

# Mental Health and Substance Use During COVID-19

## SUMMARY REPORT 2: Spotlight on Gender and Household Size

Conducted by **Leger** for the  
**Canadian Centre on Substance Use and Addiction**  
and the **Mental Health Commission of Canada**



**October 13 – November 2, 2020 (Time 1)**  
**November 19 – December 11, 2020 (Time 2)**  
**January 15 – January 25, 2021 (Time 3)**  
**March 1 – March 14, 2021 (Time 4)**

## Key Findings

- Mental health and substance use concerns have remained **very high**, with **little change between October 2020 and March 2021**.
- In line with long-standing gender differences, more **females report mental health concerns** and more **males report problematic substance use**.
  - 35% of females and 48% of males report excellent or very good mental health; 29% of females and 20% of males report moderate-to-severe anxiety symptoms.
  - 28% of males and 16% of females report more problematic alcohol use; 43% vs 32% report problematic cannabis use.
- The pandemic is having greater mental health and substance use impacts among those living in **households with young kids** (under 13), especially for females.
  - 30% of females and 21% of males living with young kids report moderate-to-severe anxiety.
  - Since November 2020, 37% of females and 26% of males living with young kids and who use alcohol report increased alcohol use; 48% of females and 37% of males living with young kids and who use cannabis report increased cannabis use.
- Compared to the rest of the population, people living alone are more likely to report moderate-to-severe depression symptoms (20% vs 15%), thoughts of suicide (9% vs 6%), and problematic alcohol use (31% vs 22%).
- Financial situation and social isolation continue to be **major stressors** during the pandemic; childcare stress is more common among females in households with kids (14%) than males (4%) in households with kids.
- As found in our first [report](#), mental health and substance use concerns continue to be **interrelated**; 34% of people with current substance use concerns report severe depression symptoms; 36% with current mental health concerns report increased alcohol use.
- Access to treatment is **not keeping pace**; only 18% of people with current mental health symptoms and 20% with problematic substance use say they accessed treatment in February 2021.

# Context And Objectives

## Context

It has now been over one year since the onset of the COVID-19 pandemic. Over the past year, concerns about catching the virus, feelings of isolation and hopelessness, financial concerns, job insecurity, the trauma of losing a loved one, or a combination of these and other stressors, have certainly affected us all. However, not everyone has been impacted equally.

Since October 2020, the MHCC and CCSA have been tracking the relationship between mental health and substance use over time and across several priority populations (see slides 5 & 29). This report includes cross-sectional findings collected over four time periods between October 2020 and March 2021. This report consists of three parts. Part One focuses on mental health and substance use across gender and household size, while Part Two looks at changes in mental health and substance use over time. Part Three provides an update on the first summary report, which focused on individuals with past or current mental health and substance use concerns.

## Objectives

The objectives of this project are to:

- Track the ongoing impact of COVID-19 on mental health and substance use across several priority populations
- Highlight the intersection between mental health and substance use during the COVID-19 pandemic
- Inform public health policy and the development of resources related to mental health and substance use



Long-standing gender differences in mental health and substance use pre-date the pandemic. According to [Statistics Canada](#), in 2012 women were 2x more likely to report depression than men (5.8% vs 3.6%) and 1.5x more likely to report generalized anxiety (3.2% vs 2%), and men were 2.5x more likely to report substance use disorder than women (6.4% vs 2.5%) over the past 12 months.

# Methodology

## Study Population

- Residents of Canada, aged 16 and older, who signed up to complete an online survey via Leger's online panel, LEO. (See final slides for sample details.)

## Data Collection

- Survey data was collected at four time periods, between:
  - T1: October 13 and November 2, 2020 (n=2502)
  - T2: November 19 and December 11, 2020 (n=1507)
  - T3: January 15 and January 25, 2021 (n=1502)
  - T4: March 1 and March 14, 2021 (n=1524)
- This report includes findings for the following priority populations: gender and household size (see slide 5 for details).

## Statistical Analysis

- As a non-random online survey, a margin of error is technically not reported.
- If the data were collected through a random sample, the margin of error for T1 would be Canada (n=2502)  $\pm 2.0\%$ , 19 times out of 20, and for T2, T3, T4 would be Canada (n  $\approx$  1500)  $\pm 2.5\%$ , 19 times out of 20.
- While the sample has been weighted according to age, gender and region using data from the 2016 census, it is not fully representative of the Canadian population and caution should be exercised when comparing results with other surveys.
- The numbers presented have been rounded to the nearest whole number. However, raw values were used to calculate the sums presented and therefore may not correspond to the manual addition of these numbers.

## Priority Population Profile

	T1 (Oct/Nov)	T2 (Nov/Dec)	T3 (Jan2021)	T4 (March 2021)
<b>Weighted n=</b>	<b>2502</b>	<b>1507</b>	<b>1502</b>	<b>1524</b>
<b>Male</b> <i>What is your gender identity? MALE</i>	48% (n=1192)	47% (n=711)	48% (n=721)	48% (n=725)
<b>Female</b> <i>What is your gender identity? FEMALE</i>	51% (n=1285)	51% (n=774)	51% (n=771)	51% (n=783)
<b>Single Person Household [Single Person HH]</b> <i>Do you live by yourself? YES</i>	23% (n=576)	22% (n=332)	23% (n=348)	22% (n=330)
<b>Household with Kids under 13 [HH with Kids]</b> <i>What is the age category of the other people in your household (not including yourself)? AGES – LESS THAN 1 YEAR THGOUGH 12 YEARS</i>	15% (n=375)	15% (n=231)	16% (n=240)	15% (n=233)



# Detailed Results

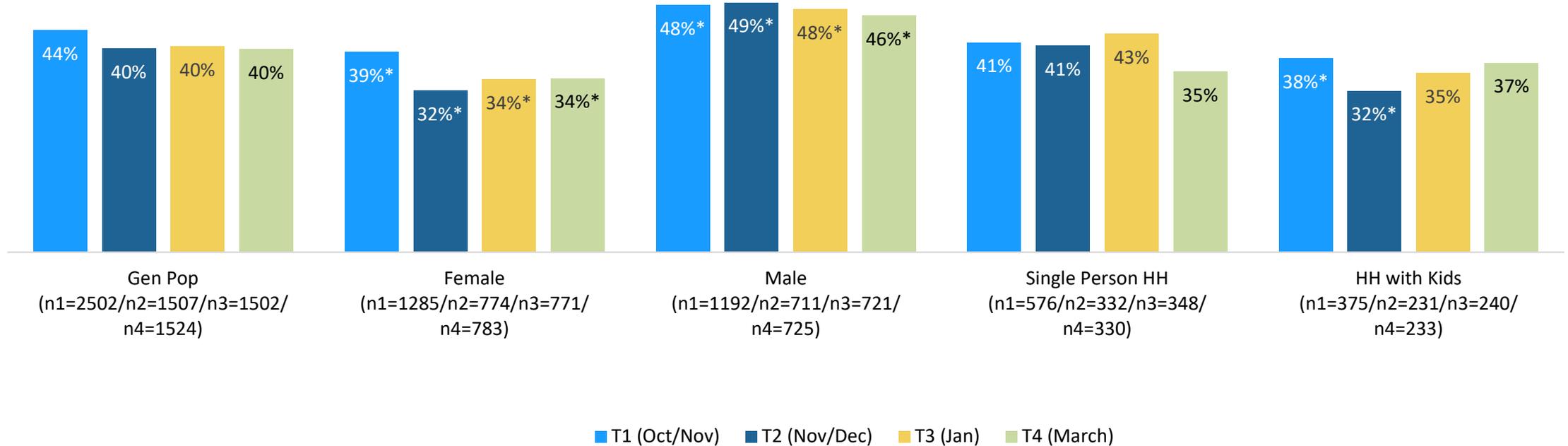
## Spotlight: Gender and Household Size

# Fewer females report excellent/very good mental health

*Poorer mental health also reported in households with kids late in 2020*

**Self-Reported Mental Health**

## *Excellent or Very Good mental health*



Q7: In general, how would you describe your mental health? [same for T1, T2, T3 and T4]

