<0.05).*

3.3. Number of Drinks Consumed Weekly

The estimated number of drinks consumed is based on the respondent's recall of both the frequency of drinking and the amount consumed on a typical drinking occasion. In contrast to past year drinking, which describes the size of the drinking population, and daily drinking, which describes the percentage drinking regularly, the estimated number of drinks consumed is an indicator of the quantity of alcohol typically consumed.

- The **average number of drinks** consumed weekly significantly increased from 4.5 in 2019 to 6.6 drinks in 2020. The number of drinks consumed per week among male drinkers increased from 5.9 drinks in 2019 to 8.6 drinks in 2020, and among female drinkers, from 3.3 drinks in 2019 to 4.8 drinks in 2020.
- We also found significant differences between 2019 and 2020 estimates among most age groups except 18 to 29 year olds (Figure 3.4).

Figure 3.4: Average number of drinks consumed weekly among current drinkers
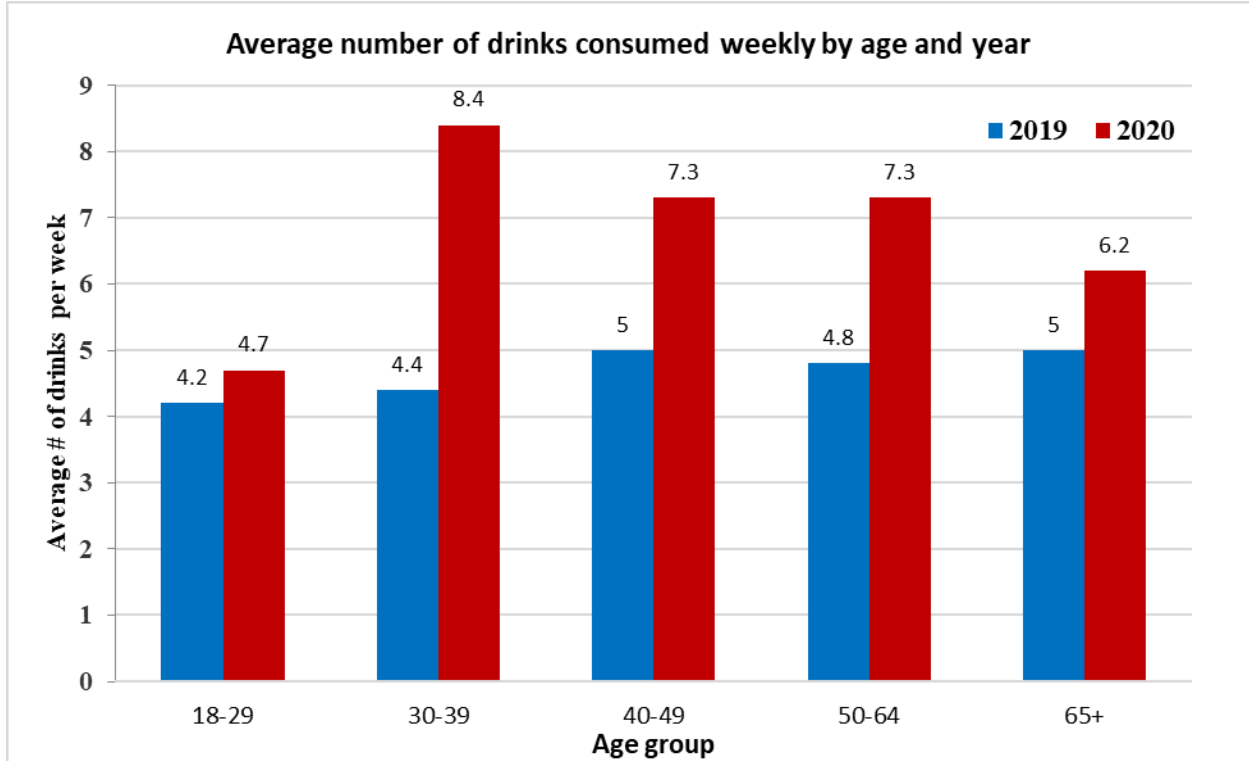

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among most age groups except 18 to 29 years old, (p<0.05).*

3.4. Weekly Binge Drinking: Five or More Drinks on a Single Occasion Weekly

The percentage reporting the consumption of five or more drinks on a single occasion on a weekly basis ("binge drinking") during the 12 months before the survey is an indicator of regular heavy intake of alcohol. Although we retain the "binge" drinking label for reader recognition, readers should note that this concept is equivalent to the terms "heavy episodic drinking," and more recently, "risky single occasion drinking".

- **Weekly binge drinking** increased significantly from 5.8% in 2019 to 11.5% in 2020 among the total sample, and 7.0% to 14.6% among past year drinkers. This increase was evident for males and females (Table 3.1), and among 30 years and older age groups (Figure 3.5).

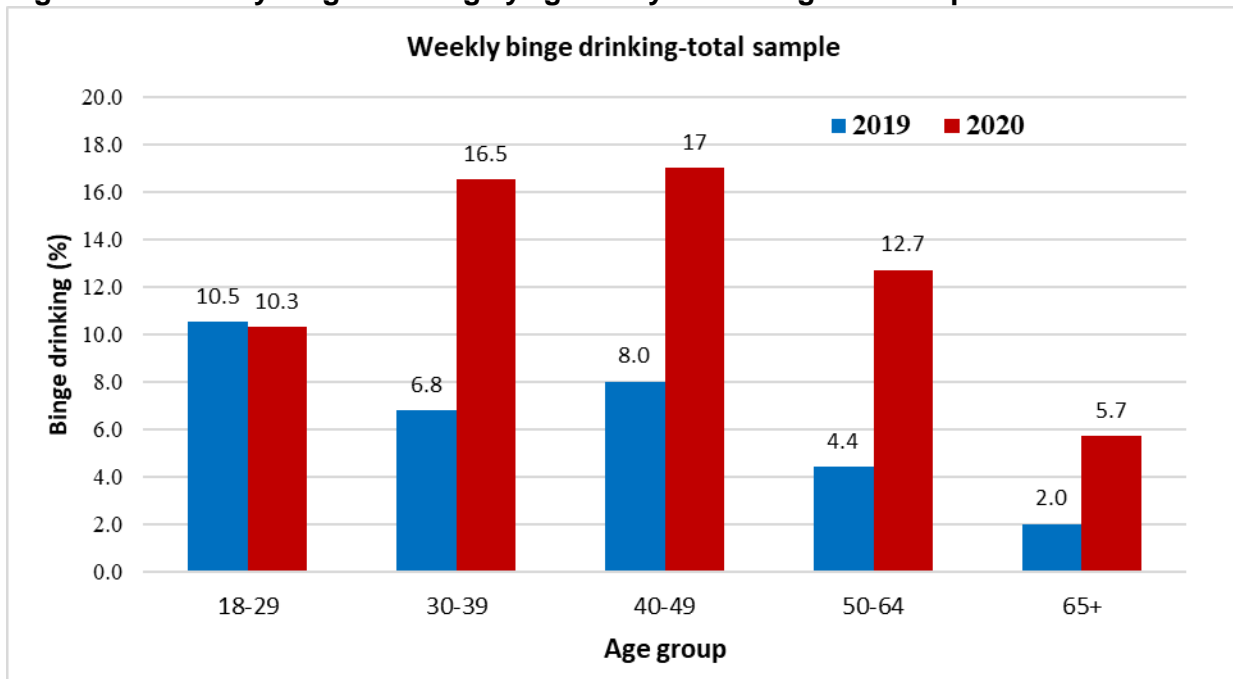**Figure 3.5: Weekly binge drinking by age and year among total sample**

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among all age groups except 18 to 29 years old, (p<0.05).*
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3.5. Hazardous or Harmful Drinking (AUDIT)

The consequences of problematic drinking vary in their nature and quality. Alcohol problems are multidimensional; they can be indicated by excessive consumption, problematic consequences, and dependence.

The *Alcohol Use Disorders Identification Te*st (AUDIT), whose development was sponsored by the World Health Organization, was designed to detect problem drinkers at the less severe end of the spectrum of alcohol problems. The AUDIT identifies **hazardous** alcohol use – an established pattern of drinking that *increases the likelihood of future* physical and mental health problems (e.g., liver disease) – as well as **harmful** consequences of that use – a pattern of drinking that is *already causing damage* to health (e.g., alcohol-related injuries, depression) and indications of dependence (Babor et al., 2001; Saunders et al., 1993). The AUDIT is a 10-item screener (including lack of control over one's own drinking, failure to meet expectations, drinking in the morning, feelings of guilt, black-outs, injuries resulting from drinking, and having someone express concern about drinking) with a protocol for scoring responses to these items.

Conventionally, a score of **8 or more** out of 40 on the AUDIT scale is used to identify drinkers that **drink at hazardous or harmful levels** or are at risk of becoming dependent. A score of 8 or more should not be viewed as "alcoholism," but as a pattern of drinking that is causing current problems or likely to cause future problems.

