An Overview of Marijuana Policy: Considerations and Implications for Public Health

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Presentation Overview

• Policy Landscape
• How has policy change impacted utilization?
• What do we know about the health effects?
• What products are people using?
• What do these policies look like on the ground?
• Public health implications, challenges, and future directions
Marijuana Policy in the U.S.

The Washington Post
Marijuana wins big on election night

The New York Times
Californians Legalize Marijuana in Vote That Could Echo Nationally

The Boston Globe
Mass. voters say ‘yes’ to legalizing marijuana

Reno Gazette-Journal
Nevada voters approve recreational marijuana

CNN
Alaska becomes latest state to legalize marijuana use
Marijuana policy, by state, 2018
Past Month Marijuana Use (any), by Age – National Survey on Drug Use and Health (NSDUH)

Past month substance use, reported by 12th Graders, Monitoring the Future, 1991-2016
Health risks of marijuana include:

- **Youth psychosocial outcomes** (short term impaired learning, memory, attention)

- **Pregnancy/Prenatal Outcomes** (low birthweight)

- **Increased risk of respiratory effects** (bronchitis)

- **Increased risk of abuse of/dependence on marijuana**

- **Increased risk of abuse of/dependence on other substances**

- **Increased risk of schizophrenia and other psychoses, some increased risk for other mental health diagnoses**

- **Increase risk of motor vehicle crash**

A number of areas of insufficient or conflicting evidence including for: Lung cancer, other cancers, COPD, cardiovascular disease, reproductive effects/fertility, breastfeeding
Therapeutic Effects

- **Schedule I substance**
  - No currently accepted medical use in treatment.

- **Anecdotal evidence**
  - Vocal advocacy community

- **Increasing scientific evidence** for medical use of cannabis or components of cannabis plant:
  - Most promising for pain relief, nausea relief, patient-reported symptoms from MS; some evidence for sleep.
  - States may authorize broader indications
  - 3 FDA approved synthetic THC drugs
Why don’t we know more?
Marijuana Products and Modes of Use

- **Combusted products**
  (e.g., joints, pipes, bongs, bowls, blunts, spliffs)
- **Vaporizers**
  (e.g., electronic vaping devices, or older models that are more like heat-not-burn)
- **Edibles**
  (e.g., brownies, cookies, candies)
- **Drinks**
  (e.g., elixirs, syrups, hot chocolates)
- **Dabbing**
  (e.g., using concentrates and waxes)
- **Other ways**
CBD/Low-THC States

• Often focus on CBD/low-THC oils
• Allow clinicians to “recommend” CBD...
• Laws often do not address how CBD oil is made, purchased or shipped
• Typically no marketplace
• Typically no regulatory agency
• Typically no product testing or oversight
• Legalization often looks more like decriminalization of CBD/low-THC products

*Notable exception to all of this: Iowa
Medical States

• Wide range of regulations in terms of:
  • Marketplaces/number of outlets
  • Types of available products
  • Registries and cards
  • Home grows
  • Lab testing

• Public health is often the regulatory agency

• Wide range of indications (not all based on science)

• Often paves the way for non-medical framework
## Non-Medical/Adult Use States

<table>
<thead>
<tr>
<th>State</th>
<th>Year Passed (% support)</th>
<th>Stores Open?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>2012 (55%)</td>
<td>January, 2014</td>
</tr>
<tr>
<td>Washington</td>
<td>2012 (56%)</td>
<td>July, 2014</td>
</tr>
<tr>
<td>Oregon</td>
<td>2014 (56%)</td>
<td>October, 2015 (through Medical dispensaries)</td>
</tr>
<tr>
<td>Alaska</td>
<td>2014 (53%)</td>
<td>October, 2016</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>2014 (65%)</td>
<td>Sales prohibited</td>
</tr>
<tr>
<td>Nevada</td>
<td>2016 (54%)</td>
<td>July, 2017 (through Medical dispensaries)</td>
</tr>
<tr>
<td>California</td>
<td>2016 (56%)</td>
<td>January, 2018</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>2016 (54%)</td>
<td>Must begin licensing retailers by July 1, 2018</td>
</tr>
<tr>
<td>Maine</td>
<td>2016 (50%)</td>
<td>Still Unknown</td>
</tr>
<tr>
<td>Vermont</td>
<td>2018 (legislative)</td>
<td>No sales or regulatory provisions enacted</td>
</tr>
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Policy Basics