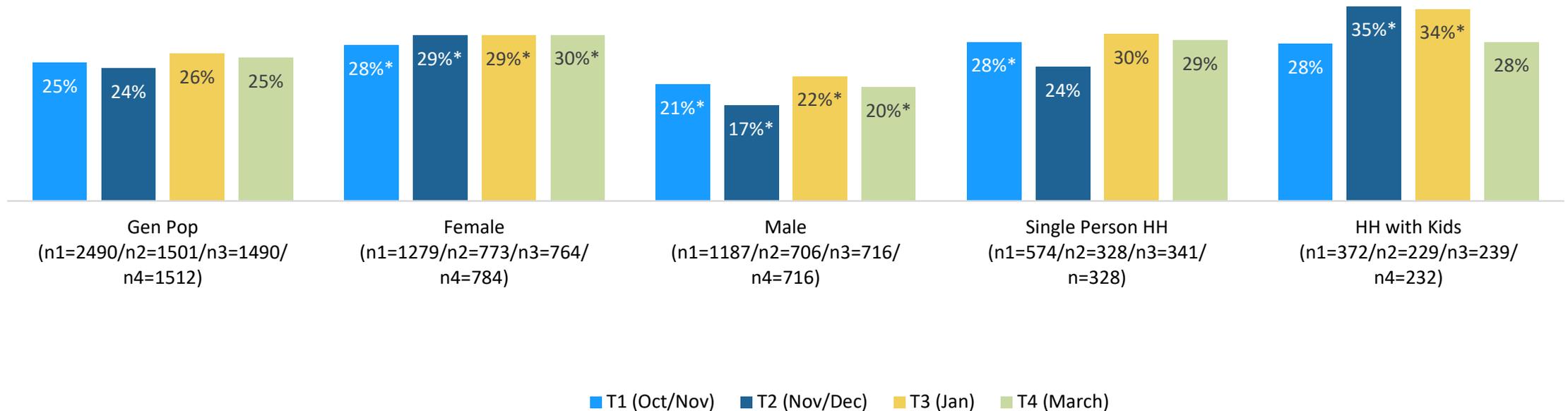
\*Statistically significant difference than rest of sample at 95% confidence interval.

# Females more likely to report moderate to severe anxiety symptoms

*Anxiety symptoms also more common in households with kids*

**Anxiety Symptoms  
(GAD-7)**

*Moderate, Severe anxiety symptoms*



Q8: ANXIETY SCORE (GAD-7) [same for T1, T2, T3 and T4]

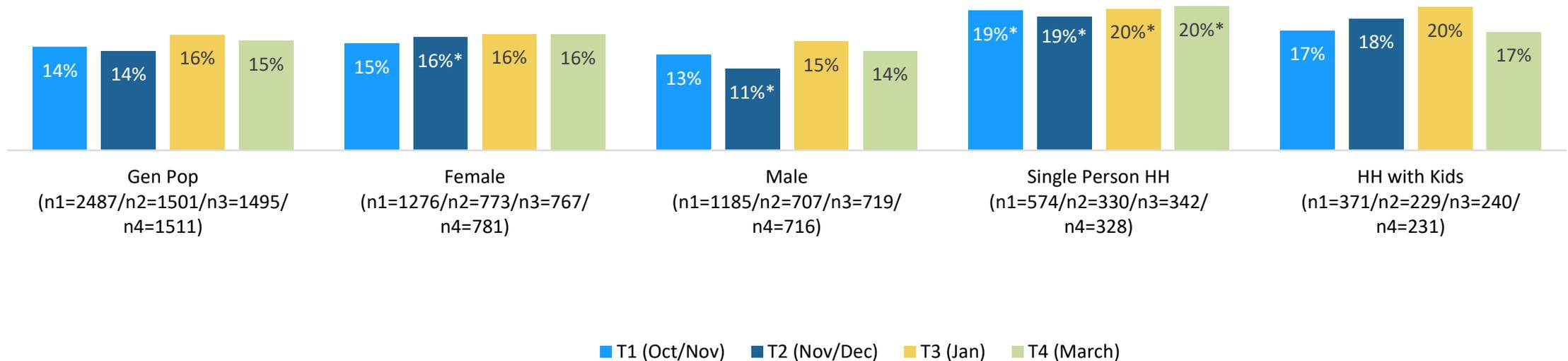
\*Statistically significant difference than rest of sample at 95% confidence interval.

# Single person households more likely to report symptoms of severe depression

*Females and males report similar rates of severe depression symptoms*

*Moderately Severe, Severe depression symptoms*

Depression Symptoms  
(PHQ-9)



Q9: DEPRESSION SCORE (PHQ-9) [same for T1, T2, T3 and T4]

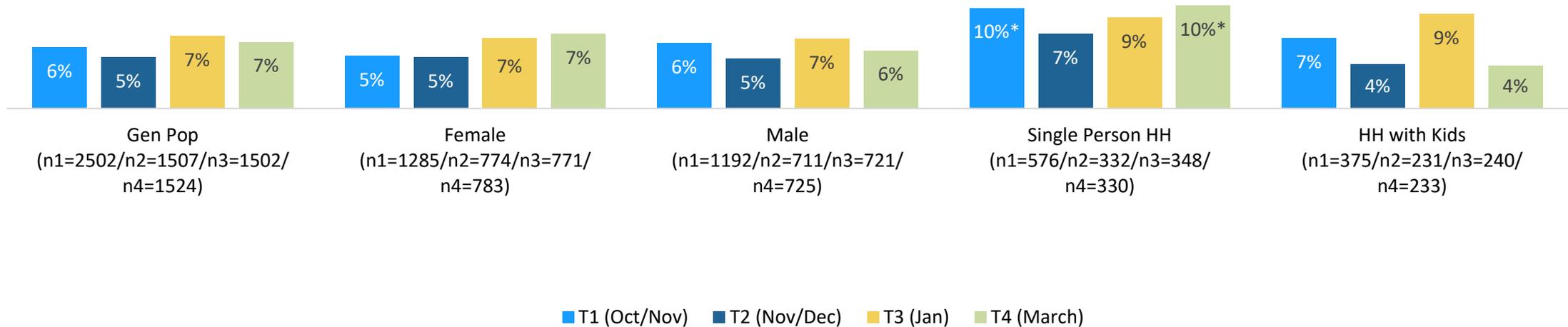
\*Statistically significant difference than rest of sample at 95% confidence interval.

# Up to 7% of survey participants reported contemplating suicide during the pandemic

*Thoughts of suicide more common in single person households*

Suicide Ideation

## Seriously contemplating suicide since March 2020

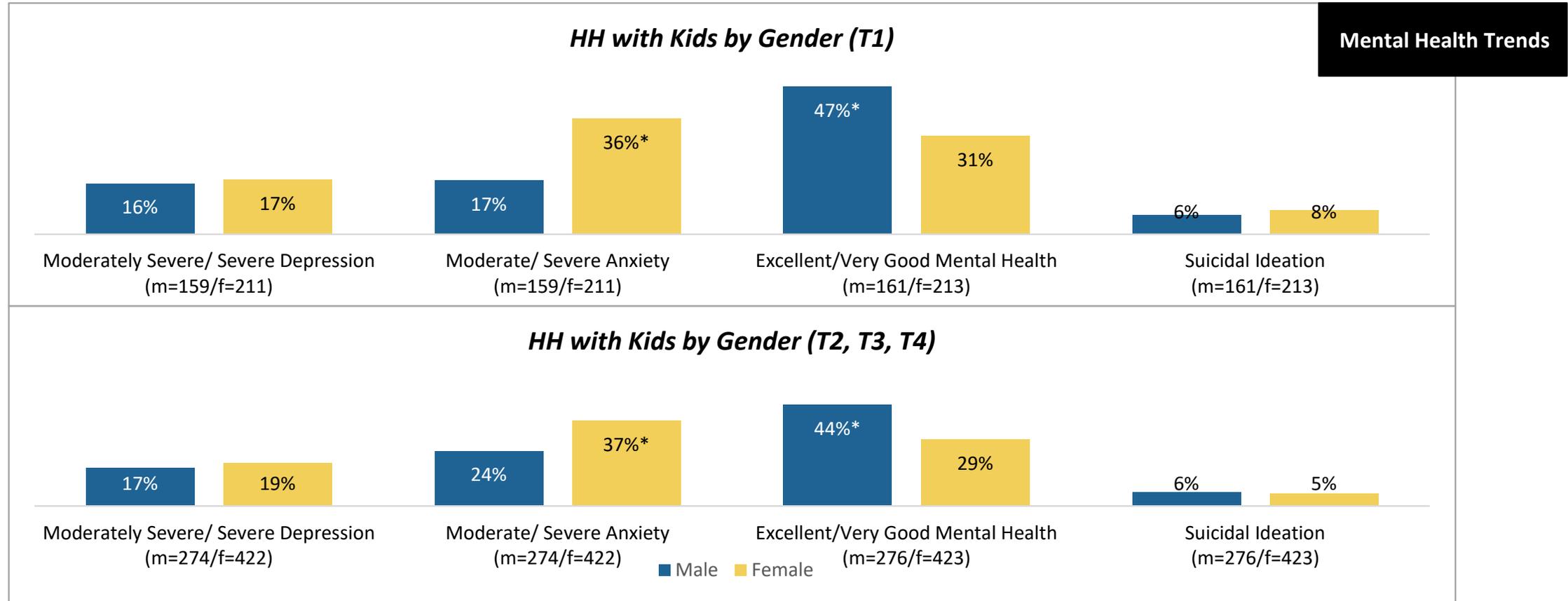


Q11: Have you seriously contemplated suicide since the COVID-19 pandemic began? [same for T1, T2, T3 and T4]

\*Statistically significant difference than rest of sample at 95% confidence interval.

