

ECHO IDAHO

Substance Use in Idaho

Cannabis, Vaping, and Tobacco: An Evidence-Based Update for SUD Clinicians

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Disclosures

- None

Learning Objectives

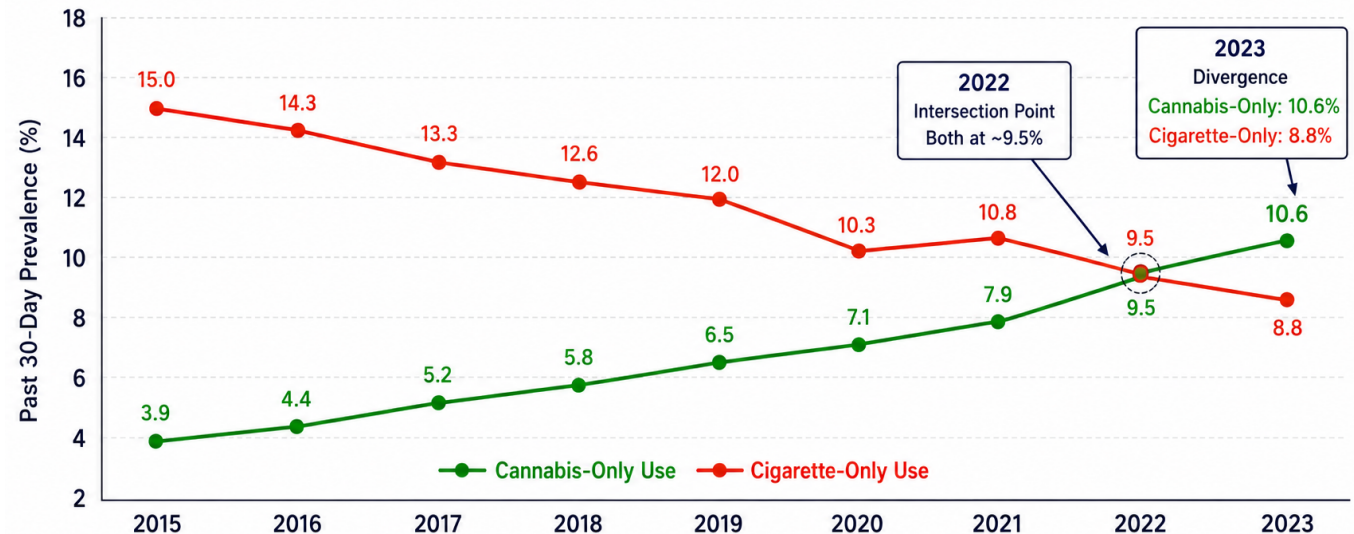
1. Recognize the epidemiology and co-use patterns of cannabis, vaping, and tobacco
2. Understand Idaho-specific policy context
3. Identify the mental and physical health effects of cannabis and vaping
4. Apply evidence-based screening and treatment strategies for cannabis use disorder (CUD), tobacco use disorder (TUD), and co-use

National Trends: Cannabis Use Is Rising, Tobacco Is Falling

- Cannabis-only use among U.S. adults: 3.9% (2015) → 10.6% (2023)
- Cigarette-only use: 15.0% (2015) → 8.8% (2023)
- Key point: Cannabis use is now more prevalent than cigarette-only use among U.S. adults

