

**FORBIDDEN FLOWER: HOW ALLOWING MEDICAL  
CANNABIS FLOWER IN WEST VIRGINIA HELPS  
HEAL PATIENTS AND THE STATE ECONOMY**

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## I. INTRODUCTION

After receiving a testicular cancer diagnosis in 2012, Russell “Rusty” Williams, a West Virginia native, turned to cannabis to alleviate the crippling side effects of chemotherapy.<sup>1</sup> Rusty, like other chemotherapy patients,<sup>2</sup> found that cannabis helped to alleviate the pain and nausea that inevitably accompanies chemotherapy. Frustrated by his home state’s intolerance of the medicine that Rusty claims saved his life, Rusty began working as a medical cannabis advocate to lobby for a change in West Virginia cannabis law.<sup>3</sup> His efforts helped realize his goal and real legislative change occurred. Rusty now serves as a patient advocate on the state’s Medical Cannabis Advisory Board where he encourages broader cannabis access, increased local business opportunities, and cannabis decriminalization.<sup>4</sup>

With the passage of the Medical Cannabis Act (“the Act”) in 2017, West Virginia joined 32 states and the District of Columbia in allowing for the use of medical cannabis under state law.<sup>5</sup> This Act marked a dramatic shift in the legal status of medical cannabis under state law. Passage of the Act was illustrative of the changing public perception and increasing support for cannabis.<sup>6</sup> However, despite national public support in favor of legalized cannabis, West Virginia’s Medical Cannabis Act remains in contravention to federal laws strictly prohibiting cannabis possession.<sup>7</sup> Likely thanks in large part to historical state and current federal prohibition, state-sanctioned medical cannabis laws each have unique constructions.<sup>8</sup> West Virginia’s Medical Cannabis Act is no exception and was the subject of much debate and alteration prior to passage.<sup>9</sup>

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<sup>1</sup> Egill Karlsson, *Russell “Rusty” Williams on Legalization of Medical Marijuana in West Virginia*, VIMEO (July 4, 2017), <https://vimeo.com/224157914>.

<sup>2</sup> See Cheyann Shaw, *I Tried Medical Cannabis During Chemo, and Here’s What Happened*, HEALTHLINE (Jan. 24, 2018), <https://www.healthline.com/health/ovarian-cancer/medical-cannabis-helped-me-beat-cancer#1>.

<sup>3</sup> See Alexandra Gallo, *The Foundation to Build a Proper Medical Cannabis Program in WV*, W. VA. CITIZEN ACTION GROUP (Jan. 15, 2018), <https://wvcag.org/a-proper-medical-cannabis-program-in-wv/>.

<sup>4</sup> *Id.*

<sup>5</sup> See *State Medical Marijuana Laws*, NAT’L CONF. ST. LEGISLATURES (July 2, 2019), <http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx>.

<sup>6</sup> Justin McCarthy, *Record-High Support for Legalizing Marijuana Use in U.S.*, GALLUP (Oct. 25, 2017), <https://news.gallup.com/poll/221018/record-high-support-legalizing-marijuana.aspx>.

<sup>7</sup> See 21 U.S.C.A. § 812 (West 2018).

<sup>8</sup> *State Medical Marijuana Laws*, *supra* note 5.

<sup>9</sup> See Jake Zuckerman, *Time Runs Out on Making Changes to WV’s Medical Cannabis Program*, CHARLESTON GAZETTE-MAIL (Mar. 10, 2018), [https://www.wvgazette.com/news/legislative\\_session/time-runs-out-on-bill-making-changes-to-wv-s/article\\_a1bbc4e8-eff5-5c0d-aef0-c5c852755ba9.html](https://www.wvgazette.com/news/legislative_session/time-runs-out-on-bill-making-changes-to-wv-s/article_a1bbc4e8-eff5-5c0d-aef0-c5c852755ba9.html).

This Note will argue that reducing unnecessary restrictions and allowing medical cannabis in its dry leaf form will better serve patients by reducing financial barriers erected by the Act's strict regulations, thereby increasing patient access. This Note will further argue that increasing patient access should have additional social benefits such as boosting the economy while lessening the prevalence of the cannabis black market. Part I will examine the broad cannabis landscape including medical efficacy, brief history, and current policy and economic considerations associated with the budding cannabis industry. Part II will summarize the current provisions of West Virginia's Medical Cannabis Act. Part III will compare West Virginia's medical cannabis law and policies with those of other states that have comprehensive medical cannabis programs. Part IV will conclude by arguing that dry leaf prohibition and other restrictions are based on unfounded and outdated fears and that West Virginia patients and residents alike will be better served by provisions allowing dry leaf dispersion, which encourage a more robust medical market.

## II. SUMMARY OF THE CURRENT AND HISTORICAL CANNABIS LANDSCAPE

Historically, cannabis was regarded as medicinal. Cannabis was used for a variety of ailments in Ancient Egypt and appears in the oldest known Chinese pharmacopeia.<sup>10</sup> Cannabis was even recognized as a medicine in the United States pharmacopeia in the 19th century.<sup>11</sup> Cannabis did not gain its nefarious reputation in the United States until early in the 20th century when it began to be associated with Mexican immigrants and the Mexican Revolution, thus encouraging the popularization of the term "marijuana."<sup>12</sup> Nationwide prohibition soon followed.<sup>13</sup>

In the modern era, California led the way for state-sanctioned medical cannabis programs in 1996 with a voter-approved ballot initiative that allowed for medical cannabis use under state law.<sup>14</sup> However, the initial program did not have a state-licensing mechanism, which led to differential enforcement of the laws and an unregulated "gray" market for medical cannabis.<sup>15</sup> Colorado was the first state to commercialize medical cannabis access in 2009 with the adoption of a state-licensed dispensary system.<sup>16</sup> Since then, research into the effectiveness and potential negative consequences of using medical cannabis has exploded, prompting the National Academies of Sciences, Engineering, and

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<sup>10</sup> STEVE DEANGELO, *THE CANNABIS MANIFESTO: A NEW PARADIGM FOR WELLNESS* 42 (2015).

<sup>11</sup> *Id.* at 19.

<sup>12</sup> *Id.* at 21.

<sup>13</sup> *See infra* text accompanying note 71.

<sup>14</sup> *State Medical Marijuana Laws*, *supra* note 5.

<sup>15</sup> DEANGELO, *supra* note 10, at 93–94.

<sup>16</sup> *Id.* at 105–07.

Medicine to report on a review of over 10,000 scientific abstracts from marijuana health research.<sup>17</sup> Despite the significant pool of research examined in making the report, the Academy has concluded that cannabis research requires additional support and improvement, thanks in large part to the federal barriers impeding research.<sup>18</sup>

A. *Cannabis Has the Medical Potential to Mitigate the Effects of the Opioid Crisis and Provide Treatment and Alternative Therapy for a Variety of Ailments*

Despite federal barriers to research, the cannabis plant's medical efficacy has been substantially supported by science. In the 1990s, thanks in part to cannabis, scientists discovered a previously unknown cellular communication network in the body called the endocannabinoid system.<sup>19</sup> The endocannabinoid system regulates other critical biological systems, including the "central nervous system, the autonomic nervous system, the endocrine network, the immune system, the gastrointestinal tract, the reproductive system, and microcirculation."<sup>20</sup> Thus, "if properly activated, the [endocannabinoid system] is capable of suppressing numerous cancers and may be protective against Alzheimer's disease."<sup>21</sup> The endocannabinoid system also "strengthens our nervous and immune systems, initiates pain control, and calms inflammation."<sup>22</sup>

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<sup>17</sup> See NAT'L ACADS. OF SCIS., ENG'G, & MED., *THE HEALTH EFFECTS OF CANNABIS AND CANNABINOIDS: THE CURRENT STATE OF EVIDENCE AND RECOMMENDATIONS FOR RESEARCH* 4 (2017).

<sup>18</sup> *Id.* at 395–401. Thanks to the federal prohibition of cannabis and the plant's status as a Schedule I drug, researchers face a myriad of regulatory, access, and funding barriers when attempting to conduct cannabis research. Potential researchers must apply for the opportunity to conduct cannabis research with the National Institute on Drug Abuse ("NIDA"), the U.S. Food and Drug Administration ("FDA"), and the U.S. Drug Enforcement Administration ("DEA"). The NIDA mission is to advance science on the causes and consequences of drug addiction, rather than to investigate the therapeutic potential of a particular drug. The DEA imposes strict regulations such as onsite security inspections and a mandate requiring as few employees handling the cannabis as possible, in order to prevent cannabis diversion. Federal cannabis supplied for research is sourced exclusively from the University of Mississippi and has historically been of lower potency and quality than products available in state markets. Additionally, edibles and concentrates are not typically available through federal sources. *Id.* at 377–93.

<sup>19</sup> CLINT WERNER, *MARIJUANA: GATEWAY TO HEALTH* 13 (2011).

<sup>20</sup> DEANGELO, *supra* note 10, at 45.

<sup>21</sup> UWE BLESCHING, *THE CANNABIS HEALTH INDEX: COMBINING THE SCIENCE OF MEDICAL MARIJUANA WITH MINDFULNESS TECHNIQUES TO HEAL 100 CHRONIC SYMPTOMS AND DISEASES* 1 (2015).

<sup>22</sup> *Id.*

The National Cancer Institute first reported that tetrahydrocannabinol (“THC”)<sup>23</sup> inhibits the growth of lung cancer tumors and increases bone marrow resistance to cancer in 1975.<sup>24</sup> Despite failed attempts by the National Institute on Drug Abuse to fund studies finding a causal link between cannabis and cancer, data continues to suggest that cannabis can be an effective treatment for cancer-induced symptoms or cancer treatment-induced symptoms.<sup>25</sup> More controversially, some advocates claim that evidence suggests cannabis is capable of fighting, preventing, and inhibiting the growth of various cancers.<sup>26</sup> However, even after its 1975 reporting, the National Cancer Institute remains conservative in its messages on cannabis, stating simply that “[c]annabinoids may have benefits in the treatment of cancer-related side effects,”<sup>27</sup> but that “there is insufficient evidence to recommend . . . [cannabis] as a treatment for cancer-related symptoms . . . however, additional research is needed.”<sup>28</sup>

The cannabis plant’s medical potential does not end with cancer treatment. There are also empirical indications that cannabis can be an effective tool for preventing and treating opiate addiction.<sup>29</sup> The nation’s opioid crisis has

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<sup>23</sup> “THC is the best known of the cannabinoids and is notorious for its psychoactive effects.” However, it is not strictly used for recreational intoxication. THC has a wide range of potential medical applications including providing patients with relief from insomnia, chronic pain, cancer-related symptoms, and PTSD. DEANGELO, *supra* note 10, at 44.

<sup>24</sup> *Id.* at 46.

<sup>25</sup> *Id.* at 47.

<sup>26</sup> *Id.* The author notes the reputable institutions providing the data which supports this claim, including, “the University of Madrid, the *British Journal of Cancer*, the University of California San Diego, the University of South Florida, and the National Cancer Institute.” The author speculates that “[i]f any other substance showed the same results, hundreds of millions of dollars in public funding would be devoted to developing it.” *Id.* at 48 (“It is beyond reason that our tax dollars have for decades been poured into proving impossible myths about cannabis instead of exploring the most promising treatment for cancer ever discovered.”). Anecdotes from medical-cannabis consuming cancer patients supporting this claim are not difficult to find, but it should be noted that anecdotes are *not* substitutes for data that is a product of rigorous scientific method; for a local example, see Conor Griffith, *Cannabis Legalization Encouraged During WV Municipal League Conference*, MORGANTOWN NEWS (Aug. 9, 2018), [https://www.wvnews.com/morgantownnews/news/cannabis-legalization-encouraged-during-wv-municipal-league-conference/article\\_0b2f8782-231b-500c-b11e-5298b0673ba1.html](https://www.wvnews.com/morgantownnews/news/cannabis-legalization-encouraged-during-wv-municipal-league-conference/article_0b2f8782-231b-500c-b11e-5298b0673ba1.html) (featuring an interview with a patient advocate representing the West Virginia Medical Cannabis Advisory Board claiming that “in 2012 cancer tried to kill me and an illegal flower stopped that from happening”).

<sup>27</sup> *Cannabis and Cannabinoids (PDQ)—Health Professional Version*, NAT’L CANCER INST., <https://www.cancer.gov/about-cancer/treatment/cam/hp/cannabis-pdq> (last updated July 16, 2019) [hereinafter *Cannabis & Cannabinoids*].

<sup>28</sup> *Id.*

<sup>29</sup> DEANGELO, *supra* note 10, at 53.

become a commonly understood cultural fact and is responsible for more than 130 daily overdose deaths throughout the nation.<sup>30</sup>

THC was found to suppress “behavioral, biochemical, and molecular dependence in morphine-addicted rats” by the Laboratory for Physiopathology of Diseases of the Central Nervous System at Sorbonne University in 2009.<sup>31</sup> Subsequent human-subject experiments conducted by Columbia University found that “both heroin and cocaine addicts were more likely to adhere to their treatment when they used cannabis.”<sup>32</sup> One California physician reports anecdotally that “[a]mazingly the effects of cannabinoids can reduce or eliminate the majority of symptoms of opiate withdrawal. Cannabis can reduce anxiety and agitation, improve sleep, and help normalize the digestive tract.”<sup>33</sup>

Early data from states that implemented cannabis reform policies seemingly validated the positive impact cannabis has on opioid treatment and the crisis in general.<sup>34</sup> “Cannabis access is associated with reduced rates of opioid use and abuse, opioid-related hospitalizations, opioid-related traffic fatalities, opioid-related drug treatment admissions, and opioid-related overdose deaths.”<sup>35</sup> These data have led commentators to suggest cannabis reform and access as a

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<sup>30</sup> *Opioid Overdose Crisis*, NAT’L INST. ON DRUG ABUSE, <https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis> (last updated Jan. 2019); see also *Opioid Crisis Fast Facts*, CNN (Aug. 28, 2019, 4:15 PM), <https://www.cnn.com/2017/09/18/health/opioid-crisis-fast-facts/index.html> (highlighting the increase in rates of addiction and overdose across recent decades, as well as the concurrent reactive increase in opioid regulation).