# In households with kids, females more likely to report anxiety symptoms

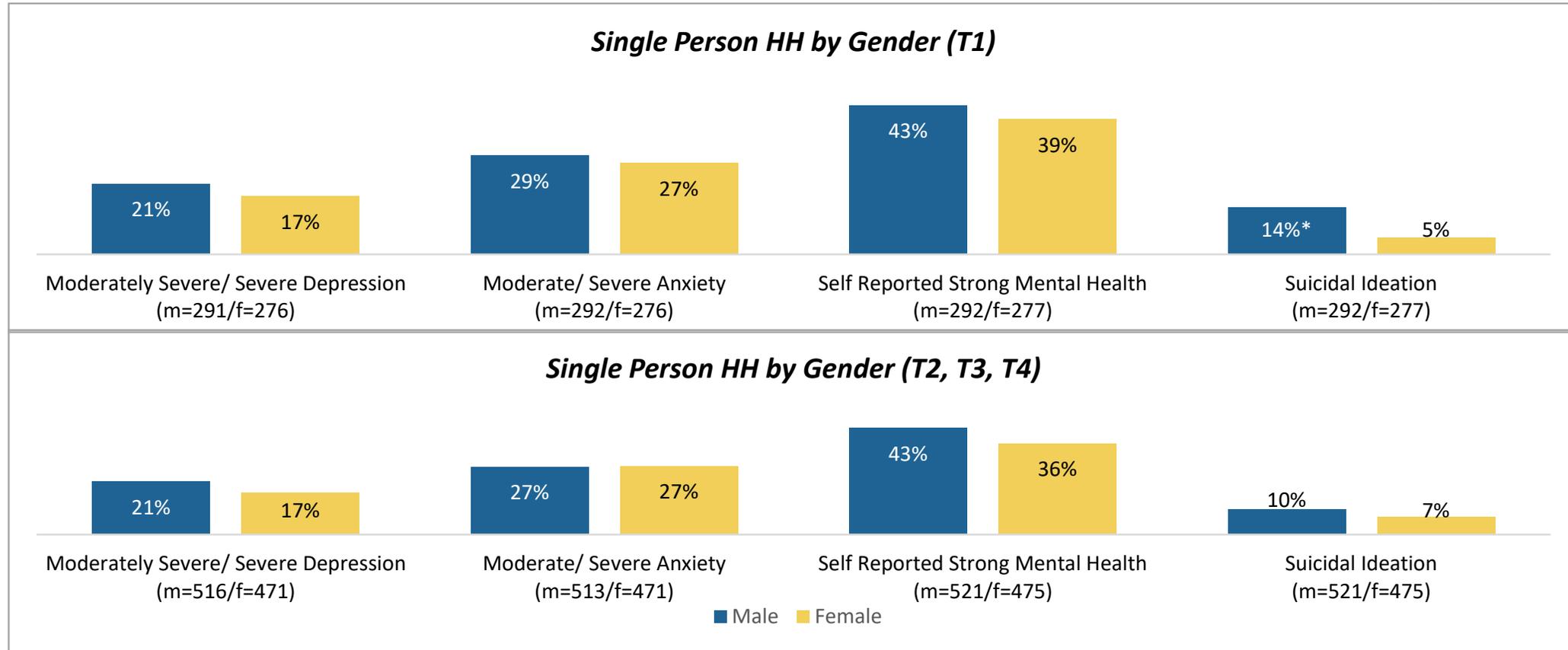
... and less likely to report excellent or very good mental health



PHQ9/ GAD7/ Q7: In general, how would you describe your mental health?/ Q11: Have you seriously contemplated suicide since the COVID-19 pandemic began? [same for T1, T2, T3 and T4]

\*Statistically significant difference than the other gender at 95% confidence interval

# In single person households, females and males tend to report similar mental health outcomes



PHQ9/ GAD7/ Q7: In general, how would you describe your mental health?/ Q11: Have you seriously contemplated suicide since the COVID-19 pandemic began? [same for T1, T2, T3 and T4]

\*Statistically significant difference than the other gender at 95% confidence interval



# Detailed Results

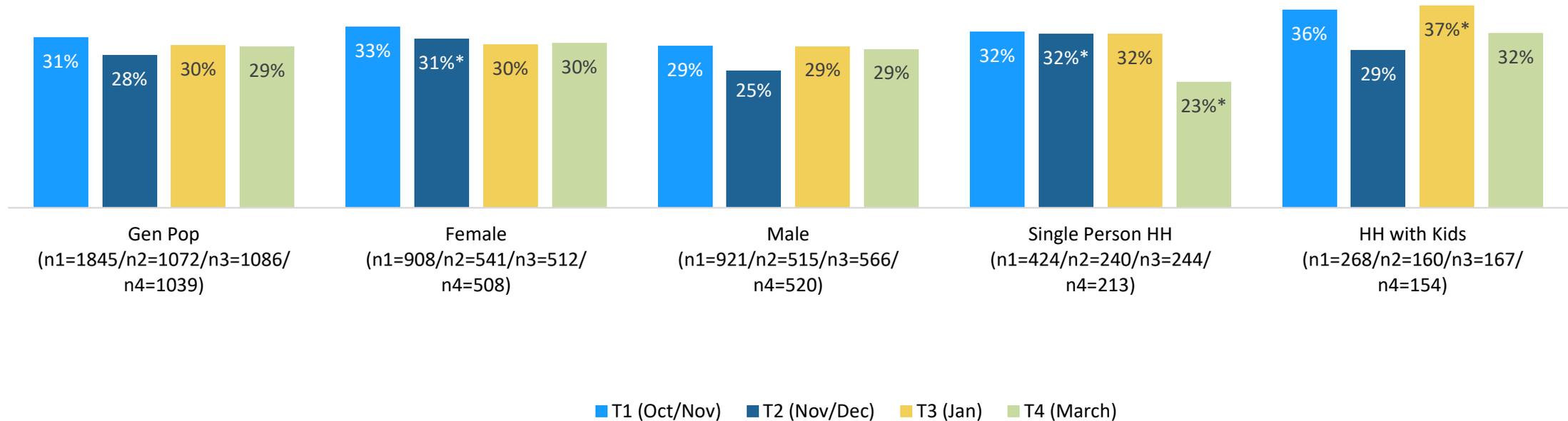
## Spotlight Continued: Alcohol and Cannabis Use

# Since fall 2020, about 30% of people who use alcohol report using more

*Slightly greater % of households with kids report increased alcohol use*

Alcohol Use

*Slightly More, Far More alcohol use since March 2020 (T1)/in past month (T2, T3 and T4)*



Q22r14: Drinking alcohol (beverages/drinks) - Have you engaged in the following activities more or less since the onset of the COVID-19 pandemic (since March 2020)? [T1]  
 During the past month, have you engaged in more or less of the following activities? [T2, T3, T4]

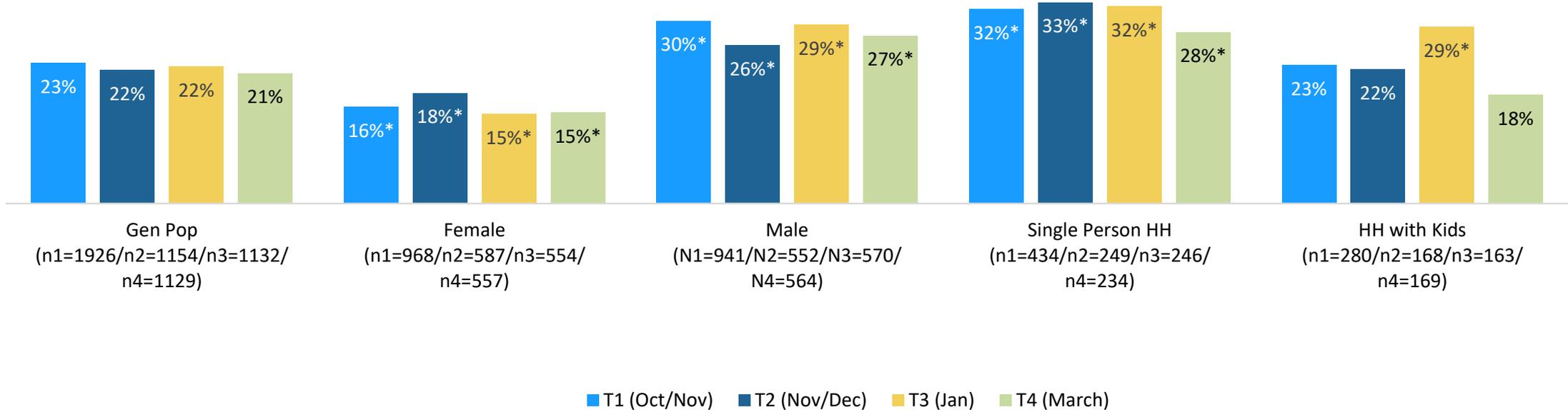
\*Statistically significant difference than rest of sample at 95% confidence interval.

