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**Written Testimony for the House Revenue and Finance Committee  
Delaware General Assembly  
In support of H.B. 110, on Marijuana Regulation**

Respectfully submitted by:

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**May 10, 2017**

As a psychiatrist who treats patients with substance use disorders, and as a father of two teenage children, I am writing to offer my strong support for taxing and regulating marijuana for adult use in the State of Delaware.

Originally from the Philadelphia area, I graduated *magna cum laude* in biology from Princeton University. I received my M.D. from the University of Pennsylvania School of Medicine and completed my residency at the McLean Hospital of Harvard Medical School. In my final year at McLean, I served as Chief Resident of the Bipolar and Psychotic Disorders Program.

While not a Delaware resident, I am a clinical psychiatrist with experience in substance abuse, and I am well-versed in new approaches to marijuana policy across the country. I am also the Director of Continuing Medical Education for the Princeton HealthCare System and the Director of Professional Education for Princeton House Behavioral Health. I am board certified in psychiatry by the American Board of Psychiatry and Neurology, and I am a Clinical Associate Professor at the Rutgers Robert Wood Johnson Medical School. I am a Distinguished Fellow of the American Psychiatric Association, which is the highest membership honor bestowed by the APA. I volunteer as the Physician Advisor for the New Jersey State Chapter of the Depression and Bipolar Support Alliance, and I lecture to patient groups, physicians and the lay public in various settings. I have published numerous articles in the national psychiatric and lay press about a variety of topics, one of which is the legal status of marijuana.

In my role as a general adult psychiatrist, I've seen too many cases of lives ruined by marijuana — not by the substance itself, but by a justice system that chooses a sledgehammer to kill a weed. This is why, as a physician and as the father of two adolescent children, my conscience compels me to submit this written testimony in favor of the full legalization of marijuana in Delaware.

In this testimony, I'd like to anticipate several of the more common health questions that legislators may have about the adult use of marijuana. Upon request, I'll be happy to provide more detail about any of these topics and address any questions.

### **Why would physicians — or legislators — support the legalization of a potentially harmful drug?**

Most adults who use cannabis occasionally are not harmed by it.<sup>1</sup> Marijuana is unsafe for underage users<sup>2</sup> and a small minority of adult users,<sup>3</sup> but alcohol and tobacco pose a far greater threat to public health.<sup>4</sup>

America learned a lot from the failed experiment of Alcohol Prohibition in the 1920s. While alcohol use and alcoholism decreased from this draconian policy, the societal problems created by it were so great that many Prohibition advocates changed their minds and supported its repeal.

I am not the only physician with this stance. A 2014 WebMD/Medscape poll indicates that most American physicians believe medical marijuana should be legal, and hundreds of thousands of doctors now support general legalization of cannabis for consenting adults.<sup>5</sup> Just as public support for legalization has been growing for the past 40 years, more and more doctors are realizing that you don't have to be pro-marijuana to oppose its prohibition.

Physicians know that government regulation and public education have been instrumental in reducing tobacco use in America.<sup>6</sup> Yet after 78 years of marijuana prohibition, this drug is as popular as ever. In short, the war on marijuana has failed, and it is time for change.

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<sup>1</sup> "Learn About Marijuana: Adult Recreational Marijuana Consumers," Alcohol and Drug Abuse Institute, University of Washington, 3/2015, <http://learnaboutmarijuanawa.org/consumers.htm>

<sup>2</sup> "The Influence of Marijuana Use on Neurocognitive Functioning in Adolescents," Schweinsburg, et al. *Curr Drug Abuse Rev.* 2008 Jan; 1(1): 99–111. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2825218/>

<sup>3</sup> "Learn About Marijuana: Mental Health and Marijuana," Alcohol and Drug Abuse Institute, University of Washington, 3/2015. <http://learnaboutmarijuanawa.org/factsheets/mentalhealth.htm>

