

Setting the Stage for Increased CHS Risk: Cannabis Use for GI Relief and Link to Cannabis Use Disorder Among Young Adults

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Prevalence of Cannabis Use in 2025

Cannabis Use	Young Adults (19-30)
Any Past 12 Months Use	41.9%
Any Past Month Use	28.8%
Daily Use	11.8%

Daily use has increased from 5.9% in 2013 to 11.8% in 2025, constituting a new all-time high level

Cannabis Use Disorder highest in young adulthood

Patrick, M. E., Miech, R. A., O’Malley, P. M., Jager, J., & Jang, J. B. (2026). Monitoring the Future Longitudinal Panel Study annual report: National data on substance use among adults ages 19 to 65, 1976–2025. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan.

Harms of Frequent & High-intensity Use

Frequent & High-intensity Use

- Daily or near daily use
- Multiple sessions per day
- High-potency THC products

Harms

- Cannabis use disorder (CUD)
- Mental & physical health problems
- Academic & occupational harms
- Other substance misuse

Growing concern – more potent products used at higher rates than ever before.

Background

1 Dual-Purpose Use

Young adults report using cannabis for both self-reported recreational and medical reasons.

2 A Research Gap

Most YA research has focused on motives like social use, enhancement, coping, and relieving boredom.

What the Evidence Shows

Dai & Richter (2019) analyzed a U.S. national survey: young adults (18–34) with a chronic health condition were significantly more likely to report past-30-day cannabis use than those without one.

Cannabis use for GI symptoms?

Qualitative work suggested YAs use for a variety of GI-related issues.

In what ways, if any, do you distinguish between using cannabis for medical purposes and using cannabis for recreational (nonmedical) purposes? Please provide examples in your description.

Recreational is just for fun, but I use it medicinally to help control anxiety and suppress dreams. It also **stimulates appetite** and tricks me into drinking water by inducing dry mouth.

Typically it is when I am experiencing physical **pain in my physical body or stomach**.

Recreational is more for when I go on nature walks and want to heighten the enjoyment. Medical would be when I’m feeling **anxious, which makes me nauseous and I’ll smoke it to have an appetite**.

Poor appetite – smoking when i get home from work if my adhd medications have made it difficult for me to stomach/swallow food

Physical pain – dealing with menstrual cramps during my period

Stress- inability to relax after work due to anxiety and overthinking; especially when i was not in a healthy work environment

Medicinal: Before eating **help appetite**, to get energy to leave the house, **after getting nauseous or throwing up**, to help relieve tension

Recreational: Before watching TV so it will be more entertaining or funny, connected to a social event like dancing, before painting to help relax

Progression of CHS: Three Phases

Prodromal

- Mild or intermittent nausea and abdominal discomfort
- Lasts months to years
- Cannabis use sustained or increased (due to not associating symptoms or belief helps alleviate GI symptoms)

Hyperemetic

- Severe, recurring, cyclical vomiting
- Severe nausea and abdominal pain
- Lasts hours to days
- Cannabis use may increase due to believing help reduce symptoms
- Compulsive, hot showers

Recovery

- Symptom improvement days to weeks after stopping cannabis
- Resumption of cannabis causes symptoms to recur
- Anxiety, depression, other mood symptoms worsened by cannabis use often improve

Why this potentially matters now?

1

Rapid Legalization: More states are legalizing cannabis for non-medical use and for medical nausea

2

Raising Daily Use: Daily or near daily cannabis use among young adults is climbing

3

Use for Self-Managing GI Symptoms: Cannabis is often used to self-manage nausea and poor appetite

4

An Open Question: Does this use pattern signal a more concerning cannabis involvement (which may place someone at higher risk for CHS down the road?)

Exploratory Aims

Among young adults who use cannabis daily or near daily:

AIM 1

Prevalence

How many report using cannabis to manage nausea or poor appetite?

AIM 2

Baseline Associations

Is using cannabis for those reasons linked to heavier cannabis involvement?