▪ A significant **increase** was seen in reports of **hazardous or harmful drinking,** from 13.0% in 2019 to 21.4% in 2020. This increase was also evident among males and females (Table 3.1), and among 30 years and older age groups (Figure 3.6).

Figure 3.6: Hazardous or harmful drinking by age and year among total sample
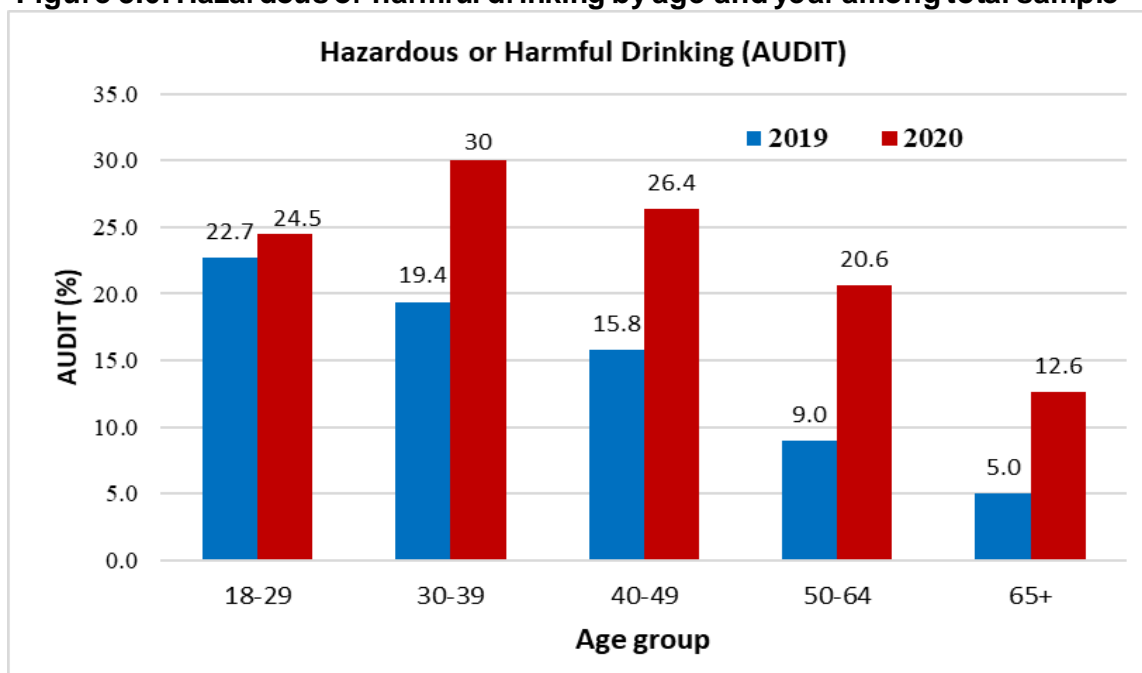
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among all age groups except 18 to 29 years old, (p<0.05).*

3.6. Symptoms of Alcohol Dependence (AUDIT)

While the previous section examined the percentages for hazardous/harmful drinking, this section describes AUDIT symptoms of **alcohol dependence** experienced in the past year among Ontario adults.

Of the 10 AUDIT items, three items are indicators of alcohol dependence. In this section, we present the proportion of Ontario adults reporting **one or more of the three dependence**

indicators included in the AUDIT: (1) *not able to stop drinking once you had started*; (2) *failed to do what was normally expected from you because of drinking*; or (3) *needed a first alcoholic drink in the morning to get yourself going after a heavy drinking session*.

- A significant **increase** was seen in reports of **symptoms of alcohol dependence,** from 7.1% in 2019 to 14.2% in 2020. This increase was evident among males and females, and among all age groups (Figure 3.7).

Figure 3.7: Symptoms of Alcohol dependence by age and year among total sample
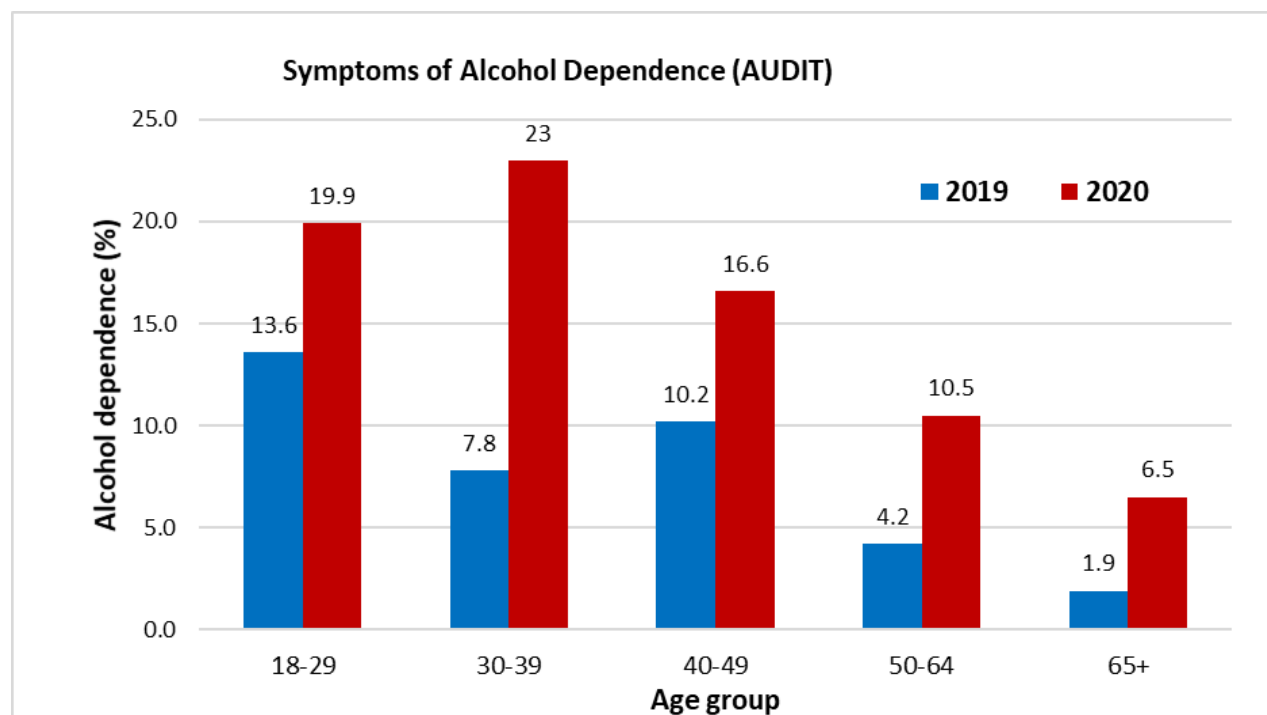
Symptoms of Alcohol Dependence (AUDIT)

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among all age groups, (p<0.05).*

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3.7. Cigarette Smoking

In 2020, the adjusted percentage of *current* smokers – respondents who (1) smoked 100 or more cigarettes in their lifetime, *and* (2) smoked occasionally or daily during the past year, *and* (3) smoked during the past 30 days[9] – was **18.6%**, which increased significantly from 15.2% in 2019. This increase was evident for females (from 12.0% in 2019 to 16.4%), and among 30 to 39 years old (Figure 3.8). There was no change among males (Table 3.1).

Figure 3.8: Current cigarette smoking by age and year among total sample

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 30 to 39 years old only, (p<0.05).*

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[9] Standard to Health Canada guidelines.

3.8. Average Number of Cigarettes Smoked Daily

On average, current smokers smoked **9.6** cigarettes per day in 2020. This number was not significantly different from the adjusted estimate in 2019 (**10.5 cigarettes per day**). A similar pattern was observed among male and female smokers (Table 3.1). There was no significant difference by age (Figure 3.9).