<sup>4</sup> Fish, Jefferson. *Drugs and Society: U.S. Public Policy*. New York: Rowman and Littlefield, 2006. Chapter 7: Acute toxicity of drugs versus regulatory status. <https://books.google.com/books?hl=en&lr=&id=xpZhjBuDkuwC&oi=fnd&pg=PA149&dq=Acute+toxicity+of+drugs+versus+regulatory+status+gale&ots=YJHdBVTrbd&sig=K95fnm6TC7k8II3NMwqZAlgQS58#v=onepage&q=Acute%20toxicity%20of%20drugs%20versus%20regulatory%20status%20gale&f=false>

<sup>5</sup> Rappold, R. Scott. "Legalize Medical Marijuana, Doctors Say in Survey." <http://www.webmd.com/news/breaking-news/marijuana-on-main-street/20140225/webmd-marijuana-survey-web>

<sup>6</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. [http://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm)

## **Why should we legalize cannabis when we already struggle with alcohol and tobacco?**

Some would say that we shouldn't make yet another drug legal, but if the harm any drug causes is less than the harm we accept in other legal drugs, then it defies logic to prosecute consenting adults from using the less harmful drug. Nonetheless, we do have a responsibility to regulate and educate the public about all potentially unhealthy activities. And we must do so with marijuana from the outset.

Even experts who oppose cannabis legalization concede that it is less dangerous than other legal drugs. Some of those same opponents would make alcohol illegal if they could, despite the miserable failure that Alcohol Prohibition proved to be in the 1920s. By the time that social experiment was finally halted in 1933, even many of those who had initially worked to enact Prohibition supported its repeal.

## **Will legalizing adult use increase underage use of marijuana? Won't kids have more access to the drug?**

The initial data from Colorado and Washington suggests there has not been a dramatic increase in use. And while we cannot predict the future, there are good reasons to believe legalization may actually decrease underage use.

First, government regulated retailers check IDs and only sell cannabis products to adults, while illegal dealers sell marijuana to kids. Thus, minors will have fewer points of access to the drug under a regulated system. Second, if marijuana is legal for adults, then the police and courts will be able to focus their attention on enforcement of laws against the diversion of marijuana to minors.

Sadly, marijuana prohibition has failed in its most basic intent. For decades, the government's own statistics show that 80-90% of 18 year olds report that marijuana is "very easy" or "fairly easy" to obtain if they want it.<sup>7</sup> And while underage use of alcohol and tobacco — both drugs that are legal for adults — have fallen in recent decades, the use of marijuana has increased even during its prohibition. The regulation of the cannabis trade, coupled with smart youth education, may actually help decrease underage use of marijuana.

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<sup>7</sup> Johnston, Lloyd. *Monitoring the Future: National Survey Results on Drug Use, 1975-2008: Volume II: College Students and Adults Ages 19-50*. Bethesda: National Institute on Drug Abuse, 2009.  
<https://books.google.com/books?hl=en&lr=&id=TQMRXa4Ja7MC&oi=fnd&pg=PP1&dq=Monitoring+the+Future+national+survey+results+on+drug+use&ots=9XINiCxJaH&sig=H8pVRYajHY5nh-9CNu7IppvXqlQ#v=onepage&q=%22how%20difficult%20do%20you%20think%22&f=false>

## **Will marijuana lead to the use of more dangerous drugs?**

We all grew up learning that marijuana was a “gateway” to harder drugs. This is still a claim repeated over and over again without evidence by those opposed to changing our marijuana laws. The reality is that the “gateway theory” is not supported by research or science. A study by the Institute of Medicine, the health branch of the National Academy of Sciences, concluded that marijuana “does not appear to be a gateway drug to the extent that it is the cause or even that it is the most significant predictor of serious drug abuse.”<sup>8</sup>

While it’s true that users of hard drugs often try marijuana first because it is widely available, they’re also more likely to have tried alcohol and tobacco. And the vast majority of those who try marijuana don’t go on to use harder drugs. Simply put, the fact that teenage use of marijuana is associated with later use of hard drugs doesn’t mean that marijuana causes people to use hard drugs. It is a misleading and oversimplified explanation of what leads to substance abuse and does a disservice to the discussion of this important public health issue. In the same way, the *New England Journal of Medicine* published an article showing that countries with more chocolate consumption also had a high number of Nobel Prize winners,<sup>9</sup> but no one really believes that chocolate turns people into geniuses.