<sup>31</sup> DEANGELO, *supra* note 10, at 53.

<sup>32</sup> *Id.*

<sup>33</sup> *Id.* at 54.

<sup>34</sup> See Paul Armentano, *Studies: Marijuana Legalization Associated with Reduced Opioid Prescribing Trends*, NORML BLOG (Apr. 2, 2018), <https://blog.norml.org/2018/04/02/studies-marijuana-legalization-associated-with-reduced-opioid-prescribing-trends/>.

<sup>35</sup> *Relationship Between Marijuana and Opioids*, NORML, <https://norml.org/marijuana/factsheets/item/relationship-between-marijuana-and-opioids> (last visited Sept. 9, 2019) (analyzing and citing a collection of studies from various institutions including: the University of Alabama, the Mental Health Clinician, Neuropsychopharmacology, Cannabis and Cannabinoid Research, Substance Abuse and Misuse, and the European Journal of Internal Medicine). Unfortunately, more recent studies have failed to replicate the promising early findings. See Chelsea L. Shover et al., *Association Between Medical Cannabis Laws and Opioid Overdose Mortality Has Reversed Over Time*, PNAS (June 25, 2019), <https://www.pnas.org/content/116/26/12624> (finding that the data showing a negative association between medical cannabis laws and opioid overdose mortality from 1999 to 2010 has actually reversed, becoming a positive association through 2017). However, causation cannot be equated to causation in either direction. The authors of the study “find it unlikely that medical cannabis—used by about 2.5% of the U.S. population—has exerted large conflicting effects on opioid overdose mortality. A more plausible interpretation is that this association is spurious.” *Id.* (“Research into therapeutic potential of cannabis should continue, but the claim that enacting medical cannabis laws will reduce opioid overdose death should be met with skepticism.”). Thus, this appears to be another illustration of the deficiency in cannabis research. See *supra* note 18 and accompanying text. Ultimately, as noted by the authors of the Shover study, cannabis’s therapeutic potential should not be discounted by these findings alone.

serious solution to the nation's opioid crisis.<sup>36</sup> However, cannabis reform opponents often argue that cannabis will act as a “gateway” to more destructive drugs<sup>37</sup> or fear that cannabis access will simply encourage its use as an alternative drug.<sup>38</sup> Further, West Virginians who oppose progressive reform are concerned about the addictive potential of cannabis, especially because pro-legalization groups have argued for years that cannabis is non-addictive.<sup>39</sup>

However, these arguments are not well supported by our understanding of drug abuse or the cannabis plant specifically. First, “[t]he Institute of Medicine, itself a federal agency, [states]: ‘There is no evidence that marijuana serves as a stepping stone to other drugs on the basis of its particular physiological effect.’”<sup>40</sup> Various studies have more recently supported this proposition by finding that factors other than cannabis's psychoactive effect (such as personal predisposition, concurrent availability, and unemployment) are stronger explanations for the proposed “gateway effect” of cannabis.<sup>41</sup> Second, a

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<sup>36</sup> See Kendra Fershee, *The Next Thousand-Year Flood: The Case for Federal Legalization of Medical Marijuana*, HUFFINGTON POST (Dec. 18, 2017, 3:45 PM), [https://www.huffingtonpost.com/entry/the-next-thousand-year-flood-the-case-for-federal-us\\_5a382860e4b0578d1beb71c1](https://www.huffingtonpost.com/entry/the-next-thousand-year-flood-the-case-for-federal-us_5a382860e4b0578d1beb71c1) (describing the devastating effects of the opioid crisis and concluding that “there is one solution in particular that we West Virginians can embrace to turn the ship . . . nationally legalized medical marijuana”); see also Sanjay Gupta, *Dr. Sanjay Gupta to Jeff Sessions: Medical Marijuana Could Save Many Addicted to Opioids*, CNN, (Apr. 24, 2018, 8:25 AM), <https://www.cnn.com/2018/04/24/health/medical-marijuana-opioid-epidemic-sanjay-gupta/index.html> (“Cannabis . . . show[s] potential to save lives in three important ways. Cannabis can help treat pain, reducing the initial need for opioids . . . eas[e] opioid withdrawal symptoms, . . . [and] the compounds found in cannabis can heal the diseased addict’s brain, helping them break the cycle of addiction.”).

<sup>37</sup> DEANGELO, *supra* note 10, at 52 (“Faced with overwhelming evidence that cannabis itself is not addictive, prohibitionists . . . have advanced the gateway theory: that cannabis should remain illegal because it leads to the use of addictive drugs like heroin.”).

<sup>38</sup> While debating the West Virginia Medical Cannabis Act, Senator Mike Azinger voiced concern that “the bill will take away from the ‘fear’ and ‘mystery’ of marijuana and will encourage its use among the state’s youth.” See Jake Zuckerman, *Time Runs Out on Bill Making Changes to WV’s Medical Cannabis Program*, CHARLESTON GAZETTE-MAIL (Mar. 10, 2018), [https://www.wvgazette.com/news/legislative\\_session/time-runs-out-on-bill-making-changes-to-wv-s/article\\_a1bbc4e8-eff5-5c0d-ae0-c5c852755ba9.html](https://www.wvgazette.com/news/legislative_session/time-runs-out-on-bill-making-changes-to-wv-s/article_a1bbc4e8-eff5-5c0d-ae0-c5c852755ba9.html) (“We’re saying as a culture this is not a dangerous drug and what we’re doing is fine . . . . We know intuitively there is something to be afraid of.”).

<sup>39</sup> Erin Beck, *Marijuana Arrests Make Up Majority of Drug Crimes*, CHARLESTON GAZETTE-MAIL (Sept. 1, 2014), [https://www.wvgazette.com/news/marijuana-arrests-make-up-majority-of-drug-crimes/article\\_42c24b21-2b5d-5aca-b678-70493b3aba9e.html](https://www.wvgazette.com/news/marijuana-arrests-make-up-majority-of-drug-crimes/article_42c24b21-2b5d-5aca-b678-70493b3aba9e.html) (then-Charleston Police Bureau Chief of Investigative Services voicing concerns about the addictive potential of cannabis while referring to a Colorado doctor’s increase in marijuana addiction treatment after medical access was commercialized in 2009).

<sup>40</sup> DEANGELO, *supra* note 10, at 53 (quoting DIV. OF NEUROSCIENCE & BEHAV. HEALTH, INST. OF MED., *MARIJUANA AND MEDICINE: ASSESSING THE SCIENCE BASE* (Janet E. Joy et al. eds., 1999)).

<sup>41</sup> See Ralph E. Tarter et al., *Predictors of Marijuana Use in Adolescents Before and After Licit Drug Use: Examination of the Gateway Hypothesis*, 163 AM. J. PSYCHIATRY 2134 (2006),

fear of replacing one drug (opioids) with another (cannabis) simply ignores the fact that each drug is unique, and thus a drug's use should be assessed on the basis of its potential to heal and potential to harm. While cannabis's addictive potential has been subject to hyperbole on both sides of the argument throughout its prohibition in the United States, it appears that the truth lies somewhere in the middle.<sup>42</sup> Cannabis use can certainly escalate to a point that reaches a substance abuse disorder and disrupts an individual's life significantly, as recognized by the Diagnostic and Statistical Manual of Mental Disorders<sup>43</sup> ("DSM"), but the chemical dependency and withdrawal effects are far less severe than that of most other drugs.<sup>44</sup> Further, contemporary discussion on addiction strongly suggests that environmental factors are more predictive of developing addiction and have a greater impact on treatment than access to drugs or the chemical makeup of the drugs themselves.<sup>45</sup>

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<https://ajp.psychiatryonline.org/doi/abs/10.1176/ajp.2006.163.12.2134>; Andrew R. Morral et al., *Using Marijuana May Not Raise the Risk of Using Harder Drugs*, RAND DRUG POL'Y RES. CTR. (2002), [https://www.rand.org/pubs/research\\_briefs/RB6010.html](https://www.rand.org/pubs/research_briefs/RB6010.html).

<sup>42</sup> For a brief discussion on cannabis addiction and history, see Hal Arkowitz & Scott O. Lilienfeld, *Experts Tell the Truth About Pot*, SCI. AM. (Mar. 1, 2012), <https://www.scientificamerican.com/article/the-truth-about-pot/>.

<sup>43</sup> AM. PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 509 (5th ed. 2013).

<sup>44</sup> See *Cannabis & Cannabinoids*, *supra* note 27 ("Although cannabinoids are considered by some to be addictive drugs, their addictive potential is considerably lower than that of other prescribed agents or substances of abuse . . . . Withdrawal symptoms . . . appear to be mild compared with withdrawal symptoms associated with opiates or benzodiazepines, and the symptoms usually dissipate after a few days.").

<sup>45</sup> For a detailed discussion on the role environmental factors (such as trauma, poverty, or isolation) play in developing addiction, see GABOR MATÉ, IN THE REALM OF HUNGRY GHOSTS: CLOSE ENCOUNTERS WITH ADDICTION (2010) (arguing that access to drugs alone does not cause addiction and that the three necessary factors for substance addiction to occur are (1) a susceptible organism (trauma histories are strong addiction predictors), (2) a drug with addictive potential (including cannabis), and (3) environmental stress); *Making Sense: #142-Addiction, Depression, and a Meaningful Life: A Conversation with Johann Hari*, SAM HARRIS (Nov. 12, 2018), <https://samharris.org/podcasts/142-addiction-depression-meaningful-life/>. Notably both sources discuss the 1980 "rat park" experiment in which researchers attempted to create a kind of utopia for the rat subjects. The rats were housed in an environment 200 times the square footage of a standard laboratory cage, complete with physical and social enrichment through "toys" and access to other rats of both sexes. The park also contained a tunnel large enough to accommodate only one rat with a morphine dispenser at its end. Even after dissolving morphine into a sweet liquid that is otherwise irresistible to rats and forcibly exposing the rats to morphine to develop a chemical dependence, rats in the park consistently avoided the morphine when given a choice. By contrast, socially isolated rats in standard laboratory cages consumed up to 20 times more morphine than their "rat park" counterparts. MATÉ, *supra*, at 145–46 (citing Bruce K. Alexander et al., *Effect of Early and Later Colony Housing on Oral Ingestion of Morphine in Rats*, 15 PHARMACOLOGY BIOCHEMISTRY & BEHAV. 571 (1981), [https://doi.org/10.1016/0091-3057\(81\)90211-2](https://doi.org/10.1016/0091-3057(81)90211-2)).



*B. State-Level Cannabis Reform Brings Significant Economic Impact with Only Minor Side Effects*

Public debate, attention, and support regarding medical and recreational cannabis have also increased dramatically. According to Gallup, 66% of Americans now support full recreational cannabis legalization, “mark[ing] the third consecutive year that support on the measure has increased and established a new record.”<sup>46</sup> This is up from just 34% in 2002.<sup>47</sup> Further, the current support is bipartisan with 72% support from Democrats, 67% support from independents, and 51% support from Republicans.<sup>48</sup> Other studies have found national public support in favor of medical cannabis legalization as high as 93%.<sup>49</sup> In West Virginia, public support for medical cannabis is at 63%, with only 34% of West Virginia voters currently supporting legalizing recreational cannabis.<sup>50</sup> Support for both medical and recreational cannabis in West Virginia appears to be rising with medical use support seeing a six-point increase and recreational use support seeing a 12-point increase when compared to a similar poll conducted a year prior.<sup>51</sup>

Colorado and Washington made history by legalizing recreational adult use of cannabis in 2012.<sup>52</sup> California, Oregon, Alaska, Nevada, Massachusetts, Maine, Vermont, Michigan, Illinois, and the District of Columbia have followed suit and legalized recreational adult use.<sup>53</sup> Currently 33 states have comprehensive medical cannabis programs.<sup>54</sup> As a result, the legal cannabis

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<sup>46</sup> Justin McCarthy, *Two in Three Americans Now Support Legalizing Marijuana*, GALLUP (Oct. 22, 2018), <https://news.gallup.com/poll/243908/two-three-americans-support-legalizing-marijuana.aspx>.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> Press Release, Quinnipiac Univ. Poll, U.S. Voters Believe Comey More than Trump, Quinnipiac Univ. Poll Finds; Support for Marijuana Hits New High (Apr. 26, 2018), [https://poll.qu.edu/images/polling/us/us04262018\\_ufc23.pdf/](https://poll.qu.edu/images/polling/us/us04262018_ufc23.pdf/).

<sup>50</sup> Wendy Holdren, *Poll Reveals West Virginia Opinion on Politics, Opioids and More*, REG.-HERALD (Beckley, W. Va.) (Jan. 21, 2018), [http://www.register-herald.com/health/poll-reveals-west-virginia-opinion-on-politics-opioids-and-more/article\\_64fb9424-fd50-11e7-a5ae-a3e364781757.html](http://www.register-herald.com/health/poll-reveals-west-virginia-opinion-on-politics-opioids-and-more/article_64fb9424-fd50-11e7-a5ae-a3e364781757.html).