# Problematic alcohol use continues to be more common among males who use alcohol

*Single person households also more likely to report problematic use*

**Problematic Alcohol Use (AUDIT)**

*Problematic alcohol use (AUDIT = 8+)*



Q30: AUDIT (Alcohol Use Disorder Identification Test) Score [same for T1, T2, T3 and T4]

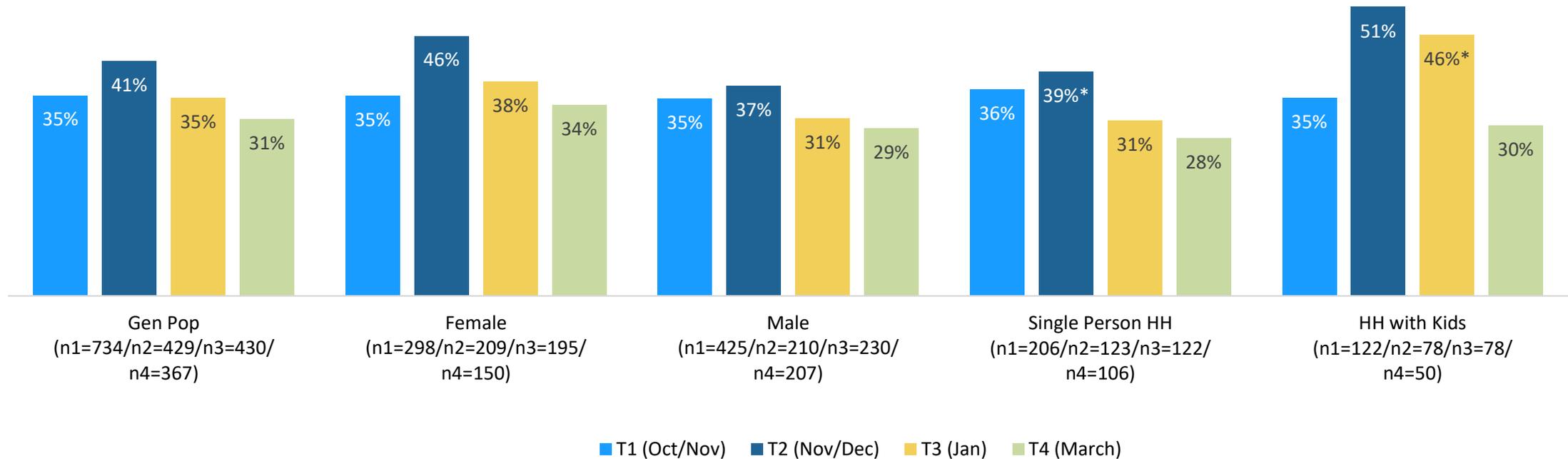
\*Statistically significant difference than rest of sample at 95% confidence interval.

# About 35% of people who use cannabis report using more during the pandemic

*% reporting increased cannabis use in the past month is decreasing*

Cannabis Use

*Slightly More, Far More Cannabis use since March 2020 (T1)/in past month (T2, T3 and T4)*



Q22r15: Consuming cannabis - Have you engaged in the following activities more or less since the onset of the COVID-19 pandemic (since March 2020)? [T1] During the past month, have you engaged in more or less of the following activities? [T2, T3 and T4]

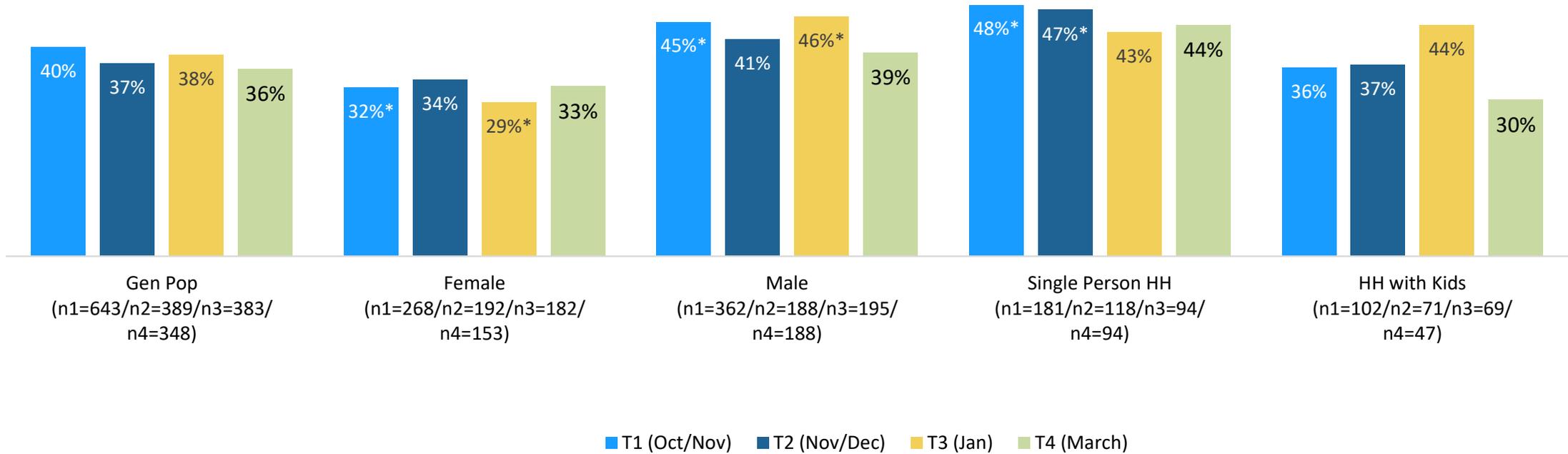
\*Statistically significant difference than rest of sample at 95% confidence interval.