Figure 3.9: Average Number of Cigarettes Smoked Daily among current smokers
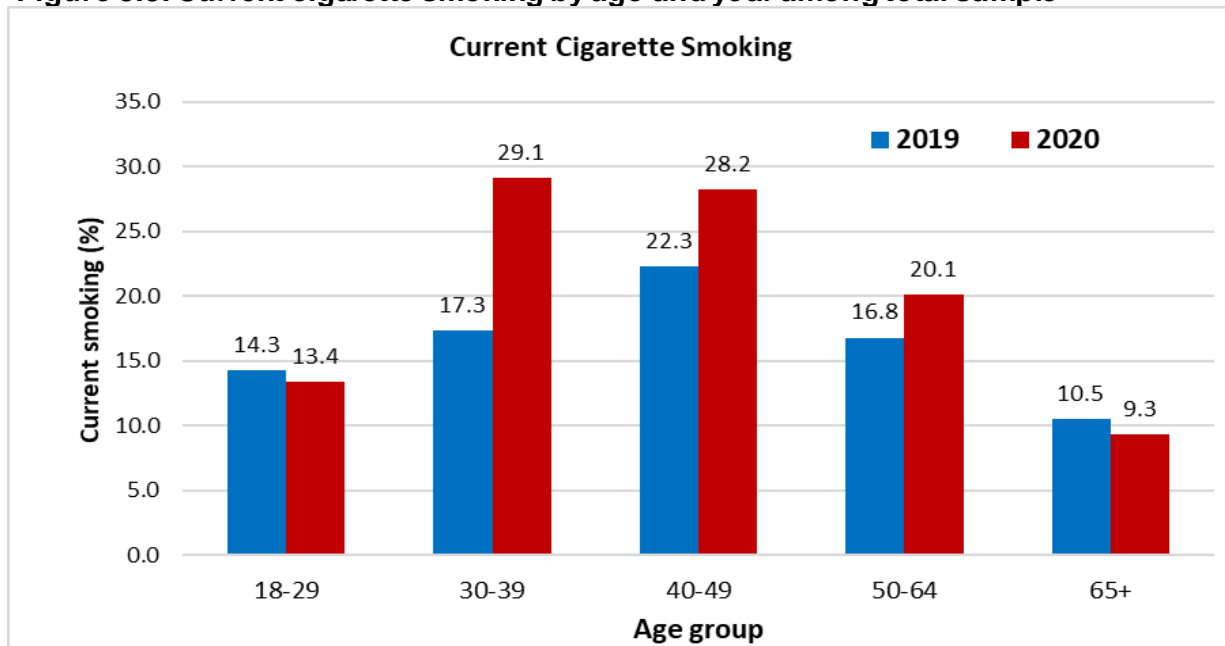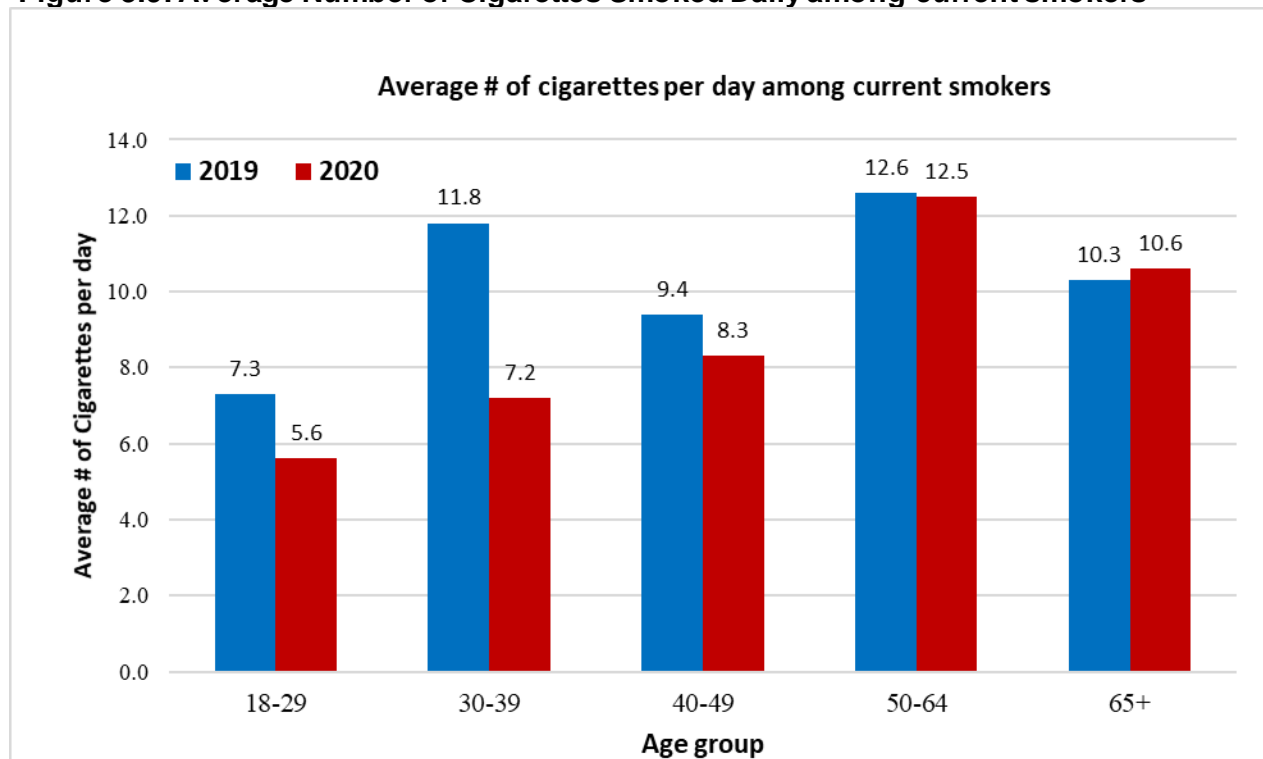

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, and region and immigration status. *There was no statistically significant differences between 2019 and 2020 adjusted estimates among all age groups, (p<0.05).*

3.9. Daily Smoking

Daily smoking increased significantly from 11% in 2019 to 13.8% in 2020 among the total sample. This increase was also evident among females (9.1% in 2019 to 12.7% in 2020), however, no change was observed among males (Table 3.1).

3.10. Electronic Cigarette Use

Respondents were asked the following question:

"E-cigarettes, also known as "vape pipes," "hookah pens," and "e-hookahs" are electronic devices that create an inhaled mist, simulating the act of smoking. Have you ever taken at least one puff from an e-cigarette?"

Two follow-up questions asked respondents whether they used an e-cigarette in the past year and if the e-cigarette they smoked the last time contained nicotine:

1) *"Was it in the past 12 months that you had at least one puff of an e-cigarette?"*

2) *"The last time you used an e-cigarette, did it contain nicotine?"*

▪ The results showed that **electronic cigarette use** increased significantly between 2019 and 2020, from 12.3% to 15.5%. This increase was evident especially among males (from 13.5% in 2019 to 17.7% in 2020), and among those 40-49 and 50-64 years old (Figure 3.10).

Figure 3.10: Past year electronic cigarette use by age and year among total sample
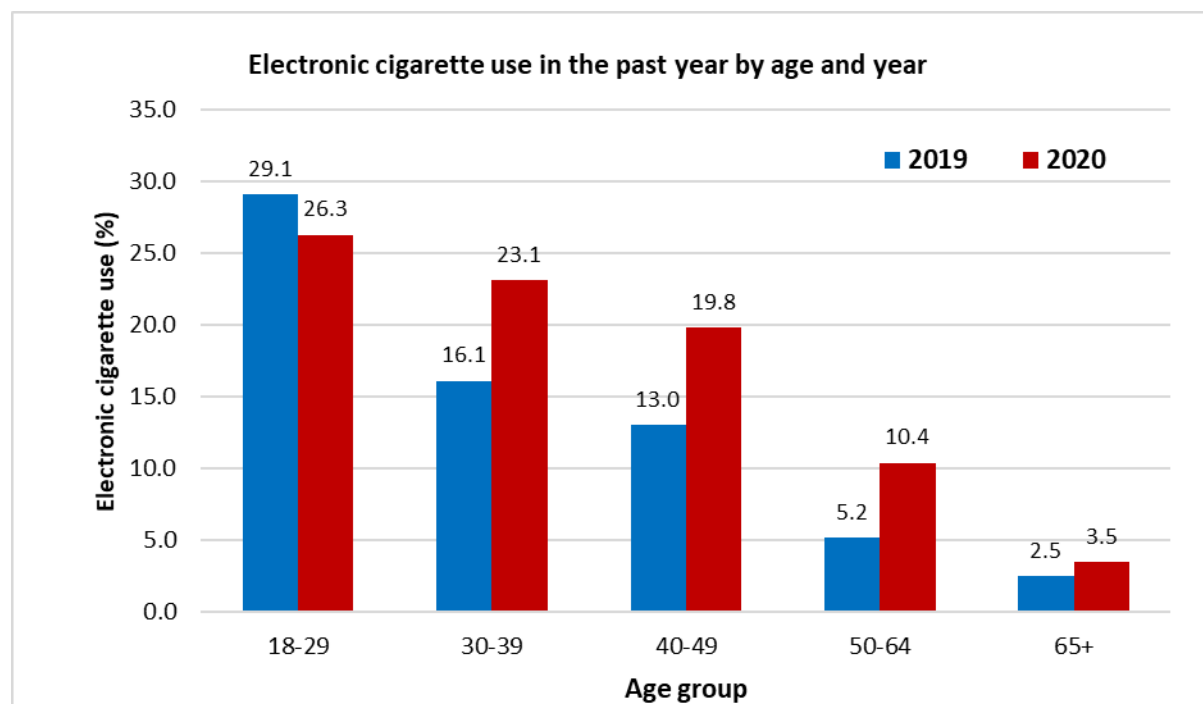
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among those 40 to 49, and 50 to 64 years old, (p<0.05).*

3.11. Cannabis Use

Overall, a significant **increase** was evident for cannabis use between 2019 and 2020.

- Past year **cannabis** use **increased** significantly from 25.5% in 2019 to 31.9% in 2020. This increase was evident among females only (from 20.5% in 2019 to 29.7% in 2020)**,** but remains stable among males. The increase was also significant among those 30 years of age and older (Figure 3.11).