Cannabis-Only Use Now Exceeds Cigarette-Only Use Among U.S. Adults

Past 30-Day Prevalence, NSDUH 2015–2023



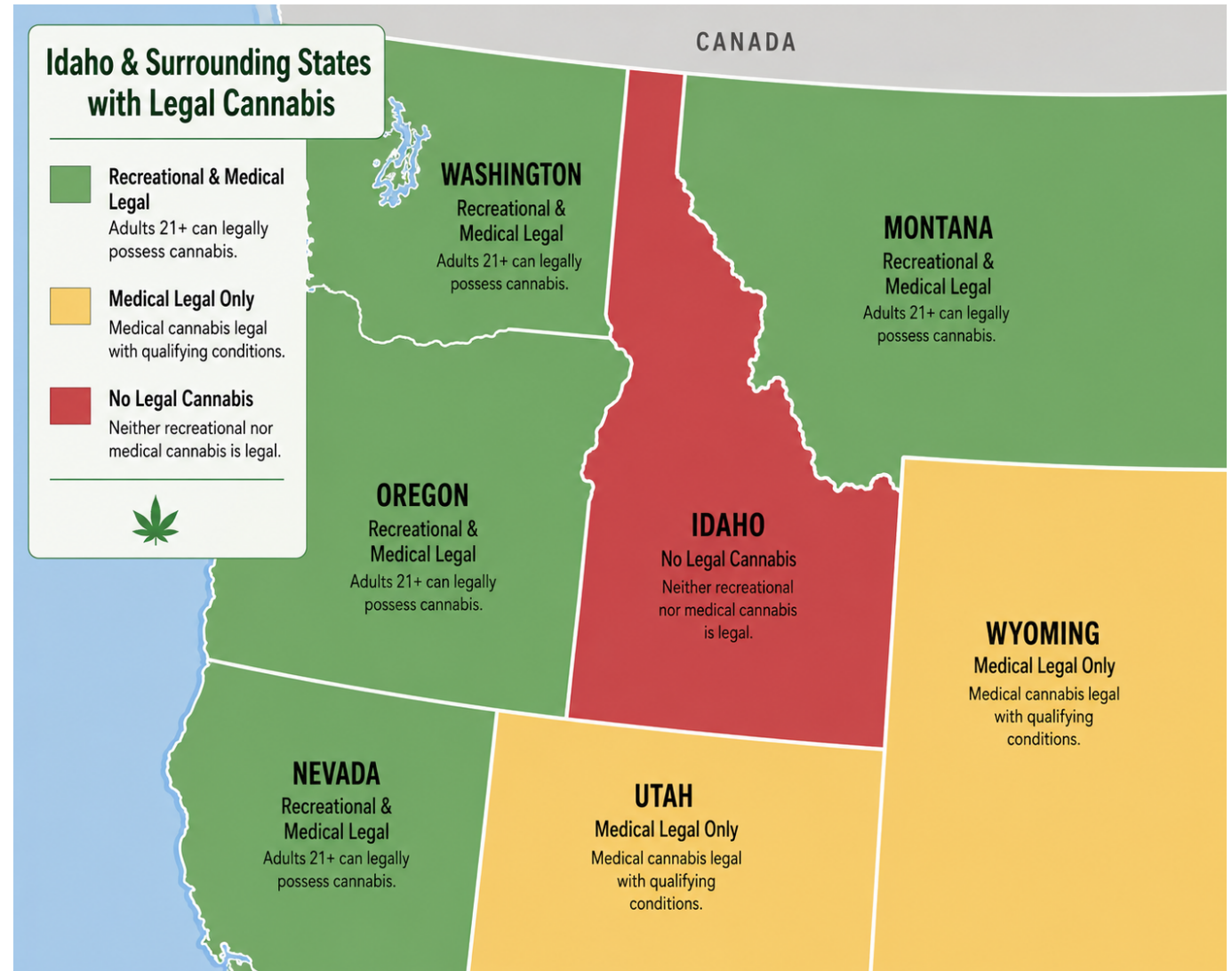
Source: Constantin & Jayawardhana, Addictive Behaviors, 2025 [1]

Co-Use: The Rule, Not the Exception

- Cannabis and tobacco co-use prevalence: ~6.4% (2021), relatively stable
- Among emerging adults (18–25): 16% exclusive nicotine vaping, 4.3% exclusive cannabis vaping, 8.1% co-vaping
- 48% of young adults (18–24) who use tobacco also use cannabis
- In high-tobacco-burden states, 45% of current cigarette smokers also use cannabis
- Cannabis use is 2–10x more common among cigarette smokers vs. non-smokers
- Co-use associated with: male sex, younger age, lower SES, mental health conditions, other substance use

Idaho Policy Context

- Idaho: no medical or recreational cannabis legalization
- Neighboring states (OR, WA, MT, NV) have full recreational legalization
- Patients may access cannabis from legal markets across state lines
- Illicit/unregulated products carry additional risks (contaminants, unknown potency)
- CUD still presents in Idaho clinical settings regardless of legal status



Cannabis and Mental Health: Key Risks

- ~30% of past-year cannabis users meet criteria for CUD; ~half have moderate-to-severe disease
- Psychosis risk: 2- to 11-fold increased risk with regular use, especially adolescents/young adults using high-THC products
- Bipolar disorder: worsened mania, decreased likelihood of recovery
- Depression: CUD associated with increased suicidal ideation and attempts
- Anxiety: high-potency cannabis associated with ~2-fold increased risk
- Cognition: impaired verbal learning, working memory, executive function
- Key message: No scientific evidence supports cannabis as treatment for any psychiatric illness