# Problematic cannabis use continues to be more common among males who use cannabis

*Single person households also more likely to report problematic use*

**Problematic Cannabis Use  
(CUDIT-R)**

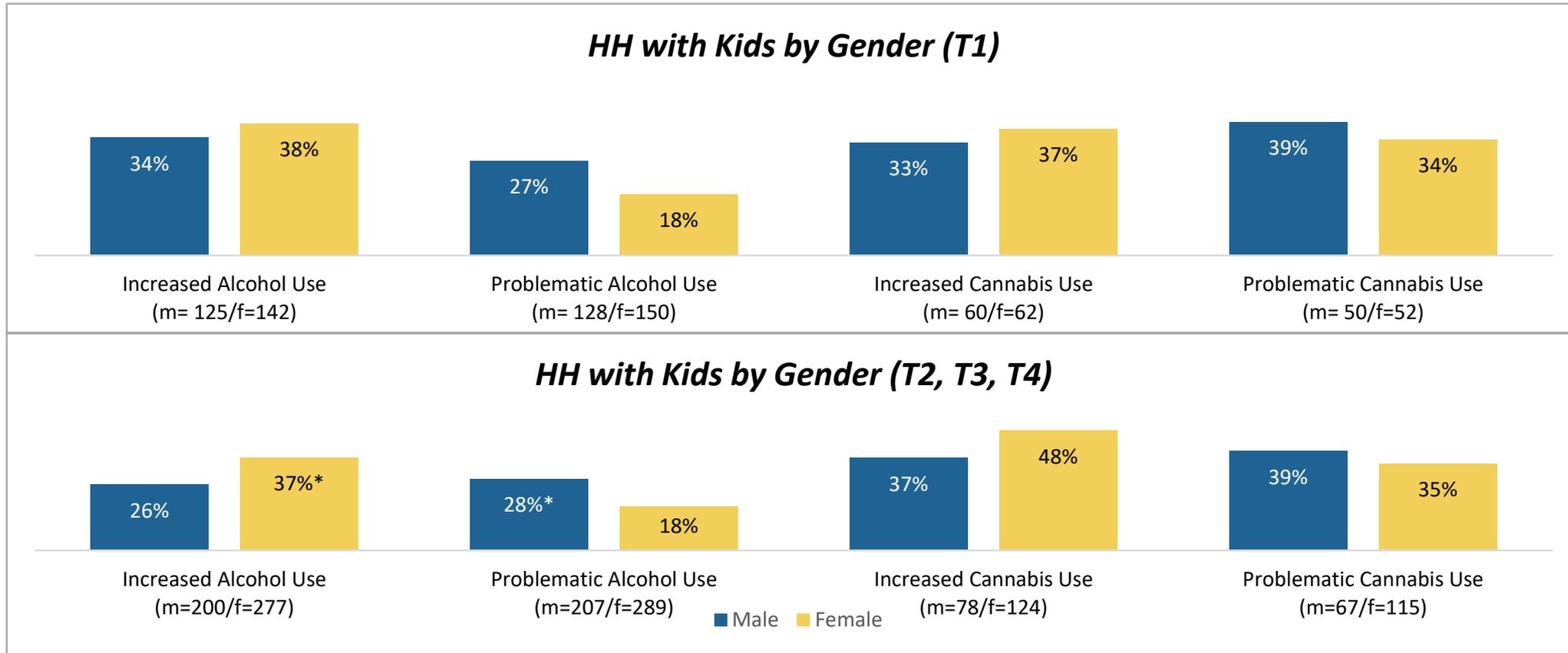
*Problematic cannabis use (CUDIT = 8+)*



Q38: CUDIT-R (Cannabis Use Disorder Identification Test-Revised) Score [same for T1, T2, T3 and T4]

\*Statistically significant difference than rest of sample at 95% confidence interval.

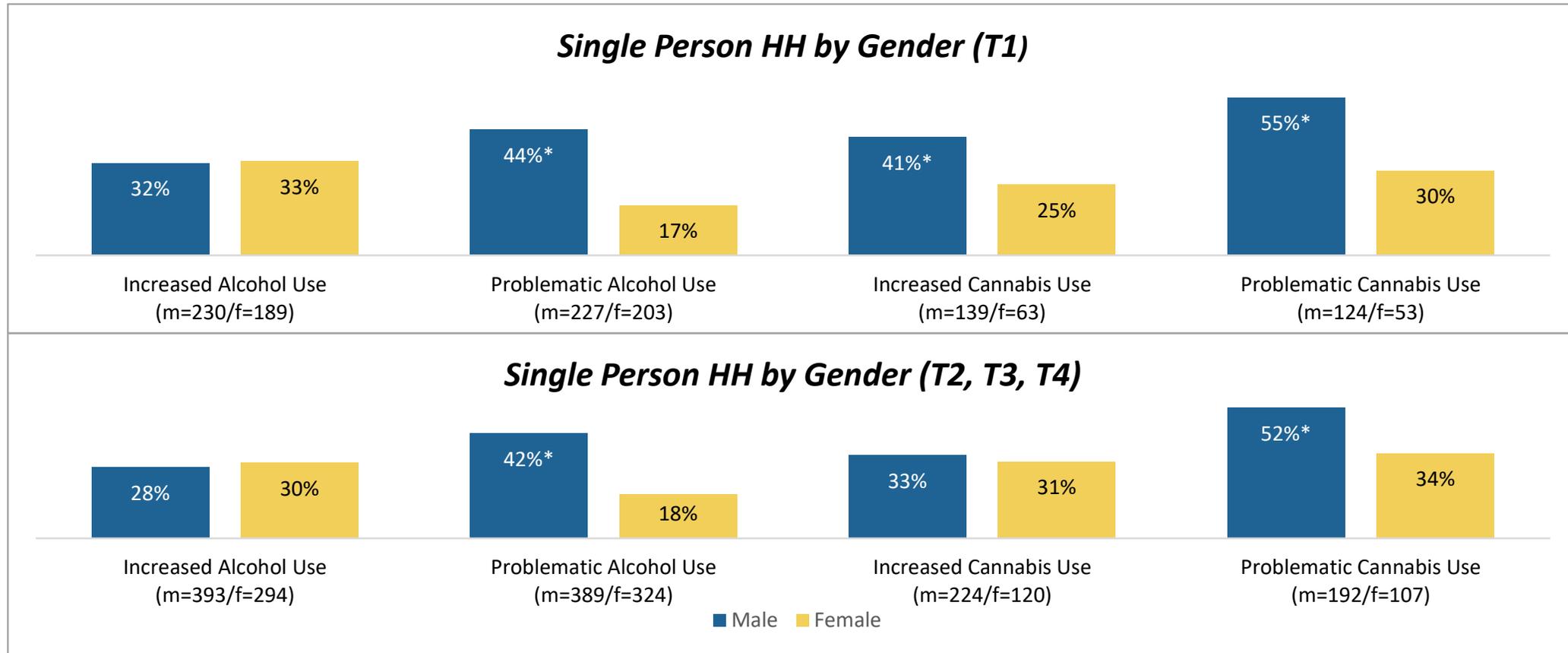
# Since November 2020, females in households with kids more likely to report increased alcohol and cannabis use



AUDIT/CUDIT-R/ Q22r14, 15: Drinking alcohol (beverages/drinks)/ Consuming cannabis - Have you engaged in the following activities more or less since the onset of the COVID-19 pandemic (since March 2020)? [T1] During the past month, have you engaged in more or less of the following activities? [T2, T3, T4]

\*Statistically significant difference than the other gender at 95% confidence interval

# In single person households, males who use alcohol and/or cannabis more likely to report problematic use



AUDIT/CUDIT-R/ Q22r14, 15: Drinking alcohol (beverages/drinks)/ Consuming cannabis - Have you engaged in the following activities more or less since the onset of the COVID-19 pandemic (since March 2020)? [T1] During the past month, have you engaged in more or less of the following activities? [T2, T3, T4]

\*Statistically significant difference than the other gender at 95% confidence interval



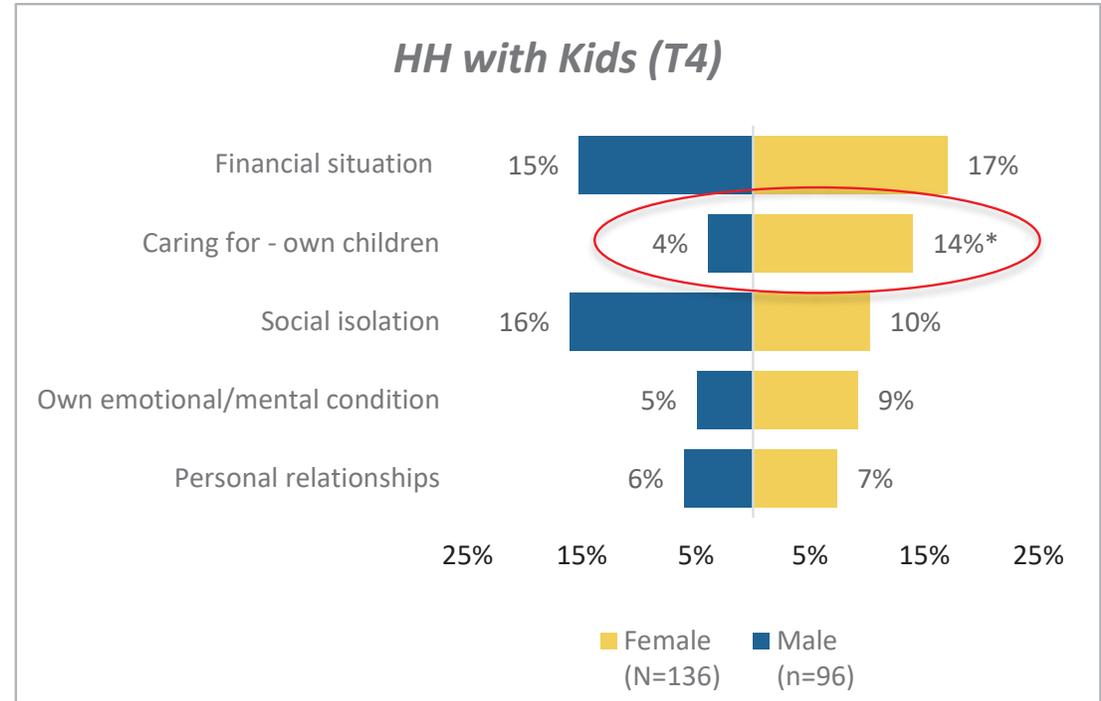
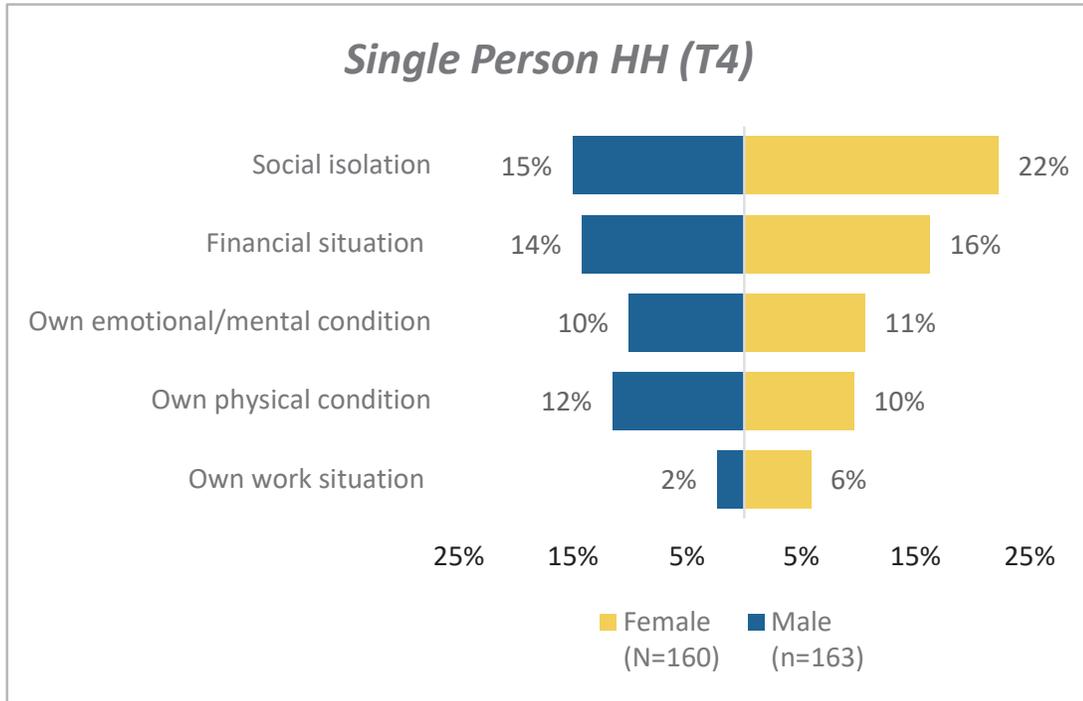
# Detailed Results