- Another important change related to cannabis use has been the **percentage using cannabis for medical purposes**. Medical use of cannabis increased significantly from 10.2% in 2019 to 13.6% in 2020 among the total sample. This increase was evident among females (from 8.2% in 2019 to 13.9% in 2020).

Figure 3.11: Past year cannabis use by age and year among total sample
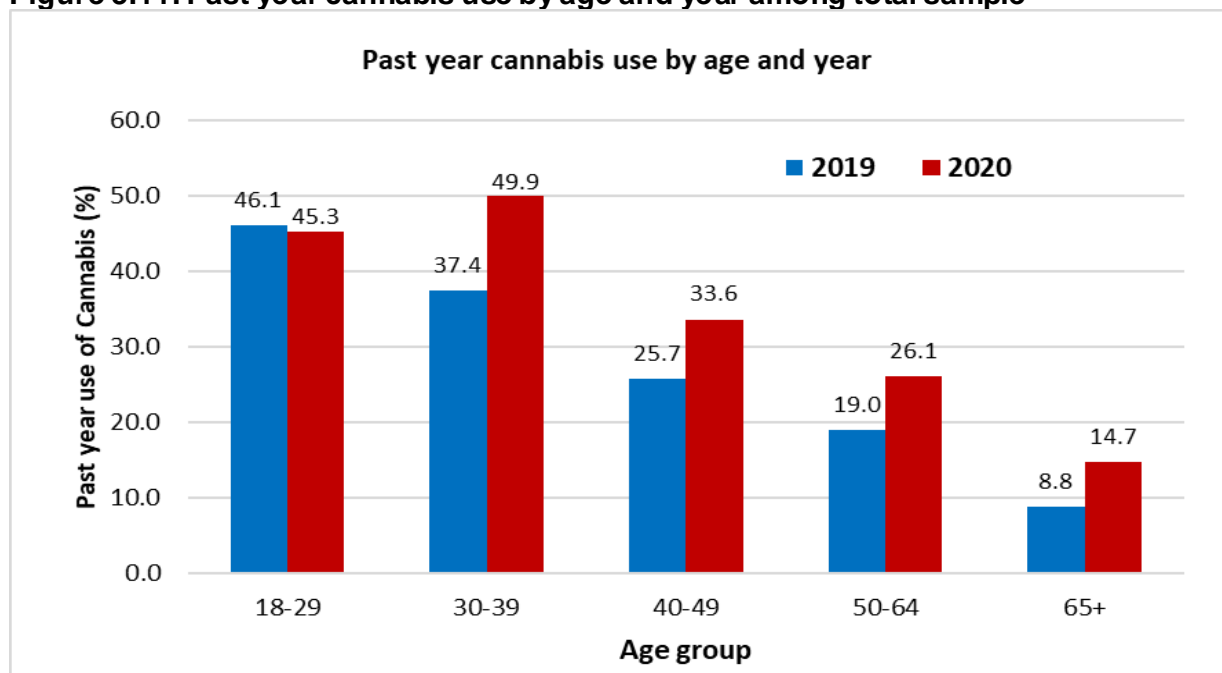
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 30 years and older age groups, (p<0.05).*

3.12. Other Drugs Use

- Past year use of **cocaine increased** from 2.0% in 2019 to 3.5% in 2020 among the total sample. However, there was no change among mong males and females (Table 3.1).

- Past year use (medical or nonmedical) of **prescription opioid** pain relievers **increased significantly** from 23.5% in 2019 to 33.5% in 2020. This increase was also evident among males (from 21.9% to

32.3%) and females (from 25.2% in 2019 to 34.7% in 2020).

- Past year **nonmedical use** of prescription opioids **increased** from 5.3% in 2019 to 17.9% in 2020, and this increase was evident among males (from 5% in 2019 to 19.5% in 2020) and females (from 5.6% in 2019 to 16.4% in 2020).

3.13. Driving

There were no changes in substance use and driving behaviors between 2019 and 2020**.**

- **Texting while driving** (among drivers) **declined** significantly among females only from 27.9% in 2019 to 22.7% in 2020 (Table 3.1).

3.14. Mental Health Measures

Psychological Distress

To assess psychological distress, the *Kessler 6-Item Psychological Distress Scale (K6)* was included in the CM surveys. In 2019 and 2020, these items were asked of a random subsample of respondents (n=1,819 and n=2,006, respectively).

Each of the six questions begins with the wording: "*In the past 30 days how often did you….*" The following symptoms comprise the K6 screener:

- *feel nervous*
- *feel hopeless*
- *feel restless or fidgety*
- *feel so depressed that nothing could cheer you up*
- *feel that everything was an effort*
- *feel worthless*

Response categories are on a 5-point frequency scale ranging from (1) "*None of the time*" to (5) "*All of the time.*" Responses to each of the six items were rescaled to a 0–4 scale for summation. A summated score

ranging from 0 to 24 was computed for respondents who answered all six items. Higher scores indicate higher levels of psychological distress.

For our purposes, we used two cut-off scores: (1) a score of **8 or higher** (of 24) to estimate the percentage experiencing a *moderate-to-serious* level of psychological distress (henceforth, called moderate psychological distress) (Galea et al., 2007); and (2) a cut-off score of **13 or higher** (of 24) to estimate the percentage experiencing *serious* psychological distress (Kessler et al., 2003).

We found significant **increases** in K6 indicators during the pandemic compared to pre-pandemic estimates.

- **Moderate to serious psychological distress** increased significantly from 16.9% in 2019 to 34.9% in 2020. Reports of moderate to serious psychological distress were also increased among males (from 14.6% in 2019 to 31.0% in 2020) and females (from 19.3% in 2019 to 38.8% in 2020), and among all age groups (Figure 3.12).

- Percentage reporting **serious psychological distress** also increased significantly from 6.2% in 2019 to 14.4% in 2020. Reports of serious psychological distress were also increased among males (from 4.3% in 2019 to 12.0% in 2020) and females (from 8.2% in 2019 to 16.7% in 2020), and among all age groups except 30 to 39 years old (Figure 3.13).

Figure 3.12: Moderate to serious psychological distress by age and year
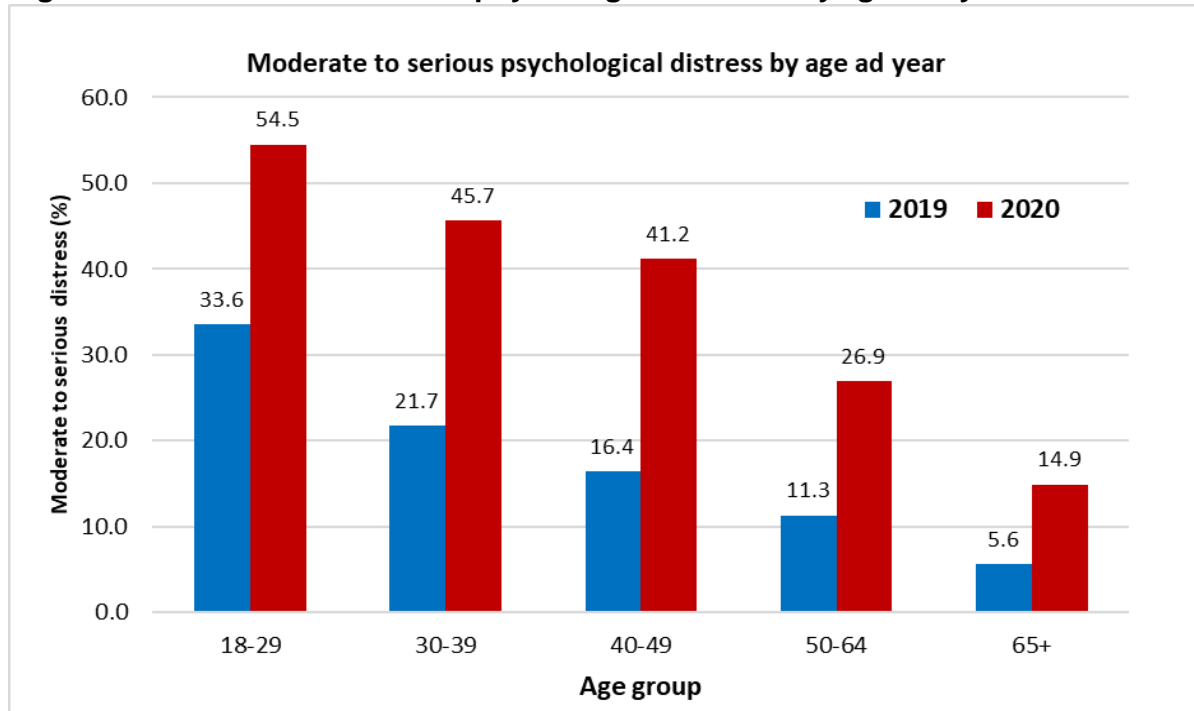
Moderate to serious psychological distress by age ad year

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among all age groups, (p<0.05).*