AIM 3

Daily-Level Associations

Do GI-symptom days coincide with more use, being high longer, or more consequences?

Study Design (R21DA050131, PI Fairlie)

Among young adults who use cannabis daily or near daily:

Screening

Baseline (n=200)

14-day EMA

**Confirm eligibility:
15+ days past month &
contemplating changing use**



**Cannabis use history
(including DFAQ),
consequences, motivations
for use**



**Daily surveys, 4x per day,
cannabis use and symptoms**

Average age 22.78 (SD = 2.87), 36% Male, 62.8% White, 12.8% Hispanic, 51.8% 4-year college student

EMA = ecological momentary assessment

Measures

Baseline: “Please indicate which conditions you use cannabis for with or without a physician’s recommendation.”

Conditions asked about include sleep, anxiety, depression, stress, physical pain, headaches, and:

- **Nausea**
- **Poor Appetite**

Daily EMA: “Yesterday, did you experience the following symptoms?”

Nine symptoms were asked about each day; this analysis focuses on:

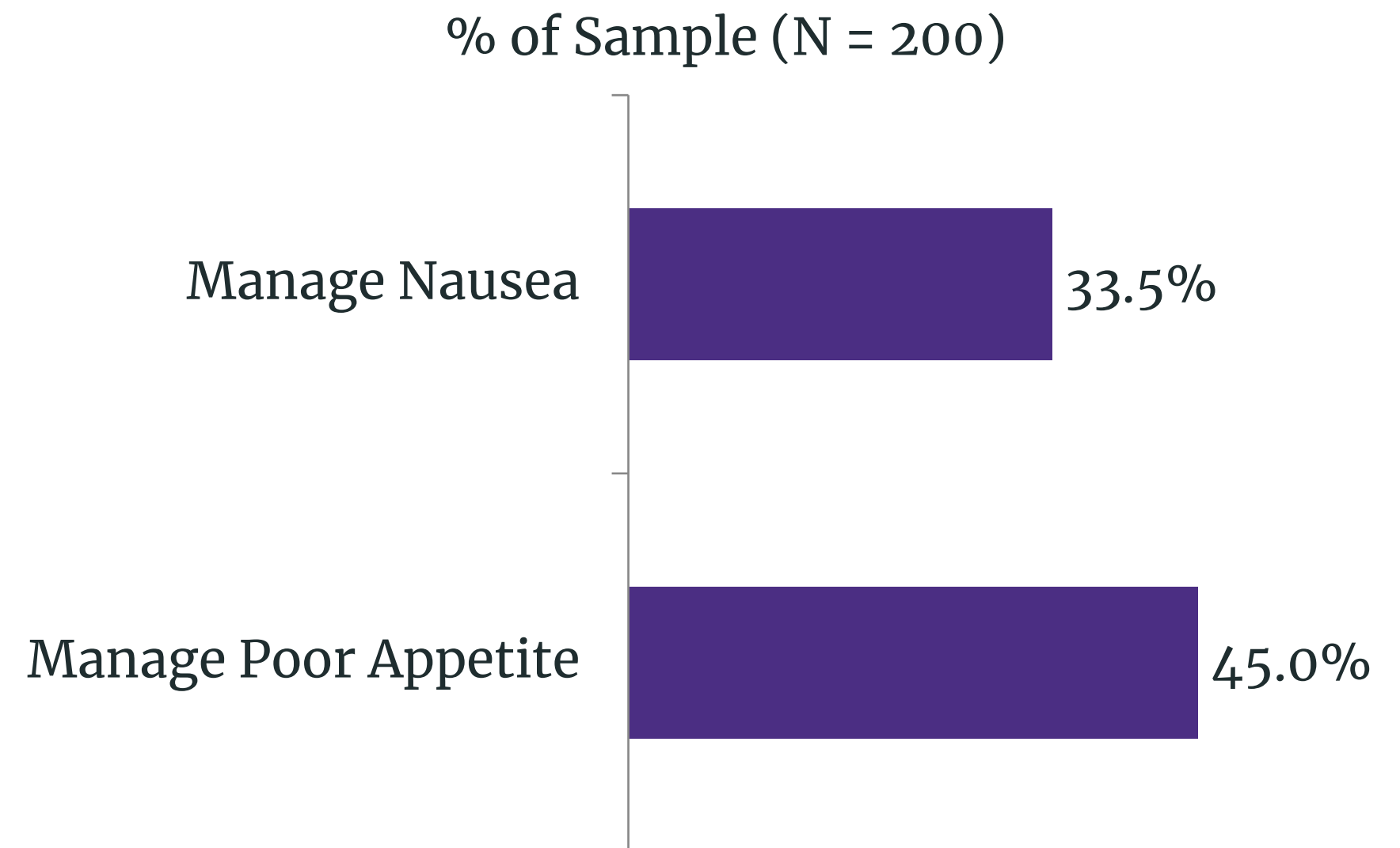
- **Gastrointestinal symptoms (e.g., constipation, diarrhea)**
- **Upset stomach**
- **Poor Appetite**