• **Regulatory Authority:**
  - Typically Depts. of Revenue/Taxation/Consumer Affairs OR Liquor/Alcohol/Beverage Control Boards
  - Public health has had retail regulatory role in 2 states (OR, CA)
  - 5 states (WA, OR, AK, CA, MA) have rule making/advisory boards; public health on all but 1 (WA); industry on all but 1 (WA)

• **What’s Legal?**
  - Most states have ~1oz possession or 7-8g concentrate (ME has 2.5 oz total)
  - MA and OR have higher home possession (10 oz and 8 oz)
  - Home grows in all states (~6 plants), with exception of WA.
Policy Basics

• **Taxes:**
  - Excise taxes vary widely: ~10% (ME, MA, NV) to 37% (WA)
  - AK is only state with weight-based tax

• **Vertical integration**
  - Allowed in all states except for WA

• **Funding for Public Health Agency:**
  - 4 states have actual (OR, WA, CO) or expected (MA) funding for public health agency. Wide range in $$.
  - Not protected. May supplant other funds.
  - Public health funding typically for surveillance, education
Policy Basics

- **Medical Marijuana Marketplace**
  - AK is only state without existing medical marketplace
  - WA is only state with fully merged Medical/Adult Use
  - All other states have or moving towards parallel regulation

- **Local Control to Ban/Amend Policy**
  - Allowed in all states (with some tax implications and restrictions on extent of local control)
Packaging and Labeling

• **Universal Symbol**
  - Required in 3 states (CO, OR, CA); will be required in MA, generic warning sticker in WA

• **Warning Labels**
  - Required in all states, but vary widely
  - On packaging vs. at point of sale
  - Most commonly include warnings against: youth use, operating machinery/driving/impairment
  - Some include warnings about: dependence (AK, WA) delayed effects from edibles (CO, NV, WA)
Packaging and Labeling

• Childproof packaging?
  • Required in all states (with exception of ME, NV – where rulemaking is ongoing); resealable requirements in most states.

• Cannabinoid/pesticide labeling
  • All states require THC amount on label; 3 (CO, OR, WA) require CBD.
  • No states require pesticide disclosure on label, differences in pesticide testing across states
Packaging and Labeling

• Edibles
  • 10mg serving size in CA, CO, WA, NV
  • 5 mg serving size in AK, OR, MA
  • Most states prohibit products that look like candy and/or commercial food items
  • Adulterated products prohibited in some form in 4 states (AK, CO, WA, NV)
  • Shelf-stable products only in WA
Time, Place, Manner, Advertising

- **Public/On-Site Consumption**
  - Any public/on-site consumption prohibited (WA, OR)
  - Prohibited, unless municipality approves on-site consumption (CA, CO, MA)
  - Rule-making underway for potential exemptions (AK, NV)
  - Ballot measure language allows; legislative proposals to restrict (ME)

- **Zoning and Advertising/Marketing**
  - Zoning for retail locations ranges from 300 ft (NV) to 1000 ft (WA) from child/community-related locations (varies by locality)
  - In most states: no advertising 1000 ft. from child-related location
  - In all states: cannot advertise health benefits, safety, or make false statements
  - Advertising restrictions are generally limited
Lab-based challenges in states with adult use

• Short timeframe to develop regs (when industry is often the most knowledgeable)
• State lab engagement
• Third party testing and reference lab role
• Testing:
  • Sampling and process validation
  • Definitions (e.g., what is a harvest batch?)
  • Contaminants (what to test for?)
  • Testing protocols for non-bud products
• What to do with test results (e.g., contamination), and when are results meaningful for public health
• Lab shopping
Public Health Implications and Challenges

• Touches many areas of public health and safety:
  • Adolescent health
  • Reproductive/maternal/child health
  • Chronic disease
  • Injury prevention and control (*drugged driving, accidental consumption/ingestion*)
  • Environmental health (*pesticides, lab testing, food safety, secondhand smoke exposure*)
  • Mental health and other substance abuse
  • Occupational health
  • Equity/Disparities

• Often a new area for public health agencies (capacity building);

• Lack of data, surveillance, research to inform messaging, programming;

• Differences from other substances like tobacco and alcohol;

• Limited funding for public health agencies to do this work;
What do you do now?

• Get a seat at the table!
• Think about a public health lab testing approach now, don’t wait for policy to change
• Focus on protecting public health in CBD-only and Medical – they set a template for non-medical.
• Don’t put marijuana in any specific “box” – it’s uniquely different
• But – draw on public health interventions from other areas
• Learn from your peers (in the US and abroad)
Questions?

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