Figure 3.13: Serious psychological distress by age and year
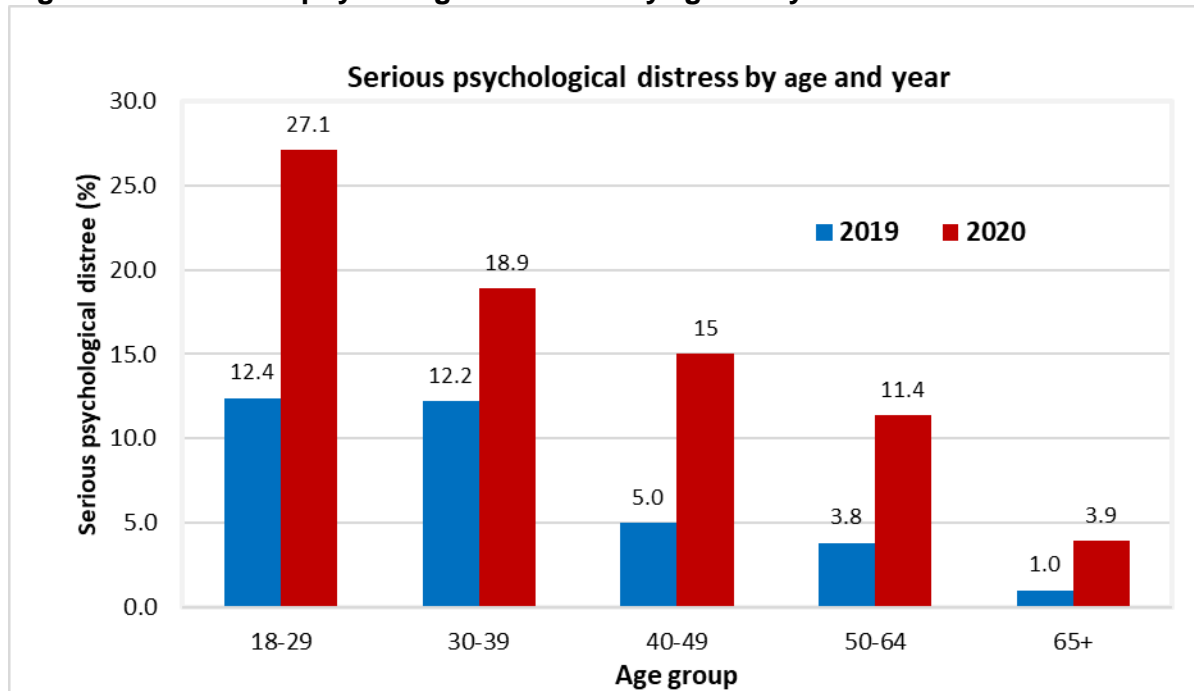
Serious psychological distress by age and year

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among all age groups except 30 to 39 years old, (p<0.05).*

Prescription Medication for Anxiety and Depression

We assess the percentage reporting having used prescription medication to treat anxiety (anxiolytics) and depression (antidepressants) during the 12 months before the survey.

The following questions were asked:
1) In the past 12 months, have you taken any prescription medication to treat anxiety or panic attacks?
2) In the past 12 months, have you taken any prescription medication to treat depression?

▪ Past year use of **antianxiety medication** significantly **increased** from 13.7% in

2019 to 19.5% in 2020. There were significant increases during this period for both males (from 10.4% in 2019 to 16.0% in 2020), and females (from 16.8% in 2019 to 22.6% in 2020), and among those 50 to 64 years old (Figure 3.14).

▪ Past year use of **antidepressants** also **increased** significantly, from 11.6% in 2019 to 16.3% in 2019. There were significant increases during this period for both males (from 8.3% in 2019 to 12.2% in 2020), and females (from 14.4% in 2019 to 20.1% in 2020). There were also significant increases among respondents 50 to 64, and 65 years and older (Figure 3.15).

Figure 3.14: Past year use of antianxiety medication by age and year
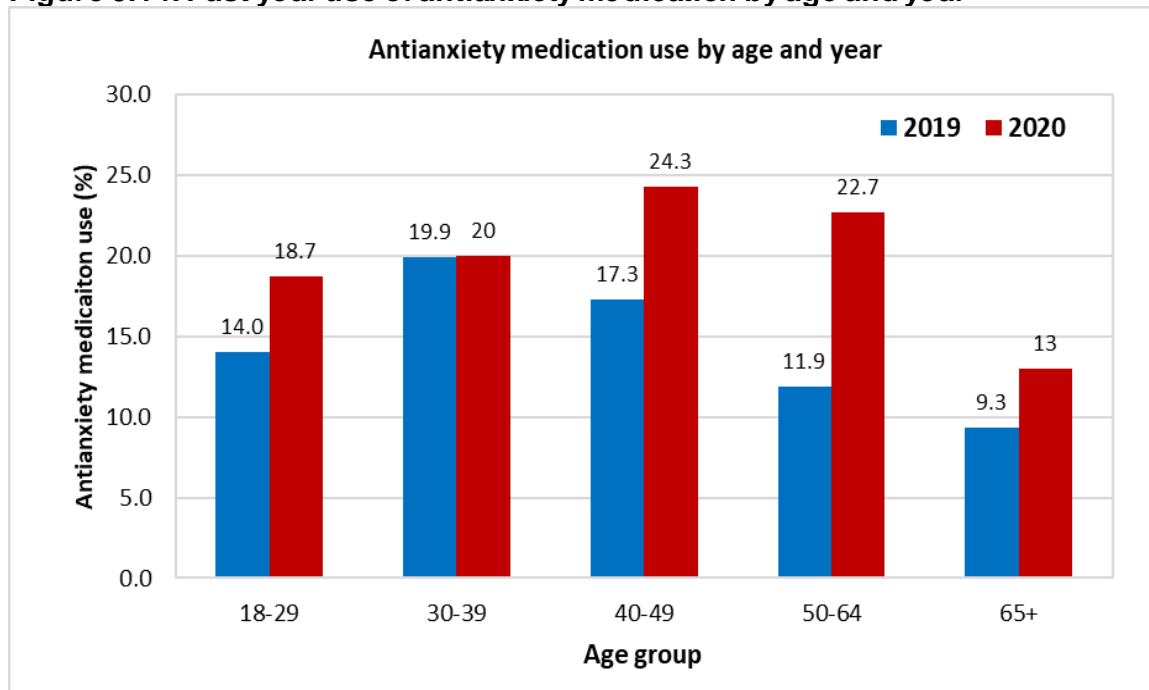
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 50 to 64 years old, (p<0.05).*

Figure 3.15: Past year use of antidepressant medication by age and year
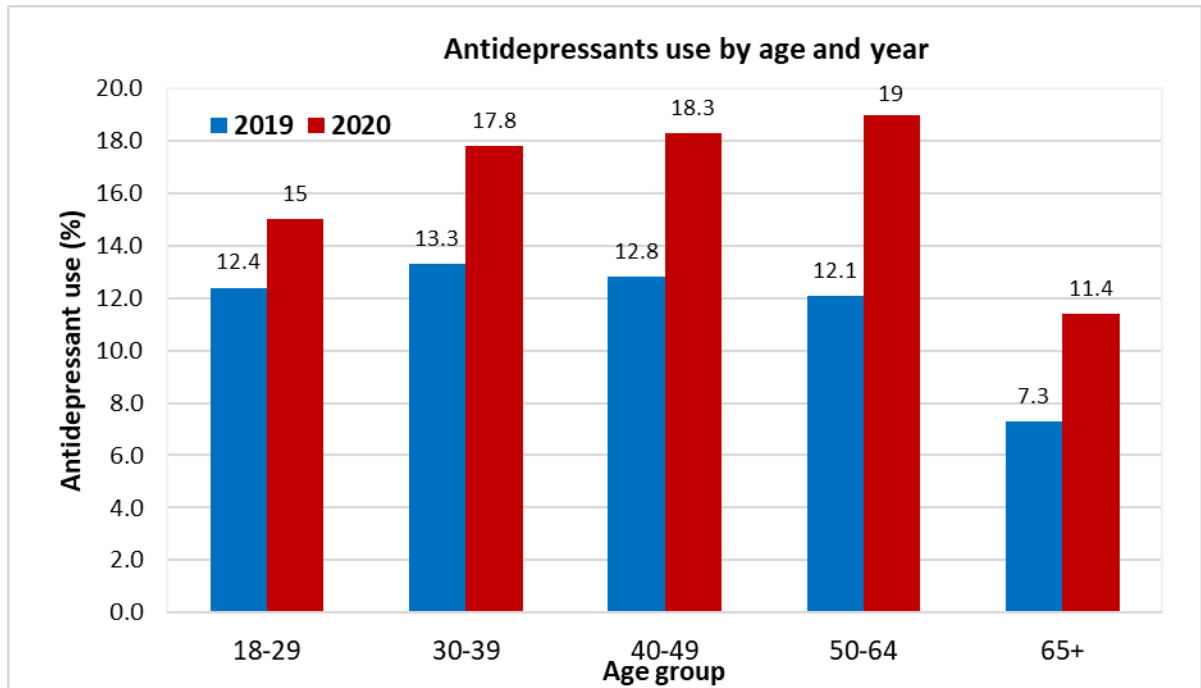
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 50 years and older age groups, (p<0.05).*

Mental Health-Related Quality Of Life

Health-Related Quality of Life (HRQoL) items are based on the core module (HRQoL-4) developed by the Centers for Disease Control and Prevention (CDC). Investigators at CDC developed a brief instrument to identify key health-related quality of life measures for adult populations (Moriarty, Zack, & Kobau, 2003; Ôunpuu, Krueger, Vermeulen, & Chambers, 2000).