<sup>51</sup> *Id.*

<sup>52</sup> *State Medical Marijuana Laws*, *supra* note 5.

<sup>53</sup> *Id.* In 2019, Illinois became the first state to legalize cannabis possession and sales legislatively. Most other reforms have come through ballot initiatives. *See* Amber Phillips, *How Illinois Became the First State Legislature to Legalize Marijuana Sales*, WASH. POST (June 4, 2019), <https://www.washingtonpost.com/politics/2019/06/04/how-illinois-became-first-state-legislature-legalize-marijuana-sales/>.

<sup>54</sup> *State Medical Marijuana Laws*, *supra* note 5 (even states with comprehensive medical use programs vary widely on regulations pertaining to dispensaries, acceptable forms of cannabis, and qualifying medical conditions).

industry has grown tremendously, with consumers spending \$5.9 billion on legal cannabis in the United States in 2016.<sup>55</sup> By 2021, that figure is expected to reach \$19 billion.<sup>56</sup> In Colorado alone, consumers have spent approximately \$6.8 billion in total cannabis (medical and recreational) sales to date,<sup>57</sup> leading to over \$1 billion in state tax revenue through 2019.<sup>58</sup>

Because Colorado was one of the first states to embrace legal, commercialized recreational cannabis, its model has been the subject of much scrutiny as to its impacts on various aspects of society. One study found that as of October 2016, the legal cannabis industry in Colorado was responsible for creating 18,005 new full-time-equivalent positions and that “[b]ecause the industry is wholly confined within Colorado, spending on marijuana creates more output and employment per dollar spent than 90 percent of Colorado industries.”<sup>59</sup> Colorado State University–Pueblo’s Institute of Cannabis Research found that the regulated and taxed industry led to a net positive impact of more than \$35 million in Pueblo County’s local economy alone.<sup>60</sup>

Naturally, state-sanctioned access to cannabis has raised traffic safety concerns.<sup>61</sup> Legalization opponents point to rising numbers of automobile accidents, as well as an increase in THC-positive drivers involved in fatal crashes, to highlight the potential dangers associated with increased cannabis access.<sup>62</sup> Proponents and cannabis industry analysts claim the increase in total accidents can be attributed simply to an increase in population, and that the increase in THC-positive drivers does not determinatively indicate impairment

<sup>55</sup> Avantika Chilkoti, *States Keep Saying Yes to Marijuana Use. Now Comes the Federal No.*, N.Y. TIMES (July 15, 2017), <https://www.nytimes.com/2017/07/15/us/politics/marijuana-laws-state-federal.html>.

<sup>56</sup> *Id.*

<sup>57</sup> *Marijuana Sales Reports*, COLO. DEP’T REVENUE, <https://www.colorado.gov/pacific/revenue/colorado-marijuana-sales-reports> (last updated Aug. 2019).

<sup>58</sup> *Marijuana Tax Data*, COLO. DEP’T REVENUE, <https://www.colorado.gov/pacific/revenue/colorado-marijuana-tax-data> (last updated Aug. 2019).

<sup>59</sup> Miles Light et. al., *The Economic Impact of Marijuana Legalization in Colorado*, MARIJUANA POL’Y GROUP (Oct. 2016), <http://mjpolicygroup.com/pubs/MPG%20Impact%20of%20Marijuana%20on%20Colorado-Final.pdf>.

<sup>60</sup> Mona Zhang, *Legal Marijuana Is a Boon to the Economy, Finds Study*, FORBES (Mar. 13, 2018, 5:34 PM), <https://www.forbes.com/sites/monazhang/2018/03/13/legal-marijuana-is-a-boon-to-the-economy-finds-study/#39aa9e7dee9d>.

<sup>61</sup> *See Drugged Driving: The Cannabis Conversation*, COLO. DEP’T TRANSP., <https://www.codot.gov/safety/alcohol-and-impaired-driving/druggeddriving> (last visited Sept. 8, 2019).

<sup>62</sup> David Migoya, *Exclusive: Traffic Fatalities Linked to Marijuana Are Up Sharply in Colorado. Is Legalization to Blame?*, DENV. POST (Aug. 25, 2017, 10:01 AM), <https://www.denverpost.com/2017/08/25/colorado-marijuana-traffic-fatalities/>.

because, unlike alcohol, THC in the blood does not necessarily directly correlate with THC-caused impairment.<sup>63</sup> The National Highway Traffic Safety Administration report to Congress illustrates the complexities in regulating cannabis-impaired driving because of how differently the body reacts to and processes cannabis when compared to alcohol.<sup>64</sup> Fatalities *per mile driven*, often a lesser-reported number, sheds some light on the debate—1.03 fatalities per 100 million vehicle miles traveled in Colorado only rose to 1.17 vehicle fatalities between 2013 and 2016 as the national rate rose from 1.1 to 1.19 during the same period.<sup>65</sup>

Another significant concern related to cannabis reform, either through recreational or medical laws, is its potential for increasing teenage use. And rightfully so, given most data conclusively finds that cannabis use negatively impacts cognitive development in the teenage brain.<sup>66</sup> Two of the most

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<sup>63</sup> *Id.* (“Unlike alcohol, THC can remain detectable in the blood stream for days or weeks, when any impairment wears off in a matter of hours . . . [s]o all those number[s] really tell us is that . . . a larger number of people are consuming cannabis and then, at some point . . . (are) driving a car.”).

<sup>64</sup> RICHARD P. COMPTON, NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., MARIJUANA-IMPAIRED DRIVING: A REPORT TO CONGRESS 5–7 (2017), <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf> (noting that in contrast to alcohol impairment’s positive correlation with BAC, marijuana impairment is not significantly correlated with blood THC levels, leading to difficulties in policing impaired driving). Notably, the administration reported conclusively that marijuana consumption significantly affected psychomotor and cognitive skills necessary for driving. *Id.* at 11. However, the NHTSA’s “Crash Risk” Study, which is the first large-scale case control crash risk study in the United States to include drugs other than alcohol, found that drivers testing positive for THC did not have a statistically significant increased risk of crash involvement when compared to the sober control group after adjusting for demographic variables such as age, gender, and race or ethnicity. *Id.* at 26. When unadjusted for demographic variables, the THC positive group saw a 25% increase in crash risk. *Id.* at 25. By comparison, “drivers with a [breath alcohol concentration (“BrAC”)] of 0.05 are approximately [two] times more likely to crash than drivers at zero BrAC. At 0.08 BrAC, the adjusted relative risk of crashing is approximately four times that of drivers at zero BrAC.” Richard P. Compton & Amy Berning, *Traffic Safety Facts Research Note: Drug and Alcohol Crash Risk*, NAT’L HIGHWAY TRAFFIC SAFETY ADMIN. (Feb. 2015), [http://www.nhtsa.gov/staticfiles/nti/pdf/812117-Drug\\_and\\_Alcohol\\_Crash\\_Risk.pdf](http://www.nhtsa.gov/staticfiles/nti/pdf/812117-Drug_and_Alcohol_Crash_Risk.pdf).

<sup>65</sup> See NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., FATALITY RATES: COLORADO, U.S. AND BEST STATE (2017), <https://cdan.nhtsa.gov/STSI.htm#> (click on Colorado). It should be noted that the proliferation of smart phones and a national increase in distracted driving present a potentially substantial confounding variable when attempting to examine accident increases attributable to cannabis access. See Kurt Meisinger & Scott A. Rushing, *Fatal Distraction: Smartphones and Recent Increases in US Motor Vehicle Fatalities*, 33 ON RISK 42, 49 (2017), [https://www.rgare.com/docs/default-source/newsletters-articles/driverrisk.pdf?sfvrsn=7ea788\\_0](https://www.rgare.com/docs/default-source/newsletters-articles/driverrisk.pdf?sfvrsn=7ea788_0).

<sup>66</sup> Université de Montréal, *Teen Cannabis Use Is Not Without Risk to Cognitive Development*, SCIENCE DAILY (Oct. 3, 2018), <https://www.sciencedaily.com/releases/2018/10/181003090325.htm> (citing Jean-François G. Morin et al., *A Population-Based Analysis of the Relationship Between Substance Use and*

significant predictors for teen use are access and perception of risk. While legalization may reduce teenage access by restricting the black market, it also tends to reduce the public's perception of harm. Thus, legalization could both positively and negatively impact significant factors for predicting teen use. Consequently, reports on the effects of teenage consumption related to specific policy changes have varied widely.<sup>67</sup> However, the National Institute on Drug Abuse reports that national cannabis "use declined among 8th graders and remains unchanged among 10th and 12th graders compared to five years ago, despite the changing state marijuana laws during this time period."<sup>68</sup> California also reported significant declines in teen consumption from 2015–2017, just as the state was on the verge of recreational legalization.<sup>69</sup>

Unfortunately, Colorado's crime rate has also been on an upward trend since the recreational market was established in 2014.<sup>70</sup> This trend is divergent from the descending national crime rate, leading to substantial debate as to the cause of the increase.<sup>71</sup> However, when analyzing the relationship between state-sanctioned cannabis and crime, it is imperative to remember that correlation is not causation. Accordingly, a local sheriff attributes increases in local wealth and transient populations that are associated with cannabis as the connection between cannabis and crime.<sup>72</sup> Notably, property crime is reported as the driver of the increase.<sup>73</sup> Further, it is also important to remember that the federal

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*Adolescent Cognitive Development*, 176 AM. J. PSYCHIATRY 98 (2019), <https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2018.18020202>).

<sup>67</sup> See German Lopez, *The Research Suggests Marijuana Legalization Could Lead to More Use*, VOX (Nov. 14, 2018), <https://www.vox.com/identities/2018/8/20/17938388/marijuana-legalization-more-use> (reporting three varying studies, one finding medical cannabis laws increasing teen dependence and not overall use, another finding medical cannabis laws increasing overall use for teens and adults, and the last finding no increase in teenage consumption after legalizing medical cannabis).

<sup>68</sup> *Monitoring the Future Survey: High School and Youth Trends*, NAT'L INST. ON DRUG ABUSE, <https://www.drugabuse.gov/publications/drugfacts/monitoring-future-survey-high-school-youth-trends> (last updated Dec. 2018).

<sup>69</sup> GREGORY AUSTIN ET AL., *SCHOOL CLIMATE, SUBSTANCE USE, AND STUDENT WELL-BEING IN CALIFORNIA 2015–17* (2018), [https://data.calschls.org/resources/Biennial\\_State\\_1517.pdf](https://data.calschls.org/resources/Biennial_State_1517.pdf).

<sup>70</sup> See Scott McLean & Sara Weisfeldt, *Colorado Governor Won't Rule Out Banning Marijuana Again. Here's Why*, CNN (Apr. 20, 2018), <https://www.cnn.com/2018/04/20/us/colorado-marijuana-and-crime/index.html>.

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> *Id.* This logically supports the local sheriff's assertion that increases in local wealth and transient population are responsible for the increase in crime. It should be further noted that while the rate of cannabis consumption has increased nationally since the 1990s, the rate of violent crime has concurrently decreased. See *Crime in the United States by Volume and Rate per 100,000 Inhabitants, 1998–2017*, FED. BUREAU OF INVESTIGATION (2017), <https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/tables/table-1>; *Nationwide Trends*, NAT'L INST. ON DRUG ABUSE, <https://www.drugabuse.gov/publications/drugfacts/nationwide-trends> (last updated June 2015).

cannabis prohibition and banking restrictions encourage cash transactions and onsite cash vaults for state-legal cannabis organizations,<sup>74</sup> thereby increasing property crime risk factors in legal states.

Cannabis reform is not strictly limited to the United States. Currently two countries, Uruguay<sup>75</sup> and Canada,<sup>76</sup> have legalized recreational cannabis subject to differing regulations. Two more countries, South Africa<sup>77</sup> and Mexico,<sup>78</sup> have seen recent supreme court rulings holding that total cannabis prohibition is unconstitutional. Many more have legalized medical cannabis in varying forms.<sup>79</sup>

### C. Federal Cannabis Prohibition Creates Unnecessary Uncertainty for State Reform Efforts

Although near absolute federal prohibition remains in effect, this has not always been the case. Cannabis possession and use was legal in the United States until national policy began to shift with the passage of the Marihuana Tax Act in 1937.<sup>80</sup> There is some historical debate as to the policy considerations that motivated the 75th Congress to prohibit cannabis. Those considerations range from racism<sup>81</sup> and classism to a mistake on the part of the legislators as to a

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<sup>74</sup> “The rift between federal and state law has left banks trapped between their mission to serve the financial needs of their local communities and the threat of federal law enforcement action.” *Cannabis: Bridging the Gap Between State and Federal Law*, AM. BANKERS ASS’N, <https://www.aba.com/advocacy/our-issues/cannabis> (last visited Sept. 8, 2019).

<sup>75</sup> See Malena Castaldi & Felipe Llambias, *Uruguay Becomes First Country to Legalize Marijuana Trade*, REUTERS (Dec. 10, 2013, 7:43 PM), <https://www.reuters.com/article/us-uruguay-marijuana-vote/uruguay-becomes-first-country-to-legalize-marijuana-trade-idUSBRE9BA01520131211> (observing the legislative end to prohibition in Uruguay which allows purchase by Uruguay residents only).