## Spotlight Continued: Top Pandemic Stressors

# Social isolation is the biggest source of stress among single person households

*Females more likely to identify childcare as a major source of stress*

Major Stressors



Q18: Thinking about your day-to-day life during the pandemic, what would you say is your biggest source of COVID-19 related stress right now (Top 5 Stressors)? (T4)

\*Statistically significant difference than the other gender at 95% confidence interval



# Detailed Results

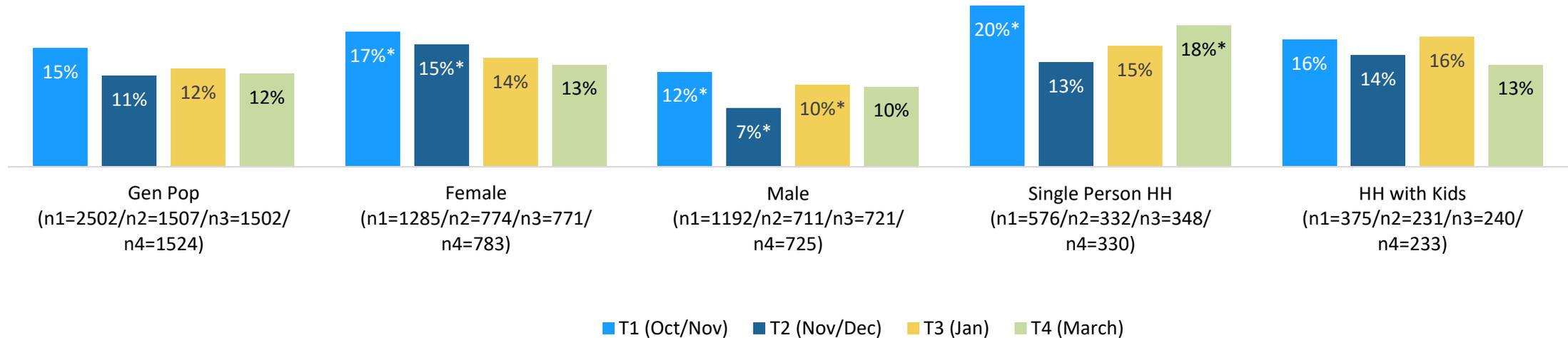
## Spotlight Continued: Access

# 12% of respondents accessed mental health treatment in the past month

*Females more likely to have accessed mental health treatment than males*

Access to Treatment:  
Mental Health

**Access to mental health treatment**  
since March 2020 (T1)/in past month (T2, T3 and T4)



Q44: Since March 2020 (T1)/over the past month (T2, T3 and T4), have you accessed formal treatment services to help manage your emotions or mental health?

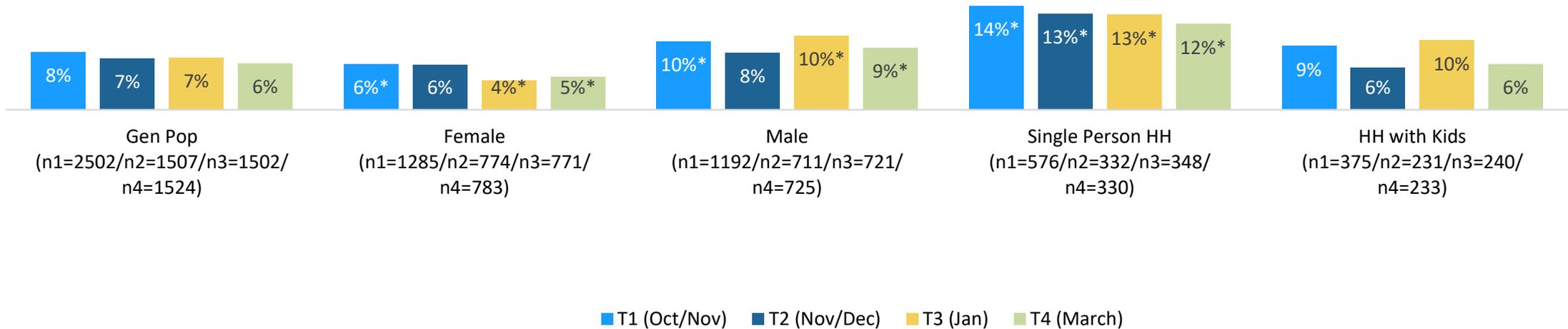
\*Statistically significant difference than rest of sample at 95% confidence interval.

# 6% of respondents accessed substance use treatment in the past month

*Males more likely to have accessed substance use treatment than females*

**Access to Treatment:  
Substance**

**Access to substance use treatment**  
since March 2020 (T1)/in past month (T2, T3 and T4)



Q42r1,2,3,4: Since March 2020 (T1)/over the past month (T2, T3 and T4), have you accessed formal treatment services to help manage your use of [alcohol], [cannabis], [prescription psychoactive drugs], [other illegal psychoactive drugs]?

\*Statistically significant difference than rest of sample at 95% confidence interval.



# Detailed Results

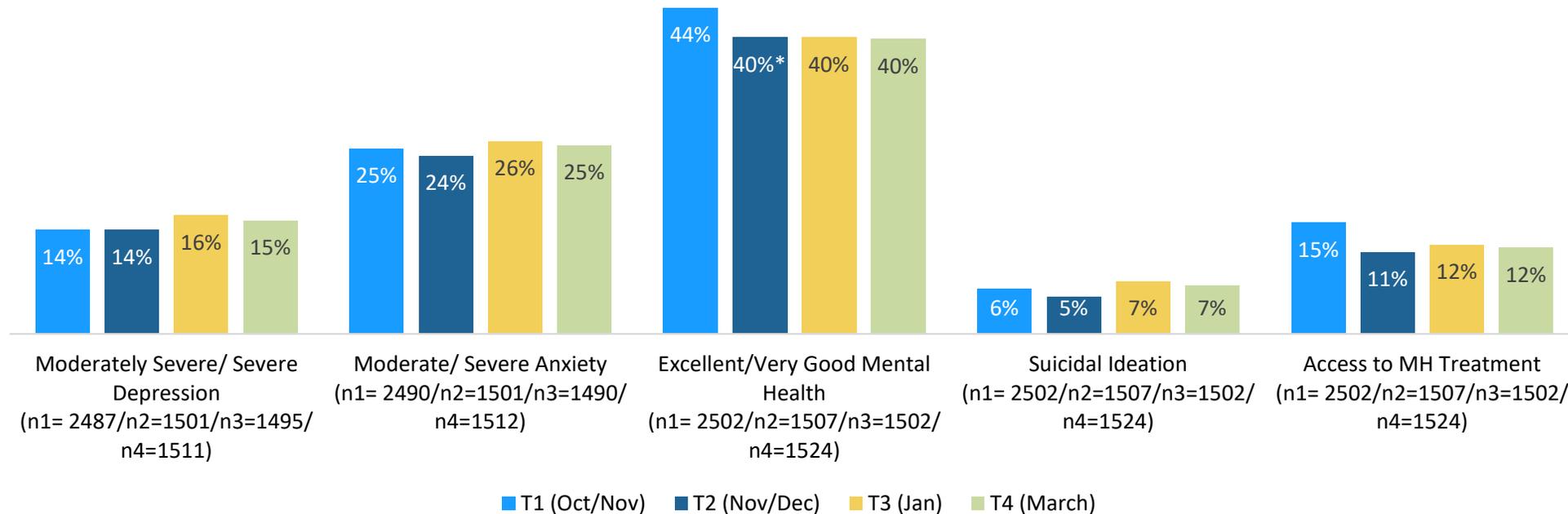
Part II, Tracking Survey Indicators over Time: Trends