The following items were asked in the CM:

1) *In general, would you say your overall mental health is excellent, very good, good, fair, or poor?*

2) *Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many*
3) *days in the last 30 days was your mental health not good?*

In this report, we present two measures of mental health-related quality of life: 1) the percent reporting *fair or poor mental health*, defined as the percentage rating their mental health as fair or poor, and 2) the percent reporting *frequent mental distress days*, defined as the percentage reporting 14 or more mentally unhealthy days during the past 30 days.

Self-rated fair/poor mental health

▪ Between 2019 and 2020, there was a significant **increase** in self-rated **fair/poor mental health** (from 12.4% to 26.7%). Reports of fair/poor mental health increased significantly among both males (from 10.6% to 21.4%) and females (from 13.9% to 31.5%). Increases were also observed among all age groups (Figure 3.16).

▪ However, there was no change in reports of **frequent mental distress days** in the past 30 days.

Figure 3.16: Self-rated fair/poor mental health by age and year
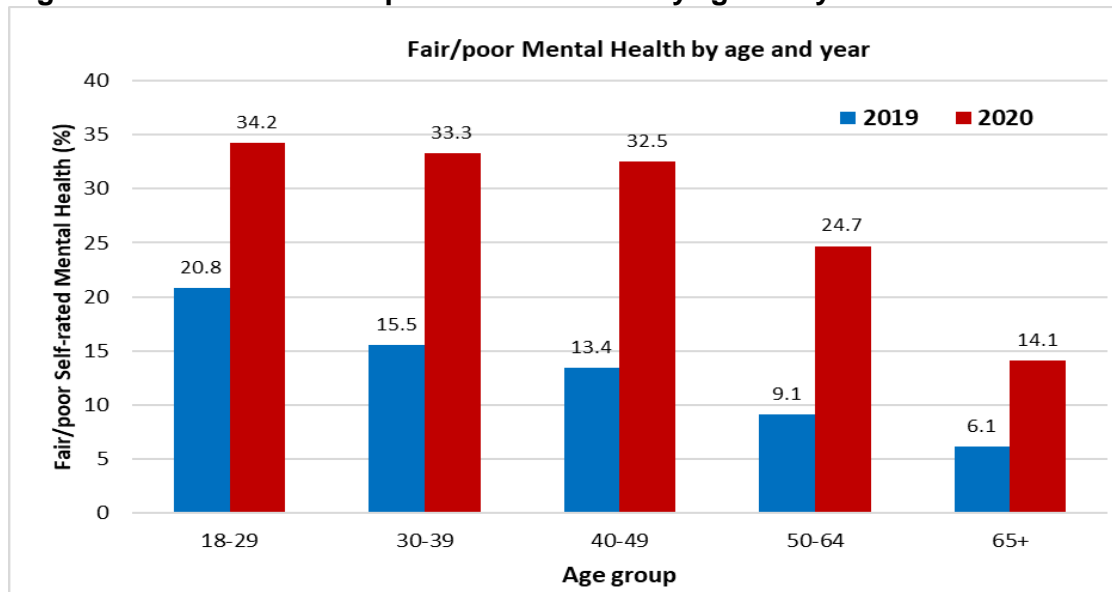
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among all age groups, (p<0.05).*

Suicidal Ideation and Suicide Attempt

In 2019 and 2020, the *CM* included a question about suicidal ideation and attempts and asked respondents the following items: (1) *"In the past 12 months, did you ever seriously consider attempting suicide?"* and (2) *"In the past 12 months, did you actually attempt suicide?"* Response options to both questions were *yes* or *no*.

- We found a significant **increase** in the percentage of respondents reporting **suicidal ideation** in the past year, from 3.8% in 2019 to 7.7% in 2020. This increase was also evident among males (increased from 2.5% in 2019 to 7.8% in 2020).

- We also found a significant increase in **suicidal ideation** among 18 to 29 and 40 to 49 years old (Figure 3.17).

Figure 3.17: Suicidal ideation by age and year

Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 18 to 29 and 40 to 49 year olds, (p<0.05).*

3.15. Overall Health

Self-Rated Health

One of the more frequently used indicators of a person's current health status is perceived or self-rated health. Despite its simplicity, this global assessment of health status has been shown to be a reliable measure and a valid predictor of physical health and emotional well-being (McDowell, 2006), as well as future morbidity and mortality (Idler & Benyamini, 1997).

The following items were asked of respondents:

*(1) In general, would you say your overall health is excellent, very good, good, fair, or poor?*
(2) Now thinking about your physical health, which includes physical illness and injury, for how many days in the last 30 days, was your physical health not good?

In this report, we present two measures of self-rated health: 1) the percent reporting *fair or poor health*, defined as the percentage rating their overall health as fair or poor in general, and 2) the percent reporting *frequent physically unhealthy days*, defined as the percentage reporting **14 or more** physically unhealthy days during the past 30 days.

- Overall, there was a significant **increase** in reports of **fair/poor self-rated health status** (from 12.4% in 2019 to 17.6% in 2020). This increase was evident among males (13.8% in 2019 to 17.7% in 2020), and females (from 10.9% in 2019 to 17.6% in 2020). There were also significant changes among 30 to 64 year olds (Figure 3.18).

- However, there were no changes in percentages reporting frequent physically **unhealthy days** in the past 30 days between 2019 and 2020 (Table 3.1).

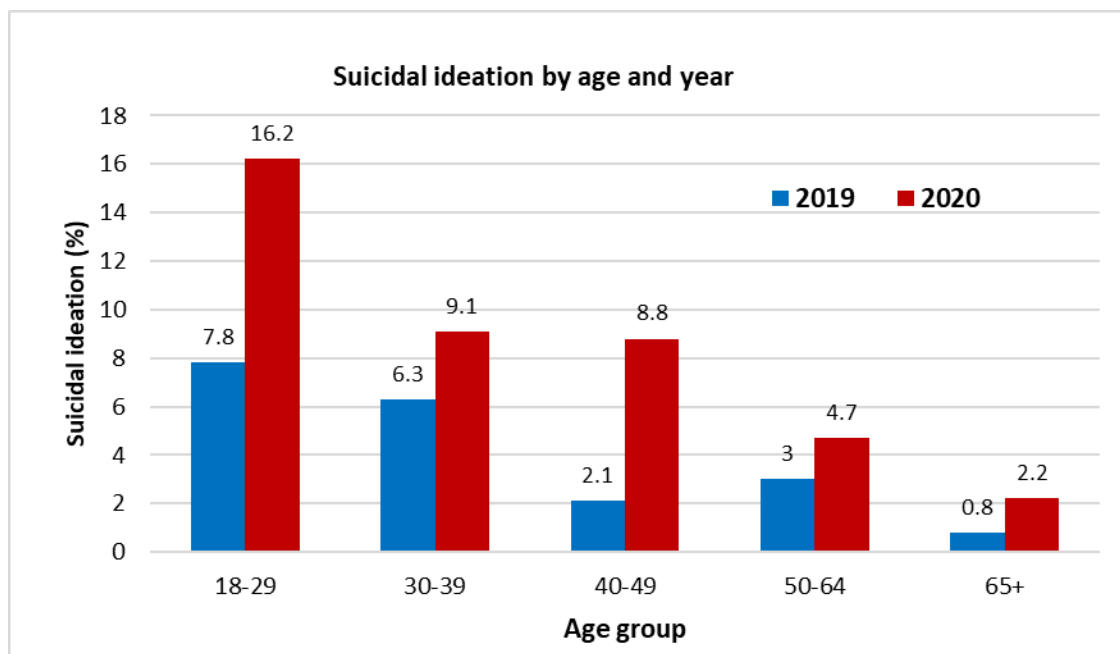**Figure 3.18: Self-rated fair/poor general health by age and year**
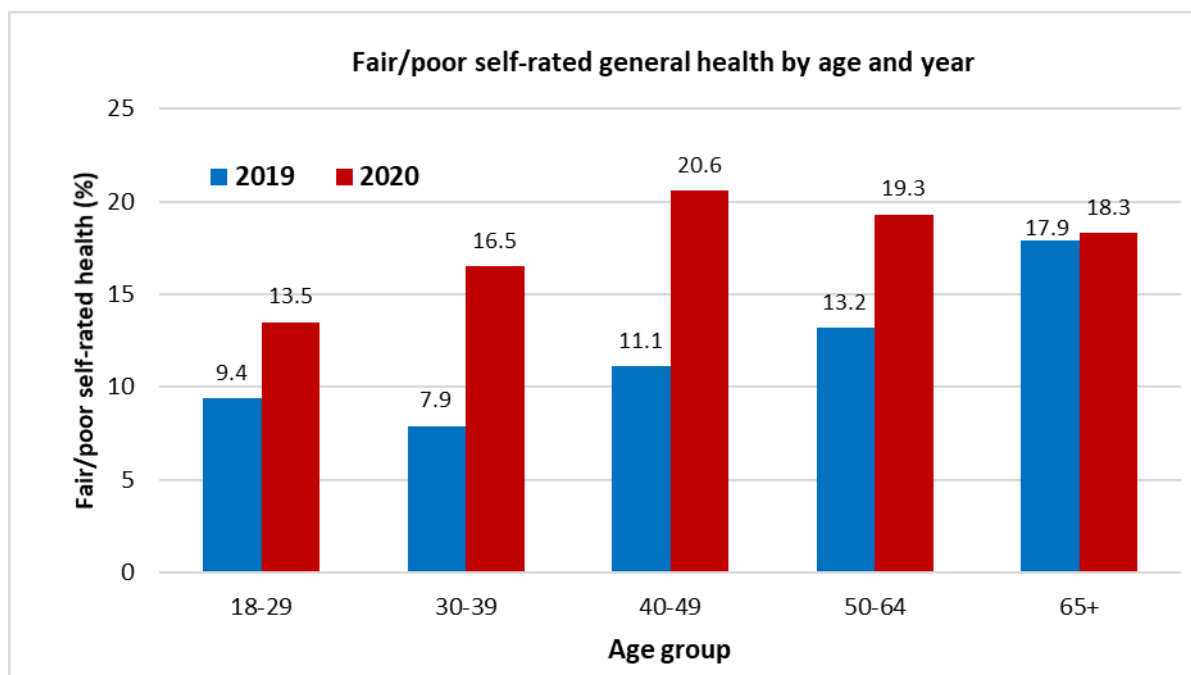
Note: The 2019 CAMH Monitor was a telephone survey conducted January to December, 2019. The 2020 survey was conducted using a web panel between September 29 and December 18, 2020. The 2019 and 2020 estimates for age groups were adjusted for sex, education, region and immigration status. *Statistically significant differences between 2019 and 2020 adjusted estimates among 30 to 64 year olds, (p<0.05).*