<sup>76</sup> Kate Rogers, *Eyes of the Global Marijuana Industry Are on Canada as It Legalizes Recreational Use*, CNBC (Sept. 24, 2018, 2:09 PM), <https://www.cnn.com/2018/09/24/eyes-of-the-global-marijuana-industry-are-on-canada-as-it-legalizes-recreational-use.html>.

<sup>77</sup> Casey Quackenbush, *South Africa’s Supreme Court Has Legalized the Private Use of Marijuana*, TIME (Sept. 19, 2018), <http://time.com/5400271/south-africa-legalizes-marijuana-cannabis/> (“South Africa’s top court unanimously legalized the private use of cannabis on Tuesday, upholding a lower court’s decision ruling that it was ‘unconstitutional and therefore invalid’ to criminalize the drug . . .”).

<sup>78</sup> German Lopez, *Mexico Just Took a Big Step Toward Marijuana Legalization*, VOX (Nov. 1, 2018, 11:50 AM), <https://www.vox.com/world/2018/11/1/18051592/mexico-marijuana-legalization-supreme-court>.

<sup>79</sup> Sean Williams, *These 30 Countries Have Legalized Medical Marijuana in Some Capacity*, MOTLEY FOOL (July 21, 2018, 11:41 AM), <https://www.fool.com/investing/2018/07/21/these-30-countries-have-legalized-medical-marijuan.aspx>.

<sup>80</sup> See Becky Little, *Why the U.S. Made Marijuana Illegal*, HIST. (Aug. 4, 2017), <https://www.history.com/news/why-the-u-s-made-marijuana-illegal>.

<sup>81</sup> *Id.*

perceived (but nonexistent) difference between “marijuana” and “cannabis.”<sup>82</sup> Regardless, sound policy considerations appear to have been absent from the initial national prohibition effort.

Increased drug use during the 1960s led to a more aggressive national prohibition effort.<sup>83</sup> In 1970, Congress passed the Controlled Substances Act (“CSA”), which adopted harsher penalties for possession and cultivation of cannabis.<sup>84</sup> Despite a 1972 report made by the National Commission on Marijuana and Drug Abuse that recommended decriminalization of simple cannabis possession,<sup>85</sup> the strict prohibitions of the CSA have continued into the present. The Nixon Administration aggressively refused to consider any of the Commission’s recommendations in regard to cannabis.<sup>86</sup>

Federal prohibition enforcement has become increasingly complex and uncertain as states continue to adopt more progressive policies, especially given the administrative changes following the 2016 election. In 2013, under the Obama Administration, Deputy Attorney General James M. Cole released a memorandum to U.S. Attorneys regarding enforcement of the federal cannabis prohibition (the “Cole Memo”).<sup>87</sup> The Cole Memo encouraged prosecutors to take a hands-off approach in jurisdictions with robust medical cannabis regulatory schemes.<sup>88</sup> In fact, it went as far as to claim “a robust system may affirmatively address [federal marijuana priorities] by . . . implementing effective measures to prevent diversion of marijuana outside of the regulated system . . . and replacing an illicit marijuana trade that funds criminal enterprises

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<sup>82</sup> See DAVID R. FORD, MARIJUANA: NOT GUILTY AS CHARGED 64 (1997).

<sup>83</sup> President Richard Nixon, Special Message to the Congress on Control of Narcotics and Dangerous Drugs (July 14, 1969), <https://www.presidency.ucsb.edu/node/239611>.

<sup>84</sup> 21 U.S.C.A. § 841 (West 2018).

<sup>85</sup> NAT’L COMM’N ON MARIJUANA & DRUG ABUSE, MARIJUANA: A SIGNAL OF MISUNDERSTANDING (1972), <http://www.druglibrary.org/schaffer/Library/studies/nc/ncmenu.htm> (“[T]he criminal law is too harsh a tool to apply to personal possession even in the effort to discourage use. It implies an overwhelming indictment of the behavior which we believe is not appropriate. The actual and potential harm of use of the drug is not great enough to justify intrusion by the criminal law into private behavior, a step which our society takes only the greatest reluctance.”).

<sup>86</sup> See Gene Weingarten, *Just What Was He Smoking?*, WASH. POST (Mar. 21, 2002), [https://www.washingtonpost.com/archive/lifestyle/2002/03/21/just-what-was-he-smoking/e984a758-94fc-482f-a9d7-890c30a41b5e/?noredirect=on&utm\\_term=.f828f8946a09](https://www.washingtonpost.com/archive/lifestyle/2002/03/21/just-what-was-he-smoking/e984a758-94fc-482f-a9d7-890c30a41b5e/?noredirect=on&utm_term=.f828f8946a09).

<sup>87</sup> Memorandum from James M. Cole, Deputy Att’y Gen., for All U.S. Att’y’s on Guidance Regarding Marijuana Enforcement (Aug. 29, 2013), <https://www.justice.gov/iso/opa/resources/3052013829132756857467.pdf> [hereinafter Cole Memo]. Notably, the Cole Memo was released prior to the 2014 elections in which Colorado and Oregon legalized recreational use. However, the Cole Memo remained in effect during the budding of the regulated recreational market until it was rescinded by Attorney General Jeff Sessions in 2018. See *infra* text accompanying note 125.

<sup>88</sup> Cole Memo, *supra* note 87.

with a tightly regulated market.”<sup>89</sup> However, in 2018, under the Trump Administration, Attorney General Jeff Sessions signed a memo rescinding the Cole Memo.<sup>90</sup> The new guidance directs U.S. Attorneys to “follow the well-established principles that govern all federal prosecutions” when deciding which “marijuana activities to prosecute.”<sup>91</sup> Predictably, the new direction to prosecutors prompted diverse commentary from legal analysts, scholars, and the cannabis industry.<sup>92</sup>

A hemp<sup>93</sup> farm in Mason County, West Virginia, provides a local illustration of the complexities of the federal and state cannabis law scheme. Prior to the recent passage of the Farm Bill, the U.S. Attorney for the Southern District of West Virginia filed suit against the hemp farm, alleging violations of the federal Controlled Substances Act due to the process by which the farm obtained seeds as well as intent to sell processed hemp across state lines.<sup>94</sup> The defendant is licensed to grow hemp under the industrial hemp pilot program in

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<sup>89</sup> *Id.* The federal marijuana priorities also include: preventing distribution to minors, preventing state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or activity, preventing violence and the use of firearms in the cultivation and distribution of marijuana, and preventing the exacerbation of other adverse public health consequences associated with marijuana use. *Id.*

<sup>90</sup> See Laura Jarrett, *Sessions Nixes Obama-Era Rules Leaving States Alone that Legalize Pot*, CNN (Jan. 4, 2018, 5:44 PM), <https://www.cnn.com/2018/01/04/politics/jeff-sessions-cole-memo/index.html>.

<sup>91</sup> Memorandum from Jefferson B. Sessions, III, Att’y Gen., for All U.S. Att’y’s on Marijuana Enforcement (Jan. 4, 2018), <https://www.justice.gov/opa/press-release/file/1022196/download>.

<sup>92</sup> See Brad Auerbach, *How Cannabis Entrepreneurs Feel About the Sessions’ Reversal of the Cole Memo*, FORBES (Mar. 3, 2018, 7:32 PM), <https://www.forbes.com/sites/bradauerbach/2018/03/03/how-cannabis-entrepreneurs-feel-about-sessions-reversal-of-the-cole-memo/#6ce92565c4ae> (“Many observers across the political spectrum concur that the decision will heighten uncertainty in an industry seeking stability.”); Ilya Somin, *Jeff Sessions Escalates the Federal War on Marijuana—and His Assault on Federalism*, VOLOKH CONSPIRACY (Jan. 4, 2018, 9:40 PM), <http://reason.com/volokh/2018/01/04/jeff-sessions-escalates-federal-war-on-m> (noting that rescission’s “impact may be relatively minor,” but calling it an “assault on constitutional federalism” with the potential to “have a major chilling effect” if even a small number of sellers are targeted); Jacob Sullum, *Did Jeff Sessions’ Marijuana Memo Restore the Rule of Law?*, REASON (Jan. 5, 2018, 3:15 PM), <http://reason.com/blog/2018/01/05/did-jeff-sessions-marijuana-memo-restore> (arguing that the rescission could be an appropriate response to excessive exercising of power by the Obama Administration).

<sup>93</sup> Hemp is a low-THC (less than one percent) variety of the cannabis plant. “Industrial hemp could be used in more than 25,000 products spanning nine markets, including agriculture, textiles, recycling, automotive, furniture, food/nutrition/beverages, paper, construction materials, and personal care . . .” S. Con. Res. 32, 83d Leg., Reg. Sess. (W. Va. 2018) (emphasizing the economic importance of industrial hemp, but recognizing that Congress has “failed to amend the Controlled Substances Act to make clear that hemp . . . is not a controlled substance”).

<sup>94</sup> See *United States v. Mallory*, 372 F. Supp. 3d 377, 379 (S.D. W. Va. 2019).

West Virginia.<sup>95</sup> Nevertheless, the court ordered a preliminary injunction prohibiting the transportation or sale of any processed plant but allowing the farm to harvest, dry, and process its crop.<sup>96</sup> After the passage of the Farm Bill, the court dissolved the preliminary injunction despite the government's last-minute attempt to question whether the crop at issue was in fact industrial hemp.<sup>97</sup> West Virginia Commissioner of Agriculture Kent Leonhardt expressed that his office was "confused on why the U.S. Attorney's Office is working so diligently to thwart a growing agricultural industry in the state . . . [e]specially . . . when there are so many other serious issues affecting West Virginia."<sup>98</sup>

It seems worth noting the speed with which changes in the legal cannabis landscape are taking place. Since early fall 2018, national public support for cannabis increased by two percent;<sup>99</sup> former Attorney General Sessions was removed from his position by President Trump;<sup>100</sup> the federal prohibition on hemp was lifted via the Farm Bill;<sup>101</sup> and the Joint Economic Committee Democrats issued a report on the national cannabis economy, which advocates changing federal law so that states can experience the economic, medical, and social justice benefits of cannabis reform without federal interference.<sup>102</sup> Internationally, Canada's nationwide legalization went into effect, and South Africa's Supreme Court struck down blanket prohibition of personal cannabis use.

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<sup>95</sup> *Id.*

<sup>96</sup> *Id.* at 379–80.

<sup>97</sup> *United States v. Mallory*, No. 3:18-1289, 2019 U.S. Dist. LEXIS 10796, at \*4 (S.D. W. Va. Jan. 23, 2019) ("If the United States truly believed the product exceeded the THC limits, it could have moved the Court to require testing long before now. Instead, the United States waited until the CAMO Defendants will face certain harm by continuing the injunction before it requested testing.").

<sup>98</sup> *Correction: BC-WV—Hemp Farm-Lawsuit Story*, U.S. NEWS & WORLD REP. (Sept. 26, 2018, 4:59 PM), <https://www.usnews.com/news/best-states/west-virginia/articles/2018-09-24/us-attorney-sues-west-virginia-hemp-farm>.

<sup>99</sup> Compare McCarthy, *supra* note 6 (reporting 64% public support), with McCarthy, *supra* note 46 (reporting 66% public support).

<sup>100</sup> Peter Baker et al., *Jeff Sessions Is Forced Out as Attorney General as Trump Installs Loyalist*, N.Y. TIMES (Nov. 7, 2018), <https://www.nytimes.com/2018/11/07/us/politics/sessions-resigns.html>.

<sup>101</sup> Andre Bourque, *How Hemp and the Farm Bill May Change Life as You Know It*, FORBES (Dec. 17, 2018, 9:39 AM), <https://www.forbes.com/sites/andrebourque/2018/12/17/how-hemp-and-the-farm-bill-may-change-life-as-you-know-it/#31204f00694c>.

<sup>102</sup> JOINT ECON. COMM. DEMOCRATS, THE NATIONAL CANNABIS ECONOMY (2018), [https://www.jec.senate.gov/public/\\_cache/files/bf473de9-98bb-4465-a310-de992926409a/national-cannabis-economy-final.pdf](https://www.jec.senate.gov/public/_cache/files/bf473de9-98bb-4465-a310-de992926409a/national-cannabis-economy-final.pdf) (advocating the bipartisan STATES Act, which would amend the Controlled Substances Act so that it would no longer apply to state-sanctioned cannabis industries and clarify that financial transactions with state-legal cannabis businesses are not drug trafficking).



*D. West Virginia Policy Considerations Illuminate the Potential for Medical Cannabis to Benefit the State*

The local effects of the opioid crisis are likely one of those “other serious issues affecting West Virginia” present among Commissioner Leonhardt’s concerns. West Virginia communities have been hit especially hard by the opioid crisis.<sup>103</sup> “In 2017, there were 833 drug overdose deaths involving opioids in West Virginia—a rate of 49.6 deaths per 100,000 persons. This is the double the rate in 2010 and threefold higher than the national rate of 14.6 deaths per 100,000 persons.”<sup>104</sup> Tragically, overdoses are only one of many impacts on the state due to the opioid crisis. Increased prevalence in injection drug use has also led to increased prevalence of associated diseases.<sup>105</sup> The combined costs related to “fatalities, health care spending, addiction treatment, criminal justice and lost productivity” are estimated to have cost the state a staggering \$8.72 billion in 2016 alone.<sup>106</sup> The lost productivity caused by the opioid crisis contributes to West Virginia’s very poor labor force participation rate, which as of 2016 was the lowest among all states at 53%.<sup>107</sup> Not only is the participation rate poor, the labor pool is also gradually shrinking as West Virginia is impacted by population decline due to death rates exceeding birth rates coupled with an exodus from the state.<sup>108</sup>

General health and wellness throughout the state is another significant contributing factor to West Virginia’s labor force participation rate.<sup>109</sup> According to America’s Health Rankings annual 2018 report, West Virginia ranks 44th among the states with respect to state health scores.<sup>110</sup> West Virginia’s cancer

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<sup>103</sup> *West Virginia Opioid Summary*, NAT’L INST. ON DRUG ABUSE, <https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/west-virginia-opioid-summary> (last updated Mar. 2019).