# High % of individuals continue to report mental health concerns during the pandemic

*Yet, access to mental health (MH) treatment services remains low*

Mental Health Trends

## General Population



PHQ9/ GAD7/ Q7: In general, how would you describe your mental health?/ Q11: Have you seriously contemplated suicide since the COVID-19 pandemic began? [same for T1, T2, T3 and T4]

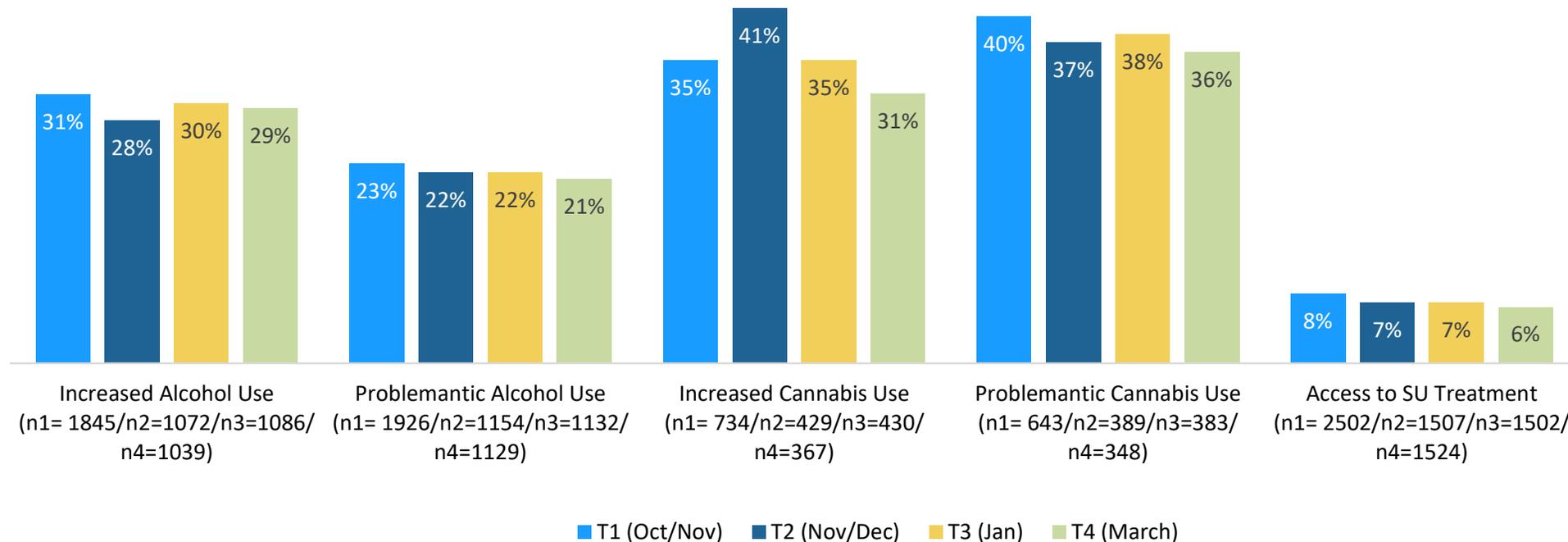
Q44: Since March 2020 (T1)/over the past month (T2, T3 and T4), have you accessed formal treatment services to help manage your emotions or mental health?

\*Statistically significant difference than rest of sample at 95% confidence interval from the last time interval

# Similarly, high % of individuals continue to report substance use concerns

*Yet, access to substance use (SU) treatment services remains low*

## General Population



Q22r14/ Q22r15: Drinking alcohol (beverages/drinks)/ Consuming cannabis - Have you engaged in the following activities more or less since the onset of the COVID-19 pandemic (since March 2020)? [T1] During the past month, have you engaged in more or less of the following activities?[T2, T3, and T4]/ AUDIT/ CUDIT [Same for T1, T2, T3, and T4]



# Detailed Results

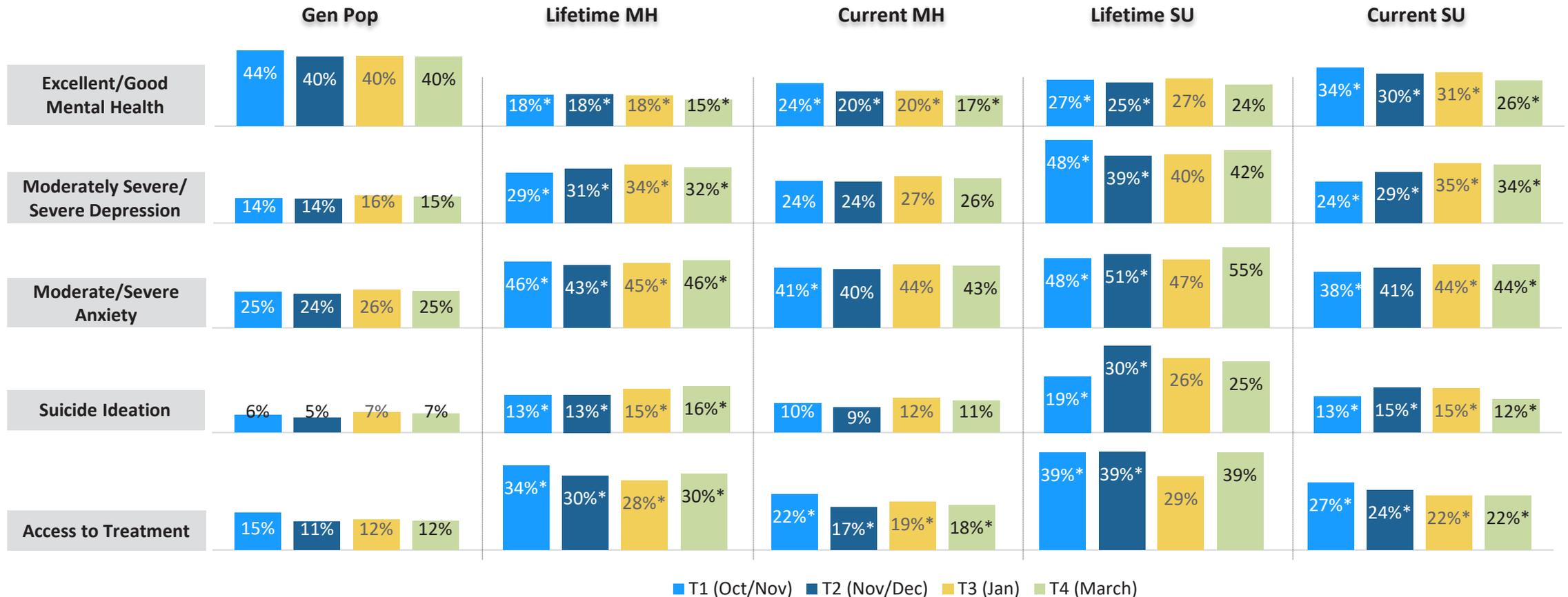
Part III, Highlights from MHSU Priority Populations