Cannabis and Physical Health

- Respiratory: chronic bronchitis symptoms with smoked cannabis; EVALI risk with vaped cannabis
- Cardiovascular: emerging evidence of increased risk
- Cannabinoid hyperemesis syndrome: cyclic vomiting in chronic heavy users
- Pregnancy: low birth weight, preterm birth; should be avoided
- Driving: impaired reaction time and judgment; increased crash risk

Cannabis Withdrawal Syndrome

- Occurs in ~50% of daily users upon cessation
- Onset: 1–2 days; peak: 2–6 days; duration: up to 3 weeks
- Symptoms: irritability, anxiety, depressed mood, insomnia, decreased appetite, restlessness, chills, headache, sweating
- Overlaps significantly with nicotine withdrawal
- Management: psychoeducation, CBT, symptom-targeted meds, slow tapering

Cannabis-Induced Psychosis

What Is Cannabis-Induced Psychosis (CIP)?

- THC can induce a transient psychotic state — typically lasting hours, but sometimes persisting well beyond acute intoxication
- Transient psychotic symptoms during cannabis intoxication reported by 5–50% of adults
- Rates of CIP are increasing — partly attributable to rising THC potency and increasing CUD prevalence

The Potency Problem

- THC concentration in seized cannabis resin increased nearly 4-fold (8.3% → 31.2%) from 2000–2022 in Denmark
- Population-level data: rising THC potency is positively associated with cannabis treatment admissions, CIP incidence, and dual diagnosis (schizophrenia + CUD)
- High-potency cannabis use associated with 2× the odds of incident psychotic experiences (OR 2.15, 95% CI 1.13–4.06)
- Systematic review (20 studies): higher potency cannabis consistently associated with increased risk of psychosis and CUD

Acute Management

- No FDA-approved antidote or specific treatment for CIP
- Supportive care: quiet environment, reassurance
- Severe agitation/anxiety → benzodiazepines
- Psychotic symptoms → second-generation antipsychotics (risperidone most commonly used; mean dose ~8 mg/day in one study)
- Inpatient admission if severe mood or psychotic symptoms (e.g., suicidality)
- Average hospital length of stay for CIP: ~28 days
- Symptoms typically improve significantly by day 22 of treatment
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Screening for CUD

- United States Preventive Services Task Force (USPSTF) recommends screening for substance use including cannabis
- Single Item Screen-Cannabis: high negative predictive value
- Positive screen → CUDIT-R (8 items)
- SBIRT model: Screening, Brief Intervention, Referral to Treatment
- Ask routinely, non-judgmentally — normalize the conversation

Treatment of CUD: What Works

- No FDA-approved pharmacotherapy for CUD
- Evidence-based psychosocial treatments:
 - CBT: identify and manage thoughts/behaviors/triggers
 - MET: patient-centered, personalized feedback
 - CM: behavioral reinforcement (vouchers for negative UDS)
 - Combined MET-CBT ± CM: most robust evidence
- Adolescents: add family-based treatment
- Digital delivery effective for mild CUD: PursueCare reSET, Grounded: Quit Weed Smoking
- Long-term abstinence in ~50% — set realistic expectations
- Harm reduction: lower-THC products, avoid daily use, gradual tapering

Investigational pharmacotherapy

No FDA-approved medications exist for CUD; psychosocial interventions remain first-line

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Agent	Mechanism	Dose	Key Finding	Limitation
NAC	Glutamate modulation	1200 mg BID	Doubled abstinence odds — only when paired with contingency management	No benefit without behavioral co-intervention
Gabapentin	Ca ²⁺ channel / GABA modulation	1200 mg/day	Reduced use, withdrawal, and cravings (single trial, n=50)	Unreplicated; single small proof-of-concept
Topiramate	GABA agonist / glutamate antagonist	Up to 200 mg/day	Reduced cannabis use frequency/amount	Poor tolerability; cognitive side effects; high dropout
Varenicline	Partial nAChR agonist	1 mg BID	Possible benefit in men; lower urine THC levels	No overall main effect; sex-specific finding needs replication
Nabiximols	THC + CBD oromucosal spray	Self-titrated	Fewer use days (35 vs 53); more achieved ≥50% reduction (NNT=4)	Not available in US; no significant abstinence benefit
CBD	Endocannabinoid modulation	400-800 mg/day	Reduced use and withdrawal in phase 2a dose-finding trial	Early-phase only; requires high doses unavailable OTC