Table 3.1 provides the results of standardized estimates for substance use, mental health and well-being indicators for CM2019 and CM2020 CAMH Monitor surveys. The adjusted estimates are also presented for males and females for each year survey.

Table 3.1. Substance Use, Mental Health and Well-Being Indicators, 2019/2020 CAMH Monitor

Indicator	2019 Tot %	M %	W %	2019 (adjusted) Tot %	M %	W %	2020 Tot %	M %	W %	2020 (adjusted) Tot %	M %	W %
Alcohol												
Percentage drinking alcohol - past 12 months	79.9	81.3	78.7	81.5	82.7	80.5	80.4	80.8	80.0	79.1	80.0	78.5
Percentage drinking daily - total sample	5.6	7.3	4.1	5.9	7.6	4.2	9.7	12.0	7.6	9.4 [a]	12.0 [b]	7.2 [c]
- among drinkers	7.1	9.0	5.2	7.4	9.4	5.5	12.1	14.9	9.5	11.7 [a]	14.5 [b]	9.2 [c]
Average number of drinks consumed weekly - among drinkers (mean)	4.6	6.0	3.2	4.5	5.9	3.3	6.7	8.7	4.8	6.6 [a]	8.6 [b]	4.8 [c]
Percentage consuming 5 or more drinks on a single occasion weekly (weekly binge drinking) - total sample	6.0	8.6	3.6	5.8	8.4	3.5	11.3	15.9	7.1	11.5 [a]	15.9 [b]	7.6 [c]
- among drinkers	7.5	10.6	4.5	7.0	10.1	4.3	14.1	19.6	8.9	14.6 [a]	20.0 [b]	9.5 [c]
Percentage reporting hazardous or harmful drinking (AUDIT 8+) - total sample	13.2	18.7	8.1	13.0	18.0	8.4	21.2	26.9	16.0	21.4 [a]	27.3 [b]	16.2 [c]
- among drinkers	16.6	23.3	10.4	15.6	21.5	10.1	26.8	33.8	20.3	27.5 [a]	35.1 [b]	20.5 [c]
Percentage reporting symptoms of alcohol dependence (based on the AUDIT) - total sample	7.4	9.7	5.2	7.1	9.1	5.3	13.9	17.1	11.0	14.2 [a]	17.3 [b]	11.2 [c]
Tobacco												
Percentage currently smoking cigarettes	16.3	20.4	12.5	15.2	18.6	12.0	17.2	19.3	15.3	18.6 [a]	20.6	16.4 [c]
- smoking daily	12.2	15.1	9.6	11.0	12.8	9.1	12.4	13.1	11.7	13.8 [a]	14.8	12.7 [c]
Average number of cigarettes smoked daily - among smokers (mean)	11.2	11.9	10.1	10.5	10.3	9.3	9.0	8.1	10.1	9.6	8.6	9.7
Percentage of daily smokers reporting high nicotine dependence - among daily smokers	13.6	18.7	6.2	12.9	15.6	5.9	7.8	6.2	9.4	8.4	5.1 [b]	10.1
Percentage reporting electronic cigarette use - past 12 months	12.8	14.3	11.4	12.3	13.5	11.2	15.2	17.4	13.0	15.5 [a]	17.7 [b]	13.4
Cannabis												
Percentage using cannabis in lifetime	53.1	57.9	48.6	54.3	58.5	50.4	53.0	53.4	52.6	52.1	53.0 [b]	51.2
Percentage using cannabis - past 12 months	25.6	31.5	20.1	25.5	30.8	20.5	31.7	33.9	29.7	31.9 [a]	34.0	29.7 [c]
Percentage reporting moderate to high risk of cannabis problems (ASSIST-CIS 4+) - total sample	13.6	19.0	8.7	13.0	17.6	8.6	16.4	18.9	14.0	17.2 [a]	19.6	14.5 [c]
- among users	57.9	63.6	49.2	53.2	57.3	46.4	55.5	62.0	48.9	56.2	60.7	50.3
Percentage using cannabis for medical purposes - past 12 months	10.5	13.1	8.2	10.2	12.3	8.2	13.1	12.6	13.5	13.6 [a]	12.9	13.9 [c]

	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
Cocaine												
Percentage using cocaine in lifetime	11.3	15.5	7.5	11.0	14.5	7.8	14.7	17.0	12.6	14.8[a]	17.4	12.4[c]
Percentage using cocaine - past 12 months	1.9	2.5	1.3	2.0	2.6	1.4	3.7	4.5	3.0	3.5[a]	4.3	2.7
Prescription Opioid Pain Relievers												
Percentage reporting any use (medical or nonmedical) of prescription opioid pain relievers - past 12 months	24.5	23.2	25.6	23.5	21.9	25.2	32.7	31.1	34.2	33.5[a]	32.3[b]	34.7[c]
Percentage using prescription opioid pain relievers for nonmedical purposes - past 12 months	5.3	5.5	5.2	5.3	5.0	5.6	17.8	19.1	16.6	17.9[a]	19.5[b]	16.4[c]
Driving[1]												
Percentage of drivers who drove after drinking two or more drinks in the previous hour - past 12 months	3.9	5.4	2.4	3.7	5.2	2.4	4.4	7.0	2.0	4.7	7.1	2.1
Percentage of drivers who drove after using cannabis in the previous hour - past 12 months	3.1	4.7	1.6	3.1	4.4	1.7	2.4	2.9	2.0	2.7	3.4	1.9
Percentage of drivers who reported texting while driving - past 12 months	27.1	27.6	26.7	28.7	29.0	27.9	26.5	28.8	24.3	25.0	27.5	22.7[c]
Mental Health												
Percentage reporting moderate to serious psychological distress during the past 30 days (K6/8+)	17.7	16.0	19.3	16.9	14.6	19.3	33.7	30.0	37.5	34.9[a]	31.0[b]	38.8[c]
Percentage reporting serious psychological distress during the past 30 days (K6/13+)	6.8	5.1	8.3	6.2	4.3	8.2	13.4	11.4	15.6	14.4[a]	12.0[b]	16.7[c]
Percentage using prescribed antianxiety medication - past 12 months	13.9	10.4	16.9	13.7	10.4	16.8	19.4	16.4	22.3	19.5[a]	16.0[b]	22.6[c]
Percentage using prescribed antidepressant medication - past 12 months	11.8	8.9	14.4	11.6	8.3	14.4	16.1	12.2	19.9	16.3[a]	12.2[b]	20.1[c]
Percentage reporting fair or poor mental health in general	12.9	11.8	14.0	12.4	10.6	13.9	26.2	20.8	31.2	26.7[a]	21.4[b]	31.5[c]
Percentage reporting frequent mental distress days (14+) during the past 30 days	13.3	9.5	16.8	12.8	8.9	16.6	16.8	12.3	21.1	17.3	12.9	21.6
Percentage reporting suicidal ideation - past 12 months	3.9	2.7	4.9	3.8	2.5	5.0	7.7	7.4	7.9	7.7[a]	7.8[b]	7.6
Physical Health												
Percentage reporting fair or poor health in general	13.7	15.4	12.1	12.4	13.8	10.9	16.3	16.3	16.4	17.6[a]	17.7[b]	17.6[c]
Percentage reporting frequent physically unhealthy days (14+) during the past 30 days	12.2	11.3	13.0	11.7	10.5	12.7	12.4	10.0	14.7	12.9	10.9	14.9

(1) [a:] Significant difference between pre- and during COVID-19 (2019 vs. 2020) among total sample; [b:] Significant difference between 2019 and 2020 among men; [c:] Significant difference between 2019 and 2020 among women at $p<0.05$; [1] estimates are based on licensed drivers.