<sup>104</sup> *Id.*

<sup>105</sup> *Id.* (reporting prevalence of HIV and hepatitis C); see also Dina Fine Maron, *West Virginia Roiled by Side Effect of Opioid Crisis—A Major Hepatitis A Outbreak*, SCI. AM. (Aug. 27, 2018), <https://www.scientificamerican.com/article/west-virginia-roiled-by-side-effect-of-opioid-crisis-a-major-hepatitis-a-outbreak/>.

<sup>106</sup> Wendy Holdren, *Analysis Shows Opioid Crisis Cost West Virginia More than \$8.72 Billion in 2016*, REG.-HERALD (Beckley, W. Va.) (May 4, 2018), [https://www.register-herald.com/health/analysis-shows-opioid-crisis-cost-west-virginia-more-than-billion/article\\_1db033ff-73c2-5a87-a267-18b58cc41101.html](https://www.register-herald.com/health/analysis-shows-opioid-crisis-cost-west-virginia-more-than-billion/article_1db033ff-73c2-5a87-a267-18b58cc41101.html).

<sup>107</sup> BUREAU OF BUS. & ECON. RESEARCH, W. VA. UNIV., WEST VIRGINIA ECONOMIC OUTLOOK 2018–2022, at 1 (2017), [https://researchrepository.wvu.edu/cgi/viewcontent.cgi?article=1003&context=bureau\\_be](https://researchrepository.wvu.edu/cgi/viewcontent.cgi?article=1003&context=bureau_be).

<sup>108</sup> *Id.* at 17.

<sup>109</sup> *Id.* at 17–18.

<sup>110</sup> AM.’S HEALTH RANKINGS, ANNUAL REPORT 2018, at 19 (2018). State health scores are determined by examining 27 health indicators grouped into two categories: determinants of health and health outcomes.

incidence rate is above the national average,<sup>111</sup> and research suggests that cancer mortality rates are disproportionately higher within rural Appalachia (including West Virginia) than the rest of the country.<sup>112</sup> Sadly, these factors and many others have resulted in West Virginia's consistent status as one of the poorest states in the country, with consistently low income and high levels of poverty.<sup>113</sup> To combat this fact, the West Virginia Center on Budget and Policy recommends increasing workforce participation (noting that criminal justice reform could alleviate criminal histories that are currently a significant barrier to employment), the general health of the workforce, and education and skills of the workforce (advocating for a public teacher pay raise<sup>114</sup>).<sup>115</sup>

New FBI reporting procedures under the Trump Administration have made specifically tracking cannabis arrests more difficult,<sup>116</sup> but investigative reporting reveals that cannabis arrests across the nation are increasing despite legalization and reform efforts.<sup>117</sup> In 2012, 53% of drug arrests in West Virginia were for marijuana, most of which were simple possession.<sup>118</sup> Given that the

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<sup>111</sup> *State Cancer Profiles*, NAT'L CANCER INST., <https://statecancerprofiles.cancer.gov/quick-profiles/index.php?statename=westvirginia#t=2> (last visited Sept. 8, 2019).

<sup>112</sup> Nengliang Yao et al., *Cancer Disparities in Rural Appalachia: Incidence, Early Detection, and Survivorship*, 33 J. RURAL HEALTH 375, 375 (2018), <https://onlinelibrary.wiley.com/doi/pdf/10.1111/jrh.12213>.

<sup>113</sup> See W. VA. CTR. ON BUDGET & POLICY & AM. FRIENDS SERV. COMM., 2016 THE STATE OF WORKING WEST VIRGINIA: WHY IS WEST VIRGINIA SO POOR? 1 (2016), <https://wvpolicy.org/wp-content/uploads/2018/5/SWWV-2016-release.pdf> [hereinafter WORKING WEST VIRGINIA].

<sup>114</sup> In February 2018, the entire state of West Virginia experienced a public-teacher strike that made national news headlines. The strike was a response to a raise that teachers felt was insufficient to cover cost-of-living increases, as well as concerns related to public-employee insurance programs, health-care costs, and payroll-tax deduction options. The state superintendent of schools said that he recognized teachers "deserve more," but "the economic realities of our state may not allow everything teachers deserve to take place immediately." Emily Stewart, *All of West Virginia's Teachers Have Been on Strike for Over a Week*, VOX (Mar. 4, 2018), <https://www.vox.com/policy-and-politics/2018/3/3/17074824/west-virginia-teachers-strike-justice-union>.

<sup>115</sup> See WORKING WEST VIRGINIA, *supra* note 113.

<sup>116</sup> Tom Angell, *Trump Administration Makes It Harder to Track Marijuana Arrests (But I Did It Anyway)*, FORBES (Sept. 25, 2017, 2:28 PM), <https://www.forbes.com/sites/tomangell/2017/09/25/trump-administration-makes-it-harder-to-track-marijuana-arrests-but-i-did-it-anyway/#471e4d3e68bc>.

<sup>117</sup> Tom Angell, *Marijuana Arrests Are Increasing Despite Legalization, New FBI Data Shows*, FORBES (Sept. 24, 2018, 8:33 AM), <https://www.forbes.com/sites/tomangell/2018/09/24/marijuana-arrests-are-increasing-despite-legalization-new-fbi-data-shows/#67acb38d4c4b>.

<sup>118</sup> Beck, *supra* note 39. Notably, a law enforcement officer interviewed within the article said that officers get frustrated because the penalties for cannabis possession aren't strict enough to deter use: "First offense is \$50 with no jail time, so it's almost like running a red light." However, currently cannabis possession laws are stricter than this would suggest, with the penalty for

national rate of cannabis related incarceration appears to be increasing, possession in West Virginia continues to be criminal. As public interest increases and harm perceptions change, it is likely safe to assume that cannabis related arrests will continue to be prominent among West Virginia drug arrests.

### III. WEST VIRGINIA MEDICAL CANNABIS ACT SUMMARY

The Act extensively regulates the emerging medical cannabis industry by controlling doctor recommendations and the means of growing, processing, and dispensing. The Act allows for doctor-recommended cannabis as treatment for patients' "[s]erious medical condition[s]" including cancer, HIV, Parkinson's disease, epilepsy, post-traumatic stress disorder, neuropathies, multiple sclerosis, Huntington's disease, Crohn's disease, chronic pain, and terminal illnesses.<sup>119</sup> Patients with a qualifying condition must apply for an identification card and present the identification card to an authorized dispensary in order to purchase medical cannabis.<sup>120</sup> Alternatively, the patient is allowed to register a caregiver who is then able to apply for an identification card and purchase medical cannabis on behalf of the patient.<sup>121</sup> Patients are limited to two registered caregivers, and caregivers are limited to acting on behalf of up to five patients.<sup>122</sup> Both patients and caregivers must have possession of their identification cards while purchasing or possessing medical cannabis.<sup>123</sup> Identification cards for patients and caregivers may be suspended or revoked upon "intentionally, knowingly or recklessly" violating any provision of the Act.<sup>124</sup> The suspension or revocation shall occur concurrently with any other criminal penalty that may apply.<sup>125</sup>

#### A. Rules for Growing, Processing, and Dispensing

Dispensaries and patients must follow the Act's regulations on the forms of cannabis that can be dispensed. Legal forms currently include pills, oils,

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possession being jail time (90 days to six months), fines up to \$1,000, or both. *See* W. VA. CODE ANN. § 60A-4-401(c) (West 2019).

<sup>119</sup> § 16A-2-1(a)(30). The exhaustive list includes only the following: cancer, HIV, amyotrophic lateral sclerosis, Parkinson's disease, multiple sclerosis, damage to the nerve tissue of the spinal cord, epilepsy, neuropathies, Huntington's disease, Crohn's disease, post-traumatic stress disorder, intractable seizures, sickle cell anemia, chronic pain, and terminal illness. *Id.*

<sup>120</sup> *Id.* § 16A-5-1(a)-(c).

<sup>121</sup> *Id.* § 16A-5-1(c).

<sup>122</sup> *Id.* § 16A-3-2(a)(4)(5).

<sup>123</sup> *Id.* § 16A-3-2(a)(7).

<sup>124</sup> *Id.* § 16A-5-9.

<sup>125</sup> *Id.*

topical forms,<sup>126</sup> tinctures,<sup>127</sup> liquids, and dermal patches.<sup>128</sup> Although the Act grants the Bureau for Public Health within the West Virginia Department of Health and Human Resources (the “Bureau”) authority to promulgate rules under the Act,<sup>129</sup> the Act expressly prohibits dispensing of dry leaf cannabis and edible medical cannabis forms, subject to change upon the promulgation of the Bureau’s rules.<sup>130</sup>

The Act delegates issuance of growing, processing, and dispensing permits to the Bureau. However, the approval of permits is limited by the following: “The [B]ureau may not issue permits to more than 10 growers . . . more than 10 processors . . . [and] more than 100 dispensaries.”<sup>131</sup> Additionally, the following must be considered by the Bureau when issuing a permit: “(1) Geographic location; (2) Regional population; (3) The number of patients suffering from serious medical conditions; (4) The types of serious medical conditions; (5) Access to public transportation; (6) Approval by local health departments; (7) [county prohibition]; (8) Any other factor the [B]ureau deems relevant.”<sup>132</sup> Although the Act initially prohibited the vertical integration of growers, processors, and dispensaries by mandating that “[a] grower or processor may not be a dispensary,”<sup>133</sup> the legislature passed a bill in 2019 that allows for the vertical integration of growers and processors.<sup>134</sup> Individuals can only possess one grower permit, one processor permit, or two dispensary permits.<sup>135</sup>

The Act contains a variety of controls aimed at preventing cannabis diversion into illegal markets. All medical cannabis organizations must “implement an electronic inventory tracking system which shall be directly accessible to the [B]ureau through its electronic database that electronically tracks all medical cannabis on a daily basis.”<sup>136</sup> For a grower or processor, this includes a “seed-to-sale tracking system” which tracks the entire growing

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<sup>126</sup> Topical forms can include gels, creams, or ointments. *Id.* § 16A-3-2(a)(2)(C).

<sup>127</sup> A tincture is a concentrated liquid herbal remedy generally consumed orally. *See* Cathy Wong, *What You Need to Know About Herbal Tinctures*, VERYWELL HEALTH, <https://www.verywellhealth.com/herbal-tinctures-89393> (last updated Aug. 30, 2019).

<sup>128</sup> W. VA. CODE ANN. § 16A-3-2(a)(2).

<sup>129</sup> *Id.* § 16A-3-1(b).

<sup>130</sup> *Id.* § 16A-3-3(b).

<sup>131</sup> *Id.* § 16A-6-13(a)(1)–(3).

<sup>132</sup> *Id.* § 16A-6-3(d)(1)–(8).

<sup>133</sup> *Id.* § 16A-6-13(a)(9) (West 2017) (amended 2019).

<sup>134</sup> *See* S. 1037, 84th Leg., 1st Extraordinary Sess. (W. Va. 2019); Erin Beck, *Lawmakers Pass Fix to Medical Marijuana Bill*, REG.-HERALD (Beckley, W. Va.) (May 20, 2019), [https://www.register-herald.com/news/state\\_region/lawmakers-pass-fix-to-medical-marijuana-bill/article\\_dbad3657-ba40-546a-a599-ea6d068941b9.html](https://www.register-herald.com/news/state_region/lawmakers-pass-fix-to-medical-marijuana-bill/article_dbad3657-ba40-546a-a599-ea6d068941b9.html).

<sup>135</sup> W. VA. CODE ANN. § 16A-6-13(a)(4)–(6) (West 2017) (amended 2019). Growers may have up to two locations per permit. *Id.* § 16A-6-13(a)(1) (West 2019).

<sup>136</sup> *Id.* § 16A-7-1(a).

process through to selling to a dispensary.<sup>137</sup> All growing must be done in “an indoor, enclosed, secure facility [with] . . . electronic locking systems [and] electronic surveillance.”<sup>138</sup> Transporting medical cannabis must be done under similar regulations; the Act requires the use of GPS and electronic tracking systems to ensure delivery and receipt recordkeeping while defending against losses occurring in storage or transit.<sup>139</sup> In addition to the security and reporting regulations, the Act further prevents the criminal diversion of medical cannabis by creating specific criminal penalties for practitioners, operators, or employees of medical cannabis organizations.<sup>140</sup> The Bureau is empowered by the Act to “notify any appropriate law-enforcement agency of information relating to any violation or suspected violation of [the] [A]ct.”<sup>141</sup> Additionally, the Bureau shall verify permits, registrations, or identification cards to law-enforcement personnel in appropriate cases.<sup>142</sup>

Dispensaries are subject to further precautionary regulations. Initially, the Act required “a physician or pharmacist onsite at all times during the hours the dispensary is open.”<sup>143</sup> However, this requirement was removed by the legislature in 2019. When dispensing to a patient or caregiver, “the dispensary may not dispense an amount greater than a 30-day supply until the patient has exhausted all but a seven-day supply.”<sup>144</sup> A medical cannabis sale must include a safety insert which educates patients on “[l]awful methods for administering medical cannabis[,] . . . potential dangers[,] . . . [h]ow to recognize what may be problematic usage[,] . . . [and] [h]ow to prevent or deter the misuse of medical cannabis by minors or others.”<sup>145</sup> Medical cannabis must be sold in a sealed and labeled package which contains health and legal warnings, as well as the package’s amount of individual doses and percentage of tetrahydrocannabinol (“THC”) and cannabidiol (“CBD”), as well as the species from which the doses are derived.<sup>146</sup>

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<sup>137</sup> *Id.* § 16A-7-1(a)(1).