## Part II, Priority Population Profile

	T1 (Oct/Nov)	T2 (Nov/Dec)	T3 (Jan2021)	T4 (March 2021)
<b>Weighted N=</b>	<b>2502</b>	<b>1507</b>	<b>1502</b>	<b>1524</b>
<b>Lifetime Mental Health Diagnosis [Lifetime MHD]</b> <i>Has a medical or psychological professional ever diagnosed you with a mental health disorder (e.g., depression, anxiety, PTSD, etc.)? YES</i>	30% (n=747)	28% (n=428)	30% (n=445)	28% (n=430)
<b>Lifetime Substance Use Diagnosis [Lifetime SUD]</b> <i>Has a medical or psychological professional ever diagnosed you with substance use disorder (e.g., alcohol use disorder, cannabis use disorder, etc.)? YES</i>	6% (n=138)	5% (n=77)	4% (n=65)	4% (n=67)
<b>Current Problematic Substance Use [Current SU]</b> <i>Respondents reporting problematic (risky) alcohol use (AUDIT score 8+) and/or cannabis use (CUDIT-R score 8+).</i>	19% (n=465)	18% (n=265)	18% (n=264)	16% (n=248)
<b>Current Mental Health Symptoms [Current MH]</b> <i>Respondents reporting mild to severe symptoms of depression (PHQ-9 score 5+) and/or anxiety (GAD-7 score 5+), and/or recently contemplating suicide.</i>	59% (n=1482)	59% (n=883)	60% (n=898)	59% (n=900)

# Mental health continues to be worse among individuals with past or current substance use concerns

Mental Health

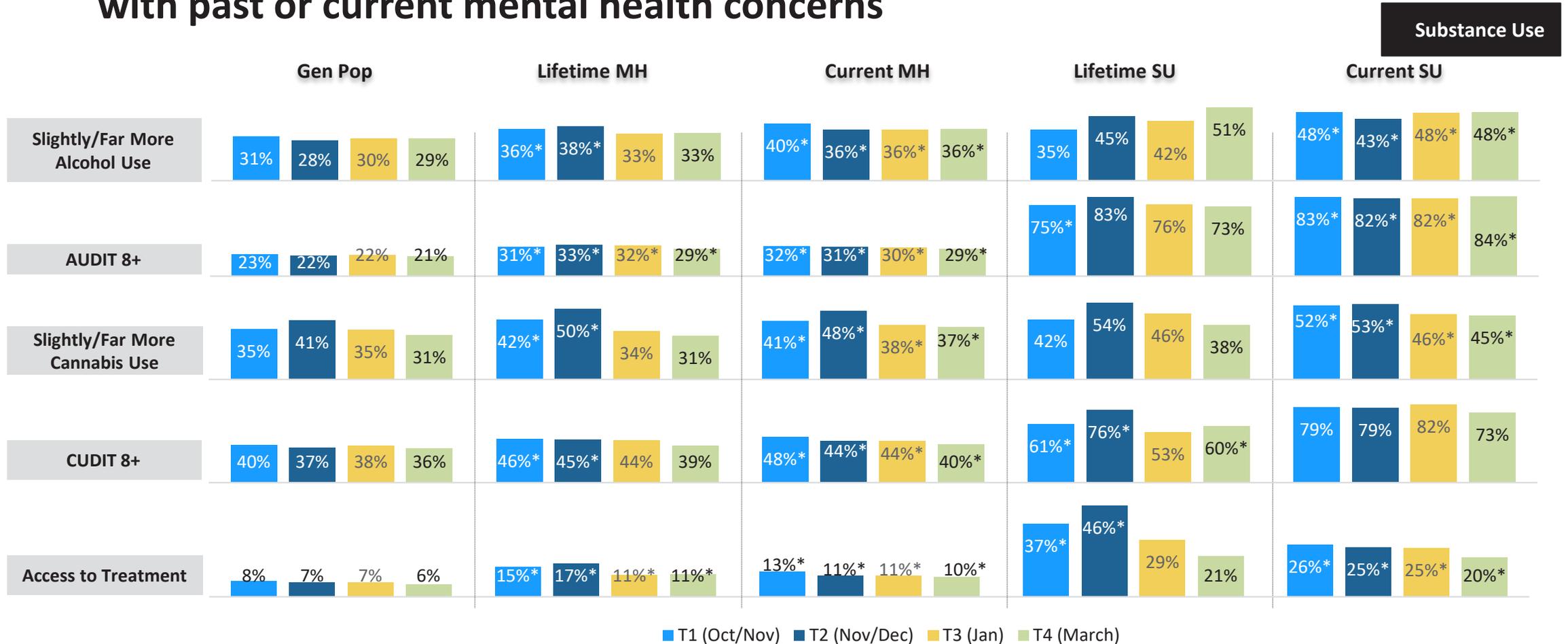


PHQ9/ GAD7/ Q7: In general, how would you describe your mental health?/ Q11: Have you seriously contemplated suicide since the COVID-19 pandemic began?/ [same for T1, T2, T3 and T4]/ Q44: Since March 2020 (T1)/over the past month (T2, T3 and T4), have you accessed formal treatment services to help manage your emotions or mental health?

\*Statistically significant difference than rest of sample at 95% confidence interval within same time period

Sample T1: ~2500; T2, T3, T4: ~1500

# Problematic substance use continues to be more common among individuals with past or current mental health concerns



AUDIT/CUDIT-R/ Q22r14, 15: Drinking alcohol (beverages/drinks)/ Consuming cannabis - Have you engaged in the following activities more or less since the onset of the COVID-19 pandemic (since March 2020)[T1]/ During the past month [T2, T3, T4]? /Q42r1,2,3,4: Since March 2020 (T1)/over the past month (T2, T3 and T4), have you accessed formal treatment services to help manage your use of [alcohol], [cannabis], [prescription psychoactive drugs], [other illegal psychoactive drugs]? 31

\*Statistically significant difference than rest of sample at 95% confidence interval within same time period; Sample T1: ~2500; T2, T3, T4: ~1500



# Respondent Profile

## Respondent Profile (1/2)

	T1 (Oct/ Nov'20)	T2 (Nov/ Dec'20)	T3 (Jan'21)	T4 (Mar'21)
<b>n =</b>	<b>2502</b>	<b>1507</b>	<b>1502</b>	<b>1524</b>
<b>Gender</b>	(%)	(%)	(%)	(%)
Female	51	51	51	51
Male	48	47	48	48
Other		1	1	1
<b>Age</b>				
16 to 24	13	13	13	13
25 to 39	25	24	24	24
40 to 64	42	42	42	42
65 +	21	21	21	21
<b>2SLGBTQ+</b>				
Yes	11	10	11	11
No	88	89	88	88

	T1 (Oct/ Nov'20)	T2 (Nov/ Dec'20)	T3 (Jan'21)	T4 (Mar'21)
<b>n =</b>	<b>2502</b>	<b>1507</b>	<b>1502</b>	<b>1524</b>
<b>Region</b>	(%)	(%)	(%)	(%)
British Columbia	13	13	13	13
Alberta	12	12	12	12
Saskatchewan	3	3	3	3
Manitoba	4	4	4	4
Ontario	39	39	39	39
Quebec	23	23	23	23
Atlantic	7	7	7	7
<b>Canadian Status</b>				
Canadian citizens by birth / non-immigrants	79	79	77	79
Canadian by naturalization	13	13	15	12
Permanent resident	6	6	6	8
No status	1	1	1	1

## Respondent Profile (2/2)

	T1 (Oct/ Nov'20)	T2 (Nov/ Dec'20)	T3 (Jan'21)	T4 (Mar'21)
<b>n =</b>	<b>2502</b>	<b>1507</b>	<b>1502</b>	<b>1524</b>
<b>Ethnicity</b>	(%)	(%)	(%)	(%)
White	77	76	78	77
East/Southeast Asian	8	8	7	8
Indigenous Peoples (First Nations, Inuk, Inuit, Métis)	5	5	5	5
South Asian	5	5	4	5
Black	2	4	2	2
Middle Eastern	2	2	2	2
Latino	1	2	2	1
Canadian / French Canadian (Non-specified)	1	<1	<1	1
<b>Income</b>				
Less than \$35K	21	19	-	-
\$35K to \$75K	30	31	-	-
\$75K to \$100K	16	16	-	-
\$100K and over	24	23	-	-

	T1 (Oct/ Nov'20)	T2 (Nov/ Dec'20)	T3 (Jan'21)	T4 (Mar'21)
<b>n =</b>	<b>2502</b>	<b>1507</b>	<b>1502</b>	<b>1524</b>
<b>Education</b>	(%)	(%)	(%)	(%)
Less than a high school diploma	3	3	3	5
High school degree or equivalent	18	21	19	21
Some college, no degree	31	29	30	28
Bachelor's degree	31	31	32	30
Master's degree	8	7	8	9
Professional degree	6	6	7	6
Doctorate	1	2	1	1
<b>Employment</b>				
Employed	46	45	46	45
Unemployed prior to COVID	5	4	4	5
Laid off or unemployed since COVID	5	5	6	5
Student	10	10	9	9
Retired	24	26	25	24
Self-employed	5	6	6	6
Unable to work	4	4	4	4