Notes: 1) The 2019 telephone sample was weighted for household size, region, age and sex. In contrast, the 2020 sample was from a web panel and thus the weights for 2020 did not include adjustments for household size because individuals were approached directly. The quota targets for some socio-demographic characteristics by region were applied as closely as

possible in obtaining this sample. The final weight adjusts the sample to the region proportions and the population figures for each age group and gender. The pooled sample (2019 and 2020) was used to compare 2019 and 2020 estimates and the corresponding weights from each individual survey year were used in analyses (i.e., weights were not averaged or adjusted).

2) The percentages were adjusted using regression modelling and a marginal standardization method in Stata, with the estimates proportionally adjusted according to a weight for each level of the confounding factors **age, sex, education, region, and immigration status**. Marginal probabilities obtained from logit models reflect a weighted average over the distribution of the confounders and are equivalent to estimates obtained by standardizing to the total population (Muller & MacLehose, 2014).

Appendix A

Sample Design

Table A-1: CAMH Monitor Regional Stratification for the Panel Sample

Region	Counties	Postal Code (FSA)	Cycle					Total
			Jan-Mar	Apr-June	July-Sept	Oct-Dec (Panel A)	Oct-Dec (Panel B)	
Metro Toronto	City of Toronto	M	0	0	0	187	319	**506**
Central East	Simcoe; York; Haliburton; Peterborough; Kawartha Lakes; Northumberland; Durham	K0L,K0M, K9, L0A to L0N, L1,L3P to L3Z, L4A to L4S, L6A to L6G, L7B, L0L to L9R	0	0	0	178	329	**507**
Central West	Halton; Hamilton-Wentworth; Peel; Waterloo; Wellington; Dufferin; Niagara; Brant; Haldimand-Norfolk	L0R to L0S, L2, L3B to L3M, L4T to L4Z, L5, L6H to L6Z, L7A to L7T, L8, L9A to L9K, L9S to L9Z, N0A to N0B, N0E, N1A to N1T, N2, N3	0	0	0	170	347	**517**
West	Kent-Chatham; Huron; Perth; Elgin; Oxford; Middlesex; Grey; Bruce; Lambton; Essex	N0C, N0G, N0H to N0R, N2Z, N4 to N9	0	0	0	163	325	**488**
East	Stormont, Dundas and Glengarry; Prescott-Russell; Ottawa-Carleton; Renfrew; Lanark; Leeds-Grenville; Hastings; Prince Edward; Frontenac; Lennox and Addington	K0A to K0K, K1 to K8	0	0	0	184	352	**536**
North	Kenora; Rainy River; Thunder Bay; Muskoka; Parry Sound; Nipissing; Timiskaming; Algoma; Manitoulin; Sudbury RM; Sudbury TD; Cochrane	P	0	0	0	137	342	**479**
Total			**0**	**0**	**0**	**1,019**	**2,014**	**3,033**

Table A-2: CAMH Monitor Stratification by Region, Panel, Age, Sex, Education and Status for the Online Panel Sample

PANEL A	SEX				AGE								EDUCATION		STATUS		
	# M	% M	# F	% F	# 18-29	% 18-29	# 30-44	% 30-44	# 45-64	% 45-64	# 65+	% 65+	# HS OR LESS	% HS OR LESS	# NOT BORN IN CAN	% NOT BORN IN CAN	TOTAL
Metro Toronto	86	46%	101	54%	35	19%	61	33%	59	32%	32	17%	27	14%	39	21%	187
Central East	85	48%	93	52%	34	19%	52	29%	56	31%	36	20%	30	17%	32	18%	178
Central West	83	49%	87	51%	30	18%	50	29%	59	35%	31	18%	23	14%	25	15%	170
West	79	48%	84	52%	26	16%	31	19%	56	34%	50	31%	27	17%	29	18%	163
East	85	46%	99	54%	34	18%	49	27%	63	34%	38	21%	35	19%	28	15%	184
North	29	21%	108	79%	30	22%	40	29%	38	28%	29	21%	30	22%	11	8%	137
OVERALL	**447**	**44%**	**572**	**56%**	**189**	**19%**	**283**	**28%**	**331**	**32%**	**216**	**21%**	**172**	**17%**	**164**	**16%**	**1,019**

PANEL B		SEX			AGE								EDUCATION		STATUS		
	# M	% M	# F	% F	# 18-29	% 18-29	# 30-44	% 30-44	# 45-64	% 45-64	# 65+	% 65+	# HS OR LESS	% HS OR LESS	# NOT BORN IN CAN	% NOT BORN IN CAN	TOTAL
Metro Toronto	166	52%	153	48%	63	20%	93	29%	108	34%	55	17%	42	13%	60	19%	319
Central East	147	45%	182	55%	54	16%	99	30%	124	38%	52	16%	49	15%	52	16%	329
Central West	171	49%	176	51%	59	17%	97	28%	127	37%	64	18%	57	16%	55	16%	347
West	168	52%	157	48%	55	17%	85	26%	114	35%	71	22%	59	18%	51	16%	325
East	180	51%	172	49%	61	17%	100	28%	133	38%	58	16%	51	14%	48	14%	352
North	126	37%	216	63%	59	17%	72	21%	127	37%	84	25%	65	19%	26	8%	342
OVERALL	**958**	**48%**	**1056**	**52%**	**351**	**17%**	**546**	**27%**	**733**	**36%**	**384**	**19%**	**323**	**16%**	**292**	**14%**	**2,014**

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OVERALL		SEX			AGE								EDUCATION		STATUS		
	# M	% M	# F	% F	# 18-29	% 18-29	# 30-44	% 30-44	# 45-64	% 45-64	# 65+	% 65+	# HS OR LESS	% HS OR LESS	# NOT BORN IN CAN	% NOT BORN IN CAN	TOTAL
Metro Toronto	252	50%	254	50%	98	19%	154	30%	167	33%	87	17%	69	14%	99	20%	506
Central East	232	46%	275	54%	88	17%	151	30%	180	36%	88	17%	79	16%	84	17%	507
Central West	254	49%	263	51%	89	17%	147	28%	186	36%	95	18%	80	15%	80	15%	517
West	247	51%	241	49%	81	17%	116	24%	170	35%	121	25%	86	18%	80	16%	488
East	265	49%	271	51%	95	18%	149	28%	196	37%	96	18%	86	16%	76	14%	536
North	155	32%	324	68%	89	19%	112	23%	165	34%	113	24%	95	20%	37	8%	479
TOTAL	1405	46%	1628	54%	540	18%	829	27%	1064	35%	600	20%	495	16%	456	15%	3033

Table A-3a
Population, Sample Distribution and Region Weights

Region	pop #	pop %	sample #	sample %	Weight (rwgtall)
1 Metro Toronto	1,179,057	21.06%	506	16.68%	1.262390
2 Central East	979,553	17.50%	507	16.72%	1.046717
3 Central West	1,492,150	26.65%	517	17.05%	1.563620
4 West	708,804	12.66%	488	16.09%	0.786893
5 East	788,878	14.09%	536	17.67%	0.797360
6 North	449,949	8.04%	479	15.79%	0.508905
Total	**5,598,391**	**100%**	**3,033**	**100%**	

.

Table A-3b
Population, Sample Distribution and Post Stratification Weights

Gender / Age Group	pop #	pop %	sample #	sample %	Weight (agwgtsampall)
Male 18 - 24	631,060	5.86%	77	2.54%	2.308713
Female 18 - 24	601,190	5.58%	187	6.17%	0.905649
Male 25 – 44	1,678,505	15.59%	477	15.73%	0.991275
Female 25 - 44	1,774,960	16.49%	626	20.64%	0.798738
Male 45 – 64	1,859,055	17.27%	544	17.94%	0.962683
Female 45 - 64	1,970,270	18.30%	520	17.14%	1.067364
Male 65 and older	1,015,655	9.43%	307	10.12%	0.931961
Female 65 and older	1,236,000	11.48%	295	9.73%	1.180284
Total	**10,766,695**	**100.00%**	**3,033**	**100%**	

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