<sup>138</sup> *Id.* § 16A-7-2(b)(1).

<sup>139</sup> *Id.* § 16A-7-3.

<sup>140</sup> *See id.* §§ 16A-12-1 to -9.

<sup>141</sup> *Id.* § 16A-10-3.

<sup>142</sup> *Id.*

<sup>143</sup> *Id.* § 16A-8-1(b) (West 2017) (amended 2019).

<sup>144</sup> *Id.* § 16A-8-1(d) (West 2019).

<sup>145</sup> *Id.* § 16A-8-1(g).

<sup>146</sup> *Id.* § 16A-8-1(h).

*B. Administrative Rules and Requirements*

Common with cannabis regulations in other states, the Act contains specific tax provisions for medical cannabis.<sup>147</sup> “A tax is imposed on the gross receipts of a grower/processor received from the sale of medical cannabis by a grower/processor to a dispensary, to be paid by the grower/processor, at a rate of ten percent.”<sup>148</sup> This tax has to be “paid by the grower/processor and shall not be added as a separate charge . . . of the price paid by a dispensary, patient or caregiver.”<sup>149</sup> Further, “[m]edical cannabis shall not be subject to a sales tax.”<sup>150</sup> The Act establishes a Medical Cannabis Program Fund to receive the taxes payable under the act and directs allocation of appropriated funds.<sup>151</sup>

“Money in the fund is allocated in accordance with the following percentages”: 55% of the revenue in the fund shall be allocated to the Bureau with the remaining 45% of the revenue allocated by 50% to the Fight Substance Abuse Fund, 40% to the Division of Justice and Community Services (for grants to local law enforcement agencies for training, drug diversion, and other programs focused on crime and addiction), and 10% to a fund to be used for law-enforcement professional training and professional development programs.<sup>152</sup>

The Medical Cannabis Advisory Board, created by the Act and located within the Bureau, is tasked with “analyz[ing] the statutory and regulatory law relating to medical cannabis within the state . . . and events in other states and the nation with respect to medical cannabis.”<sup>153</sup> Further, “[t]he [Board] shall” issue a written report to the Governor, the Senate and House of Delegates two years after the effective date of the Act.<sup>154</sup> The report “shall include recommendations and findings as to” whether to change the types of medical professionals who can issue certifications to patients; whether to change, add, or reduce the types of qualifying medical conditions; whether to change the form of medical cannabis permitted; whether to change, add, or reduce the number of growers, processors, or dispensaries; and how to ensure affordable patient access to medical cannabis.<sup>155</sup> “After receiving the report of the advisory board, at the discretion of the commissioner, the [B]ureau may propose rules for legislative promulgation . . . to effectuate recommendations made by the advisory board.”<sup>156</sup>

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<sup>147</sup> *Id.* § 16A-9-1.

<sup>148</sup> *Id.* § 16A-9-1(a) (West 2017) (amended 2019).

<sup>149</sup> *Id.*

<sup>150</sup> *Id.* § 16A-9-1(d).

<sup>151</sup> *Id.* § 16A-9-2 (West 2019).

<sup>152</sup> *Id.* § 16A-9-2(c).

<sup>153</sup> *Id.* § 16A-11-1(j)(1)–(2).

<sup>154</sup> *Id.* § 16A-11-1(j)(4).

<sup>155</sup> *Id.* § 16A-11-1(j)(5)(A)–(E).

<sup>156</sup> *Id.* § 16A-11-2.

In addition to the Medical Cannabis Advisory Board, the Act instructs the Bureau to “establish and develop a research program to study the impact of medical cannabis on the treatment and symptom management of serious medical conditions.”<sup>157</sup> The program includes “[creating] a database of all serious medical conditions . . . which are cited by practitioners in the certifications of patients.”<sup>158</sup> Once 25 or more patients with the same serious medical condition are added to the database, the Bureau shall “petition the United States Food and Drug Administration [(“FDA”)] and the United States Drug Enforcement Administration [(“DEA”)] for approval to study the condition and the impact of medical cannabis on the condition.”<sup>159</sup> Concurrent with the FDA and DEA petitions, the Bureau shall “publicly announce the formation of a research study to which a vertically integrated health system and a university within this state may submit a request to participate.”<sup>160</sup> The Bureau must also select patients to participate in the research study and notify each consenting patient “where the patient may secure medical cannabis . . . at no cost to the patient.”<sup>161</sup> “The cost of the medical cannabis which is dispensed to patients in accordance with an approved research study shall be paid for by the fund.”<sup>162</sup> Further, if the FDA and DEA reject the proposal for the research study, the Bureau shall “take all reasonable steps to collect and collate data on the serious medical condition and the use of medical cannabis as a treatment for the serious medical condition and consider submitting an additional request . . . for a research study on the same condition.”<sup>163</sup> “A health care medical cannabis organization may not participate in a research study of any kind, including the program established [by the Act].”<sup>164</sup>

The Act offers specific protections for patients and caregivers with respect to criminal penalties and employment discrimination.<sup>165</sup> The Act protects patients, caregivers, practitioners, and medical cannabis organizations from being arrested solely for their lawful use action taken in accordance with the Act.<sup>166</sup> Employers are prohibited from discriminating or retaliating against an

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<sup>157</sup> *Id.* § 16A-13-2(a).

<sup>158</sup> *Id.* § 16A-13-2(b)(2).

<sup>159</sup> *Id.* § 16A-13-2(b)(3).

<sup>160</sup> *Id.* § 16A-13-2(b)(4). “Vertically integrated health system” is defined as “[a] health delivery system in which the complete spectrum of care, including primary and specialty care, hospitalization and pharmaceutical care, is provided within a single organization.” *Id.* § 16A-13-1.

<sup>161</sup> *Id.* § 16A-13-2(b)(6).

<sup>162</sup> *Id.* § 16A-13-2(c) (referring to the fund created by the Act which receives 55% of medical cannabis tax revenue).

<sup>163</sup> *Id.* § 16A-13-2(b)(7).

<sup>164</sup> *Id.* § 16A-13-6.

<sup>165</sup> *Id.* § 16A-15-4.

<sup>166</sup> *Id.*

employee “solely on the basis of such employee’s status as an individual who is certified to use medical cannabis.”<sup>167</sup> However, the Act expressly does not “require an employer to make any accommodation of the use of medical cannabis on the property or premises of any place of employment.”<sup>168</sup> Further, the Act “in no way limit[s] an employer’s ability to discipline an employee for being under the influence of medical cannabis in the workplace . . . when the employee’s conduct falls below the standard of care normally accepted for that position.”<sup>169</sup>

*C. The Medical Cannabis Advisory Board Recommends Broader Applicability with Fewer Restrictions, Including Allowing Dry Leaf Cannabis*

Pursuant to its duty under the Act, the Medical Cannabis Advisory Board published a collection of findings and seven recommendations in February 2018.<sup>170</sup> Those recommendations include the following: Recommendation 1.1 would “[a]mend the Act to clarify requirements and responsibilities for physicians who issue certifications”; Recommendation 1.2 would “[r]eplace the phrase ‘Serious Medical Conditions’ with the phrase ‘Medical Conditions with Possible Serious Manifestations’ throughout”; Recommendation 2.1 would “[i]nclude dry leaf or plant form medical cannabis medically appropriate for administration by vaporization or nebulization”; Recommendation 3.1 would “[r]emove limitations on the number of permits the Bureau for Public Health may issue for growers, processors, and dispensaries”; Recommendation 3.2 would “[r]emove limitation that a grower or processor may not also be a dispensary to permit the vertical integration of growers, processors and dispensaries”; Recommendation 3.3 urges the legislature to “evaluate the need for the requirement that a physician or pharmacist must be onsite at all times during the hours the dispensary is open to receive patients”; and Recommendation 3.4 encourages authorization of “a pre-registration process for potential medical cannabis patients to more clearly ascertain the market interest within West Virginia.”<sup>171</sup>

The legislature considered various amendments to the Act a year after its passage. Senate Bill 487 was considered and ultimately rejected during the 2018 legislative session.<sup>172</sup> The proposal would have amended the Act to allow dry leaf cannabis dispersion without requiring a new rule promulgated by the

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<sup>167</sup> *Id.* § 16A-15-4(b)(1).

<sup>168</sup> *Id.* § 16A-15-4(b)(2).

<sup>169</sup> *Id.*

<sup>170</sup> W. VA. MED. CANNABIS ADVISORY BD., REPORT AND RECOMMENDATIONS 4 (2018), <https://dhhr.wv.gov/bph/Documents/MedicalCannabis/MCAB%20Report%20Recommendations%20FINAL%2002.22.2018.pdf>.

<sup>171</sup> *Id.*

<sup>172</sup> See S. 487, 83d Leg., Reg. Sess. (W. Va. 2018).



Bureau.<sup>173</sup> Additionally, the amendment would restructure application fees and allow the delivery of medical cannabis by a dispensary to qualifying patients.<sup>174</sup>

The legislature also considered and rejected a bill which would have significantly reduced the stringent restrictions currently placed on permit issuance. House Bill 4345 sought to increase the permits available to 50 for growers, 50 for processors, and 165 for dispensaries.<sup>175</sup> House Bill 4345 also would have allowed for the vertical integration of growing, processing, and dispensing.<sup>176</sup>

Changes to the dry leaf prohibition and permit limitations were both supported by the state's Medical Cannabis Advisory Board.<sup>177</sup> In fact, the Advisory Board recommended eliminating the limitations on number of permits issued entirely.<sup>178</sup> The Board noted that while

[t]he work group is not currently in a position to recommend a specific number for the increase [in permits] . . . work group members believe the current numbers are likely too low to provide for adequate patient access and market viability in light of . . . interest level that has been indicated thus far.<sup>179</sup>

The Board also noted that “by increasing the number of permits available, a broader cross-section of interested businesses would be able to take part in the process allowing for an increase in *affordable* patient access to medical cannabis.”<sup>180</sup> Lastly, the Board noted, in furtherance of its concern for the economics of medical cannabis in West Virginia, that

it appears West Virginia is an outlier in prohibiting vertical integration among the 29 states that have approved medical cannabis laws. . . . [I]t seems that the [prohibition on vertical integration] currently provided in the law would make it less economically viable for entities to enter into this market and to provide an affordable product for patients.<sup>181</sup>

The legislature addressed the vertical integration issue in its 2019 session by passing House Bill 2079. The bill would have allowed for vertical

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<sup>173</sup> *Id.*

<sup>174</sup> *Id.*

<sup>175</sup> H.D. 4345, 83d Leg., Reg. Sess. (W. Va. 2018).

<sup>176</sup> *Id.*

<sup>177</sup> W. VA. MED. CANNABIS ADVISORY BD., *supra* note 170, at 7.

<sup>178</sup> *Id.* (“Recommendation 3.1: Remove limitations on the number of permits the Bureau for Public Health may issue for growers, processors, and dispensaries.”).

<sup>179</sup> *Id.*

<sup>180</sup> *Id.* (emphasis added).

<sup>181</sup> *Id.* at 7–8.

integration—one person could hold any combination of grower, processor, and dispensary permits. The bill was purportedly an effort to attract medical cannabis businesses to West Virginia.<sup>182</sup> The bill also allowed for chronic pain patients to use medical marijuana without having to try an opioid first.<sup>183</sup> The legislature also passed House Bill 2538 in its 2019 session, which allows credit unions to accept medical cannabis revenue.<sup>184</sup> But the legislature did not amend restrictions on the forms of cannabis that patients can use.

#### IV. COMPARISON OF CANNABIS LAW AND POLICY ACROSS THE STATES

West Virginia stands out among the Appalachian states as one of four states with a comprehensive medical cannabis program.<sup>185</sup> Maryland, Pennsylvania, and Ohio also have comprehensive programs, while the rest of the Appalachian states allow CBD or low-THC medical cannabis products.<sup>186</sup> Like West Virginia, Ohio's strict regulations surrounding medical cannabis led to speculation on the potentially high cost of patient participation in the program.<sup>187</sup> Ohio's \$472 average per ounce price of medical cannabis essentially affirmed the accuracy of such speculation.<sup>188</sup> This Part will attempt to analyze regulations and medical cannabis pricing because in many cases pricing could present a significant barrier for patients attempting to enter the market.<sup>189</sup> However, it must be noted that in some jurisdictions' patient reporting may have to be relied upon for price data. Further, estimating dosage is a significant factor when estimating how much a patient may spend on medical cannabis, but medical cannabis users

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<sup>182</sup> Erin Beck, *Bill to Bring Medical Marijuana Businesses to West Virginia Heads to Governor*, REG.-HERALD (Beckley, W. Va.) (Mar. 9, 2019), [https://www.register-herald.com/news/state\\_region/bill-to-bring-medical-marijuana-businesses-to-west-virginia-heads/article\\_d51a6aaa-2ca1-59c8-bc67-2df4164b444c.html](https://www.register-herald.com/news/state_region/bill-to-bring-medical-marijuana-businesses-to-west-virginia-heads/article_d51a6aaa-2ca1-59c8-bc67-2df4164b444c.html). Delegate Cindy Lavender-Bowe explained, "I signed onto the bill because I want to make medical marijuana available ASAP in West Virginia to give patients the relief they need." *Id.* Delegate Mike Pushkin further stated the bill is "the biggest jobs-creating bill that we have this session." *Id.*

<sup>183</sup> *Id.*

<sup>184</sup> *Id.*

<sup>185</sup> *State Medical Marijuana Laws*, *supra* note 5.