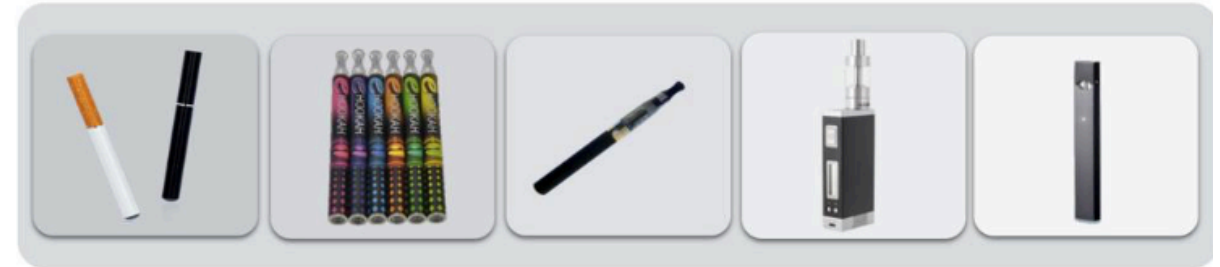
Bottom Line: Nabiximols and CBD show the most consistent signals for reducing use; gabapentin has the strongest single-trial data for withdrawal/cravings. All agents require larger confirmatory

Vaping

- E-cigarettes heat liquid containing nicotine or THC + propylene glycol, vegetable glycerin, flavorings, additives
- Aerosol contains: volatile carbonyls, furans, metals, diacetyl, reactive oxygen species
- Pod-based systems (e.g., JUUL): nicotine salt formulations — higher nicotine delivery, greater addiction potential



E-Cigarettes & Vape Pens Generations



Cig-a-Like

E-cigarettes came onto the market around 2007.

Most delivered nicotine and were disposable.

Variations

Variations on the first e-cigarettes included products like e-hookah and rechargeable versions.

Vape Pens

These have batteries that can reach higher temperatures, have refillable e-liquid cartridges, and allow users to regulate the frequency of inhalations.

Mods

Large size, modifiable e-cigarettes allow for more aerosol, nicotine, and other chemicals to be breathed into the lungs, at a faster rate.

Pod-Based

These e-cigarettes are shaped like USBs and contain pods with higher amounts of nicotine than previous generations.



Tobacco Prevention Toolkit
Division of Adolescent Medicine, Stanford University
For more information go to: www.tobaccoventiontoolkit.stanford.edu

Health Effects of Vaping

- EVALI: 2019 outbreak, >2,500 cases, 68 deaths; 89% involved THC products; vitamin E acetate identified as primary cause
- Respiratory: cytotoxicity, inflammation, impaired mucociliary clearance, oxidative stress, DNA damage
- Nicotine dependence: substantial evidence e-cigarettes cause dependence in non-smokers
- Gateway effect: strong evidence young non-smokers who vape are more likely to become cigarette smokers
- Long-term CV, cancer effects: insufficient evidence

Tobacco Cessation

- Best outcomes occur when behavioral support is combined with medication
- Combining both approaches nearly doubles quit rates
- First-line medication options:
 - Varenicline (most effective single medication)
 - Bupropion SR
 - Nicotine Replacement Therapy (NRT)
- Combination NRT (patch + gum/lozenge) works better than a single NRT product
- Typical treatment duration is **12 weeks**, though longer treatment may improve success



