Medical Cannabis Program

Impact of High Potency Cannabis Use

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Disclaimer

• The opinions shared during this meeting do not necessarily reflect the position of the Medical Cannabis Program.

• The Medical Cannabis Program does not endorse any specific product, producer, or vendor.
News$^1$

- On August 29, 2023, the Department of Health and Human Services (HHS) recommended to the Drug Enforcement Agency (DEA) that cannabis be rescheduled from Schedule I to Schedule III under the Controlled Substances Act (CSA).

- Schedule III – Tylenol with codeine, ketamine, suboxone, anabolic steroids, and testosterone.

DEA enforces drug laws – FDA enforces drug standards
Is there precedent?

• No instance yet of DEA rejecting an FDA recommendation to reschedule.
• In September 1998 FDA recommended to DEA that Marinol be rescheduled to Schedule III.
• In July 1999 DEA rescheduled Marinol to Schedule III.
• Agencies are entitled under case law to “change their mind,” but must provide reasonable scientific evidence to support the change.
Federal Policy Implications

- Those who manufacture, distribute, dispense, and possess *medical cannabis* may now be able to do so lawfully under the Controlled Substances Act (CSA).

- Cannabis produces and retailer would be able to deduct the costs of selling their product for the purposes of federal income tax filing.

- Easier access to banking services for cannabis businesses.

- Researchers would face less strict regulatory controls in researching cannabis as a Schedule III likely promoting greater research on cannabis.
Impact on Patients

- Those who use *medical cannabis* lawfully may now be eligible to:
  - Access public housing
  - Obtain immigrant and nonimmigrant visas
  - Purchase and possess firearms
  - Fewer barriers for federal employment
  - Eligibility to serve in the military
Where it gets weird

• Will the FDA fully enforce regulations on the cannabis industry as it does all other Schedule III drugs?
• What will be considered “medical cannabis”?
• Will providers be required to “prescribe” a cannabis product that has met FDA regulatory standards now that the federal government is acknowledging a potential medical benefit?
• Will pharmaceutical industries now develop cannabis drugs that can pass FDA muster and be dispensed at pharmacies?
• Will the change to Schedule III and aggressive FDA, actually be regressive to current state medical cannabis programs?
What would rescheduling not do?

• Rescheduling would not make all medical and recreational cannabis legal at the federal level.
  • Products such as flower, edibles, vape products, suppositories, and topicals would still be illegal - until FDA approved.

• Rescheduling would not impact criminal code.
  • Penalties for federal cannabis crimes would still exist - but be lower.
Why not just “de-schedule”?

• Would work better for current federal and state cannabis laws.
  • Example of testosterone (pharmacy vs. dispensary)
  • Current state-legal cannabis markets are not designed for a Schedule III drug
• Analogy to alcohol and tobacco
What is a standard drink?2

• One alcoholic drink equivalent = 14 grams of pure alcohol.
  
  • 12 ounces of regular beer (5% alcohol)
  
  • 5 ounces of wine (12 % alcohol)
  
  • 1.5 ounces distilled spirits (40% alcohol)
Standard Drink options

12 fl oz of regular beer = 8–10 fl oz of malt liquor or flavored malt beverages such as hard seltzer (shown in a 12 oz glass) = 5 fl oz of table wine = 3–4 fl oz of fortified wine (such as sherry or port; 3.5 oz shown) = 2–3 fl oz of cordial, liqueur, or aperitif (2.5 oz shown) = 1.5 fl oz of brandy or cognac (a single jigger) = 1.5 fl oz shot of distilled spirits (gin, rum, tequila, vodka, whiskey, etc.)

about 5% alcohol about 7% alcohol about 12% alcohol about 17% alcohol about 24% alcohol about 40% alcohol about 40% alcohol

Each drink shown above represents one U.S. standard drink and has an equivalent amount (0.6 fluid ounces) of “pure” ethanol.
What is a standard THC dose for edible products?

<table>
<thead>
<tr>
<th>Category</th>
<th>Dose</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginners (Microdosing)</td>
<td>1-5 mg</td>
<td>Increased appetite, decreased anxiety</td>
</tr>
<tr>
<td>Beginners (Microdosing)</td>
<td>5-10 mg</td>
<td>Euphoria, increased appetite, feelings of euphoria, general relaxation, coordination and perception may be altered</td>
</tr>
<tr>
<td>Patients with continuous problems</td>
<td>10-20 mg</td>
<td>Euphoria, helps some users with acute pain, significant sleep problems &amp; chronic pain problems, coordination and perception may be altered</td>
</tr>
<tr>
<td>Patients with sleeping problems</td>
<td>20-50 mg</td>
<td>Strong euphoria or unpleasant effects in beginners, helps with acute, chronic pain &amp; sleeping through the entire night, increased appetite, coordination and perception very likely to be altered</td>
</tr>
<tr>
<td>Well seasoned consumers, medical patients with high tolerance</td>
<td>50-100+ mg</td>
<td>Reserved for users that have severe, chronic conditions (like Cancer or Crohn's disease), coordination and perception extremely likely to be altered</td>
</tr>
</tbody>
</table>

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But what about high potency products?