<sup>186</sup> *Id.*

<sup>187</sup> See Bill Hormann, *What to Know About Ohio's Medical Marijuana Program*, 13ABC WTVG TV (Oct. 20, 2018, 2:55 PM), <https://www.13abc.com/content/news/What-to-know-about-Ohios-medical-marijuana-program-498111601.html> ("[R]ules includ[ing] packaging each daily dose separately . . . will drive up prices . . .").

<sup>188</sup> See Jackie Borhardt, *Why Aren't Ohioans Rushing to Buy Medical Marijuana?*, CINCINNATI ENQUIRER (Mar. 25, 2019, 10:11 PM), <https://www.cincinnati.com/story/news/2019/03/25/why-arent-ohioans-rushing-buy-medical-marijuana/3205803002/>.

<sup>189</sup> See W. VA. MED. CANNABIS ADVISORY BD., *supra* note 170, at 8.

can have substantially different dosage needs<sup>190</sup> and dosage is most often discussed in terms of grams of dried flower, which is prohibited in West Virginia.

Maryland does not restrict the dispersion of dry leaf cannabis and allows patients to smoke or vaporize on private property.<sup>191</sup> Nor does Maryland prohibit the vertical integration of cannabis growers, processors, and dispensaries.<sup>192</sup> Maryland has retained criminal penalties for possessing cannabis outside of its medical program.<sup>193</sup> The law commands the Maryland Commission to “actively seek to achieve racial, ethnic, gender, and geographic diversity when licensing medical cannabis growers.”<sup>194</sup> The Commission is empowered to license as many growers as is necessary to meet demand, but was initially limited to 15 licensed growers.<sup>195</sup> Maryland law does not require the presence of a licensed physician onsite.

The *Baltimore Sun* estimates that 3.5 grams of Maryland medical cannabis (one eighth of an ounce) costs about \$50–\$60.<sup>196</sup> The same amount is estimated to cost an average of \$40 throughout the national market.<sup>197</sup> However, patients have reported prices up to \$84 per 3.5 grams.<sup>198</sup> The estimated Maryland

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<sup>190</sup> See Dustin Sulak, *A Physician’s Perspective on Optimal Cannabis Dosing*, LEAFLY (Feb. 26, 2018), <https://www.leafly.com/news/health/a-physicians-perspective-on-optimal-cannabis-dosing> (describing the unusually large dosing-range for medical cannabis and describing the lowest therapeutic dose as optimal); see also *Dosing and Delivery of CanniMed Medical Cannabis*, CANNIMED, <https://www.cannimed.ca/pages/dosing-and-delivery> (last visited Sept. 9, 2019). A Canadian medical cannabis company (responsible for the first sale of medical cannabis in the country in 2001 through a deal with the Canadian government) suggests that the average medical dose per day is 1–3 grams of dried flower and that 0.78 grams of dried flower is equivalent to approximately 60 mL of (this particular company’s) oil. *Id.*

<sup>191</sup> See MD. CODE ANN., HEALTH–GEN. § 13-3314 (West 2019).

<sup>192</sup> *Id.* § 13-3314(e).

<sup>193</sup> See *id.* § 13-3313(b)(1).

<sup>194</sup> *Id.* § 13-3306(a)(9)(i)(1).

<sup>195</sup> See DEP’T OF LEGISLATIVE SERVS., FISCAL AND POLICY NOTE, S. 37, 2018 Gen. Assemb., Reg. Sess., at 5 (Md. 2018); see also Larisa E. Bolivar, *Medical Cannabis Policy in Maryland: Proposed Number of Cannabis Grow Licenses Will Not Meet Demand*, CANNABIS CONSUMERS COALITION (Jan. 19, 2016), <https://www.cannabisconsumer.org/medical-cannabis-policy-in-maryland-proposed-number-of-cannabis-grow-licenses-will-not-meet-demand.html> (predicting that 15 licenses was “far from sufficient” to meet consumer demand).

<sup>196</sup> Sarah Meehan, *FAQ: What You Need to Know About Medical Marijuana in Maryland*, BALTIMORE SUN (Mar. 20, 2018, 5:30 PM), <https://www.baltimoresun.com/health/marijuana/bs-md-medical-marijuana-faq-20171207-story.html>.

<sup>197</sup> Priceonomics, *Here’s How Much Marijuana Costs in the United States vs Canada*, FORBES (May 18, 2018, 12:52 PM), <https://www.forbes.com/sites/priceonomics/2018/05/18/heres-how-much-marijuana-costs-in-the-united-states-vs-canada/#764179bf538a>.

<sup>198</sup> See *Reviews of Allegany Medical Marijuana Dispensary*, GOOGLE, <https://www.google.com> (last visited Sept. 9, 2019) (search “Allegany Medical Marijuana Dispensary,” then click the “Google reviews” hyperlink) (reporting high prices and alleging that the owner actually bans patients who post or complain about the price).

street cost of similar quality cannabis is about \$40.<sup>199</sup> Thus, an apparently conservative daily dose of 0.5 grams in Maryland could cost consumers anywhere from \$7.10 to \$12. A consumer with higher dosage needs could expect to pay three to five times that range, resulting in a potential \$60 daily medicine bill.

Pennsylvania's program has many regulations that are similar to West Virginia's. An exhaustive list of qualifying medical conditions is expressly enumerated, and similar to that of West Virginia's.<sup>200</sup> The statute also prohibits dispersion of dry leaf cannabis, subject to change as regulations are adopted by the department.<sup>201</sup> The Department of Health currently allows dry leaf dispersion, but only for vaporization.<sup>202</sup> Smoking medical cannabis is still prohibited. Pennsylvania's scheme differs from West Virginia's with respect to its tax allocations. The Department of Health receives 55% of the tax revenue created by the Act.<sup>203</sup> The majority of the funding received by the Department (40%) is expended by the Department for operations relating to the Act; the remaining 15% is dedicated to assisting patients who demonstrate financial need with the cost of medical cannabis, as well as costs associated with identification cards and background checks.<sup>204</sup> The remainder of the fund is divided between the Department of Drug and Alcohol Programs (for drug abuse prevention, counseling, and treatment services) with 10%, further research related to medical cannabis with 30%, and the Pennsylvania Commission on Crime and Delinquency with only 5%.<sup>205</sup> Pennsylvania does not require the presence of a physician at every dispensary location.<sup>206</sup> Currently, possession of small amounts of cannabis (less than 30 grams) without intent to sell is a misdemeanor punishable by up 30 days in jail and a \$500 fine.<sup>207</sup>

Before the Department of Health began allowing dry leaf form, medical cannabis had to be purchased in processed forms such as wax or oil

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<sup>199</sup> *Maryland Weed Prices*, BUDZU, <http://budzu.com/prices/usa/maryland> (last visited Sept. 9, 2019) (relying on anonymous user submissions for data).

<sup>200</sup> See 35 PA. STAT. AND CONS. STAT. ANN. § 10231.103 (West 2019).

<sup>201</sup> See *id.* § 10231.303(b)(3).

<sup>202</sup> *Patients and Caregivers*, PA. DEP'T HEALTH, <https://www.health.pa.gov/topics/programs/Medical%20Marijuana/Pages/Patients.aspx> (last visited Sept. 9, 2019).

<sup>203</sup> See 35 PA. STAT. AND CONS. STAT. ANN. § 10231.902(c)(1).

<sup>204</sup> See *id.*

<sup>205</sup> *Id.* § 10231.902(c)(2)–(4).

<sup>206</sup> See *id.* § 10231.801(b).

<sup>207</sup> *Id.* § 780-113(g).

concentrates<sup>208</sup> for up to \$75 per gram.<sup>209</sup> The price of dry leaf cannabis after its prohibition was lifted is approximately \$35 per 3.5 grams.<sup>210</sup>

Although California was the first state to recognize medical cannabis in 1996, Colorado was the first state to develop a regulated commercial market for medical cannabis in 2010.<sup>211</sup> Prior to the passage of Colorado's act to regulate medical cannabis, the state's constitution was amended in 1999 to exempt caregivers and patients from criminal penalties for engaging in or assisting in the use of medical cannabis, without establishing a state licensed and regulated market.<sup>212</sup> Amendment 64, which legalized recreation marijuana sales, was passed in 2012 only two years after the establishment of the regulated medical market.<sup>213</sup> Possession of less than two ounces of cannabis was decriminalized in 1975, making such possession punishable by a fine of \$100 or less when the regulated medical market was established.<sup>214</sup>

Colorado's 2010 act establishing medical cannabis regulations significantly contrasts with West Virginia's approach. Dry leaf and flower sales are not prohibited,<sup>215</sup> patient cultivation of cannabis plants is expressly allowed,<sup>216</sup> and local county or municipal governments are able to develop their own licensing restrictions in addition to the statewide licensing rules.<sup>217</sup> In fact, local governments even have the power to prohibit operation of medical cannabis facilities, including dispensaries.<sup>218</sup> Under the House Bill, up to one million

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<sup>208</sup> Concentrates contain higher percentages of THC or CBD, and therefore the estimated 1–3 gram medical dosing average of flower is not directly applicable. *See What You Should Know About Marijuana Concentrates/Honey Butane Oil*, GET SMART ABOUT DRUGS (Aug. 8, 2018) <https://www.getsmartaboutdrugs.gov/content/what-you-should-know-about-marijuana-concentrates-honey-butane-oil>. Notably, encouraging concentrates by prohibiting flower may actually make finding the optimal lowest therapeutic dose more difficult for patients because the product is so much stronger.

<sup>209</sup> Ben Schmitt, *How Much Is Medical Marijuana in Pennsylvania? Prices Are Coming into Focus*, PITT. TRIB.-REV. (Feb. 16, 2018, 2:33 PM), <https://triblive.com/news/healthnow/13313069-74/how-much-is-medical-marijuana-in-pennsylvania-prices-are-coming-into-focus>.

<sup>210</sup> David Wenner, *Pa. Begins Dry Leaf Medical Marijuana Sales, Reminds Users Not to Smoke It*, PATRIOT-NEWS (Harrisburg, Pa.) (Aug. 1, 2018), [https://www.pennlive.com/news/2018/08/pa\\_begins\\_dry\\_leaf\\_medical\\_mar.html](https://www.pennlive.com/news/2018/08/pa_begins_dry_leaf_medical_mar.html). (“Terrapin Pennsylvania, a grower-processor, said this week that dry leaf will sell for as little as \$10 a gram.”).

<sup>211</sup> *See* H.R. 1284, 67th Gen. Assemb., 2d Reg. Sess. (Colo. 2010).

<sup>212</sup> COLO. CONST. art. XVIII, § 14(2)(b)–(c).

<sup>213</sup> *See id.* § 16.

<sup>214</sup> COLO. REV. STAT. ANN. § 18-18-406(1) (West 2012) (repealed 2013).

<sup>215</sup> *See id.* § 25-1.5-106(12) (West 2019).

<sup>216</sup> *See id.* § 25-1.5-106(8.5) (“All patients cultivating more than six medical marijuana plants for their own medical use are encouraged to register with the state licensing authority’s registry . . .”).

<sup>217</sup> *Id.* § 25-1.5-106(13.5).

<sup>218</sup> *See* H.R. 1284, 67th Gen. Assemb., 2d Reg. Sess. (Colo. 2010).

dollars in initial tax revenue was “appropriated to the Department of Human Services to be used to provide integrated behavioral health services for juveniles and adults with substance use disorders and mental health treatment needs who are involved with, or at risk of involvement with, the criminal justice system.”<sup>219</sup> Currently, Colorado medical cannabis tax revenues are distributed entirely to a public school fund and public school capital construction assistance fund.<sup>220</sup>

Colorado’s medical cannabis market, being the first of its kind in the United States and given its relatively loose restrictions (when compared to subsequent developments east of the Mississippi), provided patients with easier access to their medical supply. Prices of medical cannabis in 2011 ranged between \$25 to \$50 dollars per 3.5 grams depending on supply and quality of product.<sup>221</sup>

Of the 33 states that have established comprehensive medical cannabis programs (programs that do allow for medical access to THC products), 11 also allow adult recreational use.<sup>222</sup> Unsurprisingly, the 11 states allowing adult use also permit dry leaf cannabis to be dispensed to medical patients. Of the remaining 22 states with a comprehensive medical program, 20 allow dry leaf cannabis dispersion in at least some circumstances.<sup>223</sup> Louisiana and Minnesota<sup>224</sup> are the only two states besides West Virginia that have established a comprehensive medical cannabis program but retain a blanket prohibition on dry leaf dispersion.<sup>225</sup>

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<sup>219</sup> *Id.* (amending § 39-26-123).