Aim 1: Baseline Prevalence of Using Cannabis for Nausea/Appetite

51.5%

(n = 103) used cannabis to manage poor appetite and/or nausea

27.0% (n = 54) used it for both reasons



Aim 2: Linked to Heavier Cannabis Outcomes

At baseline, compared to those who did NOT use cannabis for nausea/appetite, those who did reported significantly:



More Frequent Use

Higher frequency of cannabis use
21.2 (7.8) vs. 25.6 (5.28) days



Longer Highs

More hours spent high
20.5 (12.4) vs. 29.1 (17.8)



More Consequences

More negative consequences (past month)
13.4 (4.8) vs. 14.7 (4.6)



Higher CUDIT-R

More cannabis use disorder symptoms
14.9 (5.3) vs. 17.6 (5.0)

Analysis: Negative binomial regressions testing associations between using cannabis to manage nausea or poor appetite and cannabis-related outcomes, controlling for sex, race, ethnicity, and college student status

Aim 3: Daily-Level Descriptives

All Days

N = 2,296 days, 164 individuals

- 77.8% used any cannabis
- 47.0% of days had 1+ GI symptoms
- 0.77 (SD 0.97) GI symptoms/day

Cannabis Use Days

N = 1,719 days, 161 individuals

- 4.23 hrs (SD 2.46) spent high
- 2.98 (SD 2.54) neg. consequences
- 0.82 (SD 0.98) GI symptoms/day

Symptom Type	All Days	Cannabis Use Days
GI symptoms (e.g., diarrhea, constipation)	24.9%	27.2%
Upset stomach	26.7%	27.5%
Poor appetite	25.5%	26.8%

Aim 3: Daily GI symptoms & Cannabis Outcomes

On days (and for people overall) with more GI symptoms, negative consequences were significantly higher

Outcome	Day-level GI Symptoms	Person-Avg GI Symptoms
Any cannabis use	OR = 1.01 n.s.	OR = 1.88 p = .069
Hours high	RR = 0.99 n.s.	RR = 1.11 p = .055
Negative consequences	RR = 1.09 p < .001	RR = 1.43 p < .001

Analysis: Mixed-effects models testing associations between number of GI symptoms and cannabis-related outcomes, controlling for age, sex, race, ethnicity, and college student status (level 2) and weekend status and day # (level 1). Hours high was included as covariate at level 1 and 2 for models with negative consequences.

What This Means, in Plain Language



More GI symptoms on a given day → more cannabis-related consequences endorsed that same day



Higher average symptom burden across the study → more consequences overall



GI symptoms was not associated with whether someone used cannabis, or how long they stayed high