<table>
<thead>
<tr>
<th>Dab Size</th>
<th>THC Per Dose (assuming 80% THC Concentrate)</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smaller Dose (0.025 - 0.05 grams)</td>
<td>20 - 40 mg of THC</td>
<td>Expect a mild high with subtle effects lasting 1-3 hours.</td>
</tr>
<tr>
<td>Increased Dose (0.05 - 0.1 grams)</td>
<td>40 - 80 mg of THC</td>
<td>Expect a more pronounced high with more noticeable effects lasting 1-3 hours.</td>
</tr>
<tr>
<td>Moving up the Ladder (0.1 - 0.2 grams)</td>
<td>80 - 160 mg of THC</td>
<td>Expect a strong high, with more noticeable effects lasting 1-3 hours.</td>
</tr>
<tr>
<td>Big Dab (0.2 - 0.4 grams)</td>
<td>160 - 320 mg of THC</td>
<td>Expect a more intense high paired with a prolonged experience lasting 3-4 hours.</td>
</tr>
<tr>
<td>Heavy Hitter (0.5 - 1 gram)</td>
<td>400 - 800 mg of THC</td>
<td>Expect an extremely potent high, with effects lasting up to or more than 5 hours.</td>
</tr>
</tbody>
</table>
1 mg THC versus 800 mg THC
What do we know about high potency products?

- Cannabis products are not standardized.
- Potency of THC can vary widely.
- Consumers knowledge of THC levels in the products they use is low.  
- Concentrates are more likely to contain residues and contaminants.
- New concentrates continue to flood the market.
This year, more than a third of the US’s $34 billion in expected cannabis sales will come from products high in THC. (Last year, it made up only a quarter of sales.)
Dangers of High Potency

- Young people are more vulnerable
  - socially and developmentally
- Accidental overconsumption
- Rapid development of tolerance\(^5\)
- Using high THC products increases the risk of developing of Cannabis Use Disorder\(^6\)
- Increased likelihood of Cannabis Withdrawal
- Cannabis Hyperemesis Syndrome
- Potential lifelong mental health issues - psychosis
Increased risk of psychosis with daily and higher potency cannabis

- Patients are at a greater risk for psychosis as cannabis exposure increases.\(^7\)
- Patients with psychosis have greater risk of psychosis relapse with continued cannabis use.\(^8\)
- Self-reported psychotic disorders are more common among people who use cannabis and become more prevalent with increased cannabis use.\(^9\)
- Schizophrenia linked to problematic (high potency) cannabis use.\(^10\)
Not only psychosis

- Anxiety$^6$
- Depression$^{11}$
- Downregulation of CB1 Receptors$^{12}$
  - 20% reduction in CB1 receptors in the brain’s outer cortex in individuals currently using cannabis heavily.
- Capped “high”$^5$
  - Level of impairment limited once CB1 receptors are saturated
- Extended Impairment – (Weed Hangover)
  - Cannabis “high” lasting longer than expected or desired due to the continued release of THC that has built up in the fatty tissues from frequent use of high-potency cannabis products.
Not even a good high

• Many argue that high-potency THC doesn’t even produce a “good high”. The focus on concentrating for THC eliminates many of the terpenes, phytocannabinoids, and flavonoids associated with a beneficial cannabis entourage effect.¹³
Why is this happening?¹⁴

**Concern Level for High THC**

- Industry
- Consumers
- Researchers
- Health Care Providers
- Government Employees
- Educators/School Administrators
- Community Organizations
- Prevention Agencies
- Overall Average

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Focus of current enacted state cannabis laws$^{15}$

- Raising tax revenue
- Investing in communities most harmed by drug prohibition
- Eliminating the illegal market
- Reforming the criminal justice system
- But what about public health policy and misperceptions about safety?
  - Lack of decades-long scientific evidence on the harms from excessive cannabis use is not indicative of cannabis safety.
What can be done?15

• Cannabis legalization policies can minimize threats to public health while achieving social justice, equity and economic goals, but this requires the regulatory will to prioritize the promotion of responsible cannabis use up front, rather than wait for the high potency fallout.

• Vermont and Connecticut are the only states that cap potency of THC on most cannabis products sold.

• Colorado, Washington, Montana, Massachusetts and Florida introduced similar bills that were defeated or shelved primarily due to resistance from cannabis business and industry proponent groups.
Regulatory strategies on the horizon$^{16}$

- Designing a tax structure based on potency of products
- Prohibit marketing and advertising of high THC products
- Raise legal age for high THC products’ purchase to 25 years old
- Add high THC-specific mandatory health warning labels
- Implementing seed-to-sale data-tracing systems
- Cap THC concentration
- Set purchase limits for THC content
References


2. NIH National Institute on Alcohol Abuse and Alcoholism [https://rethinkingdrinking.niaaa.nih.gov]


References


Any questions?
For More Information

• Website: www.nmhealth.org/go/mcp

• Phone: (505) 827-2321

• Email: medical.cannabis@doh.nm.gov

THANK YOU!!