<sup>220</sup> COLO. REV. STAT. ANN. § 39-28.8-305.

<sup>221</sup> See Walt Hickey, *The True Story of the Great Marijuana Crash of 2011*, BUS. INSIDER (Sept. 25, 2013, 8:00 PM), <https://www.businessinsider.com/the-great-marijuana-crash-of-2011-2013-9>.

<sup>222</sup> See *State Medical Marijuana Laws*, *supra* note 5 (Alaska, Washington, Oregon, California, Nevada, Colorado, Michigan, Vermont, Maine, Illinois, and Massachusetts).

<sup>223</sup> See *id.* North Dakota requires a physician recommendation for patient dry leaf access. N.D. CENT. CODE ANN. § 19-24.1-21(4) (West 2019). Utah prohibits dry leaf dispersion unless it is sold in a single dose “blister pack” containing no more than one gram of flower. See UTAH CODE ANN. § 26-61a-502(5)(c) (West 2019). New York and Pennsylvania permit dry leaf dispersion but prohibit smoking.

<sup>224</sup> Some Minnesota patients report that the highly regulated program costs them “hundreds or even thousands of dollars a month, none of it covered by insurance.” *Cost of Medical Marijuana in Minnesota Leads Some to Return to Illegal Sources*, GUARDIAN (London) (Sept. 20, 2015, 1:23 PM), <https://www.theguardian.com/us-news/2015/sep/20/cost-of-medical-marijuana-in-minnesota-leads-some-to-return-to-illegal-sources>.

<sup>225</sup> See LA. STAT. ANN. § 40:1046 (West 2019); see also *Overview of the Louisiana Therapeutic Marijuana Act*, MARIJUANA POL’Y PROJECT, <https://www.mpp.org/states/louisiana/overview-of-louisianas-medical-cannabis-law/> (last visited Sept. 9, 2019). Louisiana appears unique in that it only allows state universities to grow medical cannabis. See *General Information About the Minnesota Medical Cannabis Program*, MINN. DEP’T HEALTH, <https://www.health.state.mn.us/people/cannabis/about/factsheet.html> (last visited Sept. 9, 2019).

V. INCREASING THE EFFICACY OF THE ACT BY ALLOWING DRY LEAF  
AND REDUCING UNNECESSARY RESTRICTIONS

Governor Jim Justice described West Virginia’s Medical Cannabis Act as a compassionate effort to “help our neighbors who are struggling with illness.”<sup>226</sup> Given the capacity of medical cannabis to significantly aid our struggling neighbors, this Author agrees. However, there are remaining policy considerations which could further aid chronically ill West Virginians by reducing market barriers, as well as provide the rest of the state with tangential benefits. Additionally, the state should consider how a robust cannabis marketplace can help generate useful revenue.

A. *Current Restrictions May Price West Virginia Patients Out of the Market; Loosening Restrictions and Allowing Dry Leaf Cannabis Will Help Patients Access Treatment*

West Virginia’s medical cannabis laws are some of the strictest in the country. West Virginia appears to be unique among states recognizing medical cannabis in its requirement to have a physician onsite during dispensary hours of operation. Further, its prohibition on dry leaf material is a small minority rule among the states with operational medical cannabis programs. These factors, combined with strict limitations on the number of growing licenses available, may operate to reduce supply and increase prices such that many or most West Virginian patients simply cannot afford their medicine.

West Virginia’s relatively conservative policies behind the Medical Cannabis Act are indicative of the “fear” and “mystery”<sup>227</sup> that has historically surrounded the cannabis plant. The state’s concerns regarding potential cannabis misuse and teen use are not illegitimate concerns and are likely fueled in part by the havoc opioids have wreaked within the state. However, a holistic review of the data suggests that while a certain amount of legislative caution is warranted, the most stringent restrictions are unnecessary to prevent cannabis misuse, traffic accident increases, and teen use increases.

As described in Part III, medical cannabis prices have a very wide range and are sensitive to policies operating within the market. In order to fully provide compassionate use options to chronically ill West Virginians, the state should seriously consider the Medical Cannabis Advisory Board’s recommendations

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<sup>226</sup> See Press Release, W. Va. Office of the Governor, Justice Signs Medical Cannabis Bill into Law (Apr. 19, 2017), <https://governor.wv.gov/News/press-releases/2017/Pages/Justice-Signs-Medical-Cannabis-Bill-Into-Law.aspx>.

<sup>227</sup> See Zuckerman, *supra* note 38. In reference to the amendment restricting available forms, Judiciary Chairman John Shott said, “We can basically prevent its abuse, and at the same time provide help to people who need it.” Kalea Gunderson, *Amendment to West Virginia Medical Marijuana Bill Restricts Uses*, EYEWITNESS NEWS WCHS TV (Apr. 3, 2017), <https://wchstv.com/news/local/amendment-to-wv-medical-cannabis-act-restricts-marijuana-uses>.

with respect to increasing patients' potential to access medical cannabis. Otherwise, patients may be unnecessarily foreclosed from trying a physician recommended medicine, or worse, encouraged to enter the ever-present black market.

Fortunately, it seems that the legislature realized that an onsite physician's services could be easily replaced by mandatory inserts and labeling that provide patients with health and safety information.<sup>228</sup> This should significantly reduce dispensary operating costs, thus reducing the price of medical cannabis products. Further, prohibiting dry leaf dispersion is likely unnecessary and to some degree counter-intuitive. For instance, if West Virginia's policies are reflective of concerns over the drug's potential misuse, then why would West Virginia disallow the most natural form of the medicine and encourage the use of processed extracts that are generally significantly more potent?<sup>229</sup> This policy choice is especially questionable given that prohibiting dry leaf and requiring processed products will likely increase potential incentive for diversion into the black market. If processed products are valued higher, and less available in the black market than dry leaf, it follows that the economic motivation for diversion will be stronger for concentrated cannabis products.

Requiring cannabis to be processed before being sold will logically serve to increase product price. Presumably West Virginia does not want to encourage smoking among chronically ill patients, but other states allow dry leaf while still prohibiting smoking. Further, there are some scenarios where patients may not even be able to orally ingest medicine such as late-stage chemotherapy patients. In such scenarios, a more flexible rule, such as North Dakota's, which would at least allow for the dispersion of dry leaf cannabis to patients that have real need (medical or financial) for vaporization (as recognized by a physician) would be optimal. Lastly, given West Virginia's high cancer and opioid prescription rates, the demand for medical cannabis could be significant. However, as the Medical Cannabis Advisory Board points out, the limited number of growers, processors, and dispensaries may not be able to produce supply to meet the demand, thus potentially further increasing the price of medical cannabis products.

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<sup>228</sup> For a comprehensive example of labeling requirements which are aimed at warning and informing patients, see OR. LIQUOR CONTROL COMM'N, PACKAGING AND LABELING GUIDE FOR MEDICAL AND RECREATIONAL MARIJUANA – VERSION 4.0 (2018), [https://www.oregon.gov/olcc/marijuana/Documents/Packaging\\_Labeling/PackagingandLabelingGuide.pdf](https://www.oregon.gov/olcc/marijuana/Documents/Packaging_Labeling/PackagingandLabelingGuide.pdf).

<sup>229</sup> See *supra* text accompanying note 208.



*B. Increasing the Efficacy of the Medical Cannabis Act and Deprioritizing Criminal Law Enforcement Spending Would Be Economically Beneficial to West Virginia*

Increasing patient access can create a robust marketplace which provides West Virginia residents with new opportunities for meaningful employment. Cannabis growing, processing, and dispensing is a labor-intensive industry which has significant economic impact in areas that allow it.<sup>230</sup>

Tax revenue is one the most frequently recognized and cited benefits to establishing a regulated cannabis market, medical or recreational. Yet West Virginia's Medical Cannabis Act provides the public with little to no benefit by failing to distribute any medical cannabis tax revenue into publicly useful funds, such as Colorado does with its public-school funds.<sup>231</sup> Instead, the tax revenue is used to further enforce criminal prohibition which has largely been unsuccessful throughout the nation.

Prioritizing criminal law enforcement is further evidence of policy choices that are reflective of outdated fears surrounding cannabis. When considering how to prioritize spending, the state should rely not on "intuitions"<sup>232</sup> about the plant's dangers, but rather the data available. Concerns over traffic safety appear to be largely overblown.<sup>233</sup> Increases in money and transient population associated with cannabis within legal states tend to explain crime rate increases better than the cannabis plant's psychoactive effect.<sup>234</sup> Teenage use is a real concern, but criminalization seems an inadequate solution to the problem because it fails to deter use.<sup>235</sup>

Further, with so many states and countries drastically reforming cannabis laws in 2018, and the media aggressively covering the reform, exposure to cannabis information is higher than ever. The year 2019 is predicted to follow the same trajectory. In an environment where access and exposure to cannabis information are ballooning, attempting to maintain any "fear" and "mystery" surrounding cannabis through criminalization is an antiquated notion of Appalachian isolationism. The public's perception of harm has already decreased

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<sup>230</sup> See *supra* Part II.

<sup>231</sup> See COLO. REV. STAT. ANN. § 39-28.8-305 (West 2019).

<sup>232</sup> See *supra* text accompanying note 38.

<sup>233</sup> See *supra* text accompanying note 65.

<sup>234</sup> See McLean & Weisfeldt, *supra* note 70.

<sup>235</sup> Of the two strongest factors for predicting teen use, access and perception of harm, the state has the best chance at controlling access. Continued criminalization will likely do little to alter teens' perception of harm, especially when compared to the impact the media has on teens' perceptions. Access doesn't appear to be greatly impacted by criminalization, either, given the fact that stricter cannabis laws have not reduced cannabis-related charges. However, teenage access could be restricted by replacing the black market with a robust but tightly regulated market that could ensure cannabis suppliers within the community only sold to those with identification who are over 21.

dramatically compared to decades ago,<sup>236</sup> and the current national trends point towards further social acceptance throughout the country.<sup>237</sup> This will surely impact West Virginian's perceptions as well. Further, in the near future West Virginians may have the opportunity to purchase legal cannabis in a bordering state.<sup>238</sup> Given the current environment, spending the Act's revenue on maintaining legally enforced prohibition seems like an insurmountable uphill battle.

If the Act's regulations and restrictions were reduced to a degree which allows supply to meet demand, and product prices are within a range that the consuming population can generally afford, then the medicinal market created by the Act could help fund the public teacher pay raise that is recommended by the West Virginia Center on Budget and Policy as a tool to combat the state's economic status.<sup>239</sup> Alternatively, West Virginia could follow the lead of Pennsylvania's medical cannabis program which funds alcohol and drug abuse prevention programs at a higher rate than traditional law enforcement mechanisms. Regardless of the route, West Virginia has the opportunity to increase the public's tangential benefits by prioritizing public use funding over continuing the current criminal law enforcement status quo.

## VI. CONCLUSION

The Medical Cannabis Act grants patients like Rusty Williams who are chronically or terminally ill access to carefully restricted medical cannabis. Medical cannabis is a promising alternative treatment to many of the chronic ailments afflicting West Virginians. However, the tight regulations stemming

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<sup>236</sup> The internet has been one of reform advocates' greatest tools for releasing data and countering old perceptions. See DEANGELO, *supra* note 10, at 168.

<sup>237</sup> Jolene Forma, senior staff attorney at the Drug Policy Alliance told *Newsweek*, "In 2019, I think we can expect to see more of the same type of change, but maybe at a more rapid pace." Alexandra Hutzler, *Marijuana Legalization 2019: Which States Will Consider Legal Weed in Year Experts Predict Will Be 'Real Game-Changer'*, NEWSWEEK (Jan. 1, 2019, 8:10 AM), <https://www.newsweek.com/which-states-legalization-marijuana-2019-1275736> ("The train has left the station. Americans of all political affiliations and almost all demographics support marijuana legalization.").

<sup>238</sup> Maryland lawmakers claim legalizing cannabis is on the agenda for the new year's legislative session. Kate Ryan, *Legalizing Marijuana, Banning 'Ghost Guns' on To-Do List for Md. Lawmakers*, WTOP-FM (Jan. 1, 2019, 6:00 PM), <https://wtop.com/maryland/2019/01/maryland-legislative-session-starts-in-one-week/>.

Pennsylvania Governor Tom Wolf, previously opposed to legalization, "now says that he's ready to take a serious look at the issue [and] also supports moving ahead immediately with less far-reaching moves to decriminalize cannabis possession." Tom Angell, *These States Are Most Likely to Legalize Marijuana in 2019*, FORBES (Dec. 26, 2018, 2:11 PM), <https://www.forbes.com/sites/tomangell/2018/12/26/these-states-are-most-likely-to-legalize-marijuana-in-2019/>.

<sup>239</sup> See WORKING WEST VIRGINIA, *supra* note 113.

from outdated perceptions will likely serve to make medical cannabis inaccessible to at least some West Virginian patients and could potentially create an unnecessary financial burden for many more. These concerns would likely be reduced by adopting the Medical Cannabis Advisory Board's recommendations, following the majority of other states by allowing dry leaf dispersion, increasing available permits, and lifting the onsite physician requirement for dispensaries. Easing the restrictions and creating a more robust medical cannabis market could also serve the rest of the population by creating a new source of public use revenue if criminal prohibition is de-prioritized by the state. A review of outcomes in states with robust medical or recreational marketplaces does not support the need for regulations as tight as West Virginia's. Instead, the benefits of creating a robust marketplace appear to consistently outweigh costs, explaining the incredible rate of cannabis reform throughout the nation.

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