PRINCIPLES OF PHARMACOTHERAPY FOR SMOKING

	Standard Dose/Administration^{e,f,g}	Duration
Combination NRT (preferred)	<ul style="list-style-type: none"> • Initiate dosing 1–2 weeks prior to agreed upon quit date, while patient is actively cutting down cigarettes per day • Begin with nicotine patch + short-acting NRT <ul style="list-style-type: none"> ▶ If smoking 1–10 cigarettes/day, use 14-mg patch ▶ If smoking >10 cigarettes/day, use 21-mg patch <ul style="list-style-type: none"> ◊ If initial patch is not effective, consider increasing the dose, including up to more than one patch • Short-acting gum or lozenge: 2 or 4 mg <ul style="list-style-type: none"> ▶ 2 mg preferred if time to first cigarette is >30 minutes after waking; or ▶ 4 mg preferred if time to first cigarette is ≤30 minutes after waking ▶ Every 1–2 h (while awake and as tolerated), or more often as needed • Short-acting nasal spray <ul style="list-style-type: none"> ▶ 1 spray (0.5 mg) in each nostril ▶ Start with 1 or 2 doses per hour, may be increased up to a maximum dose of 40 mg (80 sprays) per day 	<p>Minimum of 3 months (6 months or longer preferred) of pharmacotherapy is recommended.³⁻⁹ However, therapy may be substantially extended to promote continued abstinence</p>
Varenicline (preferred)	<ul style="list-style-type: none"> • Initiate dosing 1–2 weeks prior to agreed upon quit date, while patient is actively cutting down cigarettes per day • Days 1–3: 0.5 mg orally, once daily • Days 4–7: 0.5 mg orally, twice daily • Day 8 to end of treatment: 1 mg orally, twice daily (if tolerated) <ul style="list-style-type: none"> ▶ Consider increase to 3 mg per day (1.5 mg twice daily if tolerated) for those who cut back by ≥50% but have not quit at 6 wks ▶ If severe renal impairment (estimated creatinine clearance <30 mL/min): Begin with 0.5 mg once daily and titrate to 0.5 mg twice daily ▶ For patients with end-stage renal disease undergoing hemodialysis, 0.5 mg maximum daily, if tolerated 	
Bupropion	<ul style="list-style-type: none"> • Initiate dosing 1–2 wks prior to agreed upon quit date, while patient is actively cutting down cigarettes² • Days 1–3: 150 mg orally, once daily • Day 4 through end of treatment: <ul style="list-style-type: none"> ▶ Sustained release: 150 mg orally, twice daily, if tolerated; or ▶ Extended release: 300 mg, once daily, if tolerated • Maximum 300 mg per day • Adjust dose or frequency for: <ul style="list-style-type: none"> ▶ Renal impairment⁹ ▶ Hepatic impairment: Maximum dose 150 mg every other day for moderate/severe hepatic impairment (Child-Pugh score 7–15); for mild hepatic impairment (Child-Pugh score 5–6), consider reducing the dose and/or frequency adjustment 	

^e Dose adjustments may be considered if clinically indicated.

^f See drug labels and full prescribing information for varenicline, bupropion, and NRT products.

^g Gradually decrease dose over 10 weeks or more. Dose reduction may not be appropriate for patients with limited life expectancy.

[Adverse Effects and Contraindications \(SC-F 3 of 4\)](#)






[References](#)

Note: All recommendations are category 2A unless otherwise indicated.

Varenicline and the EAGLES trial

Summary of Confirmed Psychiatric Effects

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Effect	RCT Evidence	Recommendation	References
Depression / suicidality	No increased risk vs. placebo in RCTs	Monitor and discontinue if symptoms emerge	 FDA + 2
Insomnia	Increased (OR 1.56)	Counsel patients; well-recognized side effect	 FDA
Abnormal dreams	Increased (OR 2.38)	Counsel patients; well-recognized side effect	 FDA
Anxiety	Reduced risk (OR 0.75)	No specific action needed	 FDA
Aggression/hostility	No increased risk in RCTs; postmarketing reports exist	Monitor, especially with alcohol use	 FDA + 1
Psychosis/hallucinations	Rare postmarketing reports only	Discontinue if symptoms occur	Addiction

Cannabis-Tobacco Co-Use: Why It Matters

- No clinical practice guidelines exist for treating co-use
- Cannabis co-use reduces tobacco cessation: 33% quit rate vs. 59% in tobacco-only users
- Tobacco co-use may also hamper cannabis cessation
- Mechanisms: synergistic euphoria, compensatory effects, substitution, greater nicotine dependence
- Reducing one substance may increase use of the other (substitution effect)
- Key message: Screen for BOTH; address both in treatment planning

Key Takeaways for the Multidisciplinary Team

For MDs/NP/PA:

- Prescribe first-line tobacco pharmacotherapy (varenicline > combination NRT > bupropion)
- Screen for CUD using CUDIT-R after positive single-item screen
- Educate patients on cannabis withdrawal vs. primary psychiatric symptoms
- No FDA-approved CUD pharmacotherapy — set realistic expectations

For Therapists/Counselors:

- CBT, MET, and CM are evidence-based for CUD
- Behavioral counseling independently effective for tobacco cessation
- Address co-use explicitly — treating both simultaneously is safe and feasible

For Behavioral health specialists:

- Connect patients to Idaho quitline (1-800-QUIT-NOW)
- Address social determinants: co-use more common with lower SES, mental health conditions
- Harm reduction for patients not ready to quit
- Be aware of cross-border access to legal cannabis

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