Key Findings: Recap

51.5%

use cannabis to
manage nausea or
poor appetite at
baseline

**Using for
nausea/
appetite**

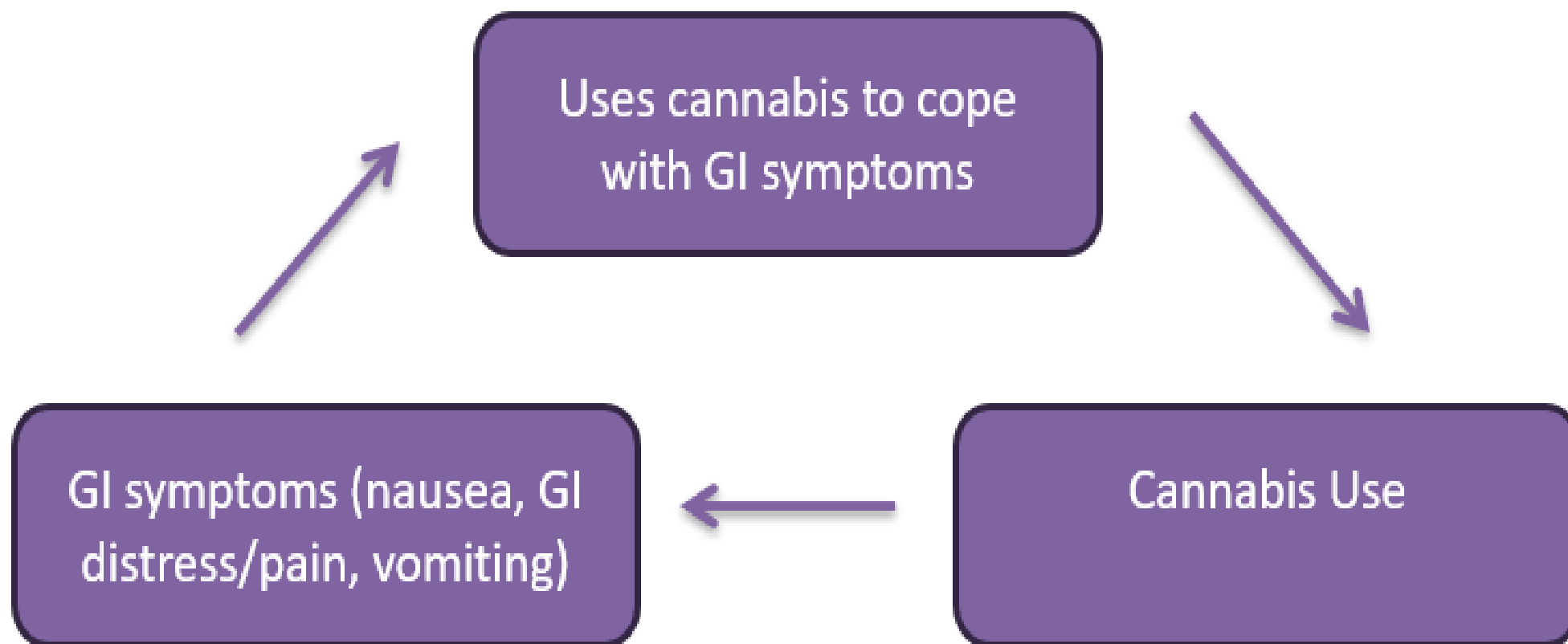
linked to more
frequent use &
more CUD
symptoms at
baseline

**Days with
more GI
symptoms**

associated with
more negative
consequences

Could many young adults who use cannabis at high frequency and intensity be experiencing early phases of CHS?

Proposed cyclical self-medication model for cannabis to relieve GI symptoms



Prodromal Phase of CHS

- Mild or intermittent nausea and abdominal discomfort
- Lasts months to years
- Cannabis use sustained or increased (due to not associating symptoms or belief helps alleviate GI symptoms)

Opportunities for Research and Prevention

- 1 Longitudinal tracking:** Examine how GI symptoms and GI-related motives may evolve over time with ongoing cannabis use and risk for CUD and CHS
- 2 Develop methods/measures** to identify YAs who may be in the prodromal phase before symptoms escalate
- 3 Clinical Awareness:** Support providers in identifying CHS risk factors earlier in YAs who use cannabis
- 4 Prevention:** Develop education around cannabis use and GI symptoms

Thank you!

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