Medical Marijuana Fact and Fiction
Practical Public Health Policy
Considerations for Kentucky

The Colorado Experience: How public health experts can shape the future of cannabis policy.

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How is Legalization Graded?

What people generally care about:

- Youth Use
  - Adult Use
  - Frequency of use
- Hospitalizations
- Driving While High
- Tax Revenue
Youth Use

NSDUH: Past 30-day marijuana use, 12-17 years old, 2005/06-2016/17

Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health (2017).
Adult Use

Past 30-day adult marijuana use, by age group, 2014–2017: BRFSS

Source: Marijuana Health Monitoring and Research Program, Colorado Department of Public Health and Environment.
Frequency of Adult Use

Cannabis Frequency Among Past Month Users

Source: NSDUH and Cowen and Company
Poison Control Center Calls

**Figure 46. Human marijuana exposures reported to Rocky Mountain Poison and Drug Center, by age group, 2000–2017**

Source: Colorado Department of Public Health & Environment (2018), at https://www.colorado.gov/pacific/cdphe/marijuana-health-effects-poison-center-calls

Note: Human marijuana exposures reported to RMPDC were determined by the presence of the generic code “Marijuana-0083000” from the National Poison Data System.
Cannabis vs. Alcohol

Number of Human Marijuana Exposure Calls† Compared to the Number of Human Alcohol‡ Exposure Calls to Rocky Mountain Poison and Drug Center (RMPDC) from January 1, 2000 to December 31, 2015 in Colorado

Marijuana Exposures
Alcohol Exposures

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†Human marijuana exposure calls to RMPDC were determined by the presence of the generic code Marijuana - 0083000 from the National Poison Data System and questionable exposures were validated with a records review.

‡Human alcohol exposure calls to RMPDC were determined by the presence of the generic code Ethanol (Beverages) - 0019140 from the National Poison Data System.

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Driving While High

Figure 15. Colorado drivers in fatal crashes involving cannabinoids, 2013–2017

Source: Colorado Department of Transportation, Data Intelligence Group, Toxicology Data (2018). Note: A) Numbers are based on toxicology results for drivers tested for drugs after a crash. See Table 21 for number and percent of drivers tested each year; B) the presence of a cannabinoid does not necessarily indicate recent use of marijuana or impairment.
State-by-State Comparison

<table>
<thead>
<tr>
<th>State</th>
<th>Population</th>
<th>Vehicle miles traveled (millions)</th>
<th>Fatal crashes</th>
<th>Deaths</th>
<th>Deaths per 100,000 population</th>
<th>Deaths per 100 million vehicle miles traveled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>6,931,071</td>
<td>66,859</td>
<td>865</td>
<td>962</td>
<td>13.9</td>
<td>1.44</td>
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<tr>
<td>Arkansas</td>
<td>2,988,248</td>
<td>36,093</td>
<td>488</td>
<td>545</td>
<td>18.2</td>
<td>1.51</td>
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<tr>
<td>California</td>
<td>39,250,017</td>
<td>366,402</td>
<td>3,357</td>
<td>3,623</td>
<td>9.2</td>
<td>0.99</td>
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<tr>
<td>Colorado</td>
<td>5,540,545</td>
<td>52,993</td>
<td>558</td>
<td>608</td>
<td>11.0</td>
<td>1.15</td>
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<tr>
<td>Kentucky</td>
<td>4,454,189</td>
<td>50,284</td>
<td>721</td>
<td>782</td>
<td>17.6</td>
<td>1.56</td>
</tr>
<tr>
<td>U.S. total</td>
<td>323,127,513</td>
<td>3,220,677</td>
<td>34,439</td>
<td>37,461</td>
<td>11.6</td>
<td>1.16</td>
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</tbody>
</table>
### Tax Revenue

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Revenue By Calendar Year</th>
<th>Total Revenue Since Feb 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 (Feb - Dec)</td>
<td>$67,594,323</td>
<td>$67,597,323</td>
</tr>
<tr>
<td>2015</td>
<td>$130,411,173</td>
<td>$198,005,496</td>
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<tr>
<td>2016</td>
<td>$193,604,810</td>
<td>$391,610,306</td>
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<tr>
<td>2017</td>
<td>$247,368,473</td>
<td>$638,978,779</td>
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<tr>
<td>2018</td>
<td>$266,529,637</td>
<td>$905,508,416</td>
</tr>
<tr>
<td>2019 (Jan - Aug)</td>
<td>$193,587,968</td>
<td>$1,099,096,384</td>
</tr>
</tbody>
</table>
Ongoing and Unresolved Implementation Issues

- Delivery
- Potency
- Vaping
- Health and Economic Equity
“One obvious solution to the uncertainties around legality, quality and safety of CBD products would be to force all CBD into the F.D.A. drug-approval pipeline, making it a prescription drug only. Somewhat surprisingly, Catherine Jacobson does not want that to happen. Her thinking on this issue has evolved, she told me. Early on, she thought all medical cannabis products should go through the F.D.A.’s approval process. But she realized that her primary concern, quality, could be assured without this expensive, time-consuming undertaking. In Germany, for instance, doctors have been able to prescribe cannabis since 2017, and patients get a pharmaceutical-grade product, because a federal agency oversees the medical-marijuana industry.”

Next Steps: The Nuts and Bolts for State Reform

- Realistic goal setting
- Data plan
- Unified front
Changing Federal Landscape

- Farm Bill
- Barr Statement
- STATES Act
The Pareto Principle
What do we want from federal reform?

- Research? FDA approval?
- Price Controls?
- Advertising Restrictions?
- Quality Control?
Thank You!

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