## **Doesn’t regulation of marijuana for adults send the wrong message to our kids?**

Quite the contrary. When cannabis is against the law for everyone, the government is saying that marijuana is dangerous for everyone, and kids *know* that’s not true. If adults cannot be trusted to tell the truth about responsible adult use of marijuana, why should kids listen to us when we say it is harmful for them? By making a legal distinction between marijuana use by adults and minors, we demonstrate a respect for scientific evidence that we would want our children to emulate.

Whether in sexual health education or drug education, when kids know that we are being honest with them and trust the information we are providing, they are more likely to take that advice seriously. And we know that preventive drug education works — the rates of underage tobacco and alcohol use have been falling for many years,<sup>10</sup> even though it remains legal for

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<sup>8</sup> Joy, Janet E., et al. *Marijuana and Medicine: Assessing the Science Base*. Washington, DC: National Academy Press, 1999, pp. 100-101. <http://www.nap.edu/read/6376/chapter/5#100>

<sup>9</sup> Messerli, Franz. “Chocolate Consumption, Cognitive Function, and Nobel Laureates.” *New England Journal of Medicine* 2012, 367:1562-1564. <http://www.nejm.org/doi/full/10.1056/NEJMon1211064>

<sup>10</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. [http://www.cdc.gov/tobacco/data\\_statistics/sgr/50th-anniversary/index.htm](http://www.cdc.gov/tobacco/data_statistics/sgr/50th-anniversary/index.htm)

adults. During that same time, underage marijuana use — which until recently was illegal in all 50 states — has risen.

### **Is marijuana more potent than when I was young? Does this make it more dangerous?**

Cannabis cultivation has led to the development of more potent strains, to the extent that illegal marijuana today is typically about five times stronger than it was 30 years ago.<sup>11</sup> Where marijuana is regulated, the state can control potency and adult consumers can make informed decisions about their intake based on potency, much as people do with alcohol — say, drinking a small amount of vodka compared with two beers. But where it is illegal and uncontrolled, marijuana products are not labeled and consumers can inadvertently ingest too much of a potent product. To me, this is another medically sound reason to regulate marijuana.

### **If marijuana prohibition made sense in the past, then what, if anything, has changed?**

Nothing has changed. Marijuana prohibition began in the 1930s — over the objections of the American Medical Association — based on scare tactics and bad science that suggested the drug was highly addictive, made users violent, and was fatal in overdose. We now know that none of those assertions are true. Cannabis is less addictive than alcohol, tobacco, and caffeine.<sup>12</sup> It does not make users violent,<sup>13</sup> and there are no documented cases of fatal cannabis overdose.<sup>14</sup> In short, from the medical standpoint, marijuana should never have been illegal for consenting adults.

### **What kinds of regulations are central to optimizing public health outcomes of marijuana legalization?**

- Government oversight of cannabis production, testing, distribution and sales
- Detailed labeling of cannabis products, including THC levels, dosing and ingredients
- Restrictions on marketing and advertising of cannabis products, including bans on targeting underage users and requirements for child-resistant packaging
- Penalties for adults who enable diversion of cannabis to minors
- Adult education about the use and misuse of cannabis

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<sup>11</sup> Mehmedic, Z. et al. "Potency trends of  $\Delta^9$ -THC and other cannabinoids in confiscated cannabis preparations from 1993 to 2008." *J. Forensic Sci* 2010 Sep; 55(5):1209-1217. <http://www.ncbi.nlm.nih.gov/pubmed/20487147>.  
References earlier work.

<sup>12</sup> Joy, Janet E., et al. *Marijuana and Medicine: Assessing the Science Base*. Washington, DC: National Academy Press, 1999. [http://medicalmarijuana.procon.org/sourcefiles/IOM\\_Report.pdf](http://medicalmarijuana.procon.org/sourcefiles/IOM_Report.pdf)

<sup>13</sup> "Learn About Marijuana: Marijuana and Aggression," Alcohol and Drug Abuse Institute, University of Washington, 3/2015. <http://learnaboutmarijuanawa.org/factsheets/aggression.htm>

<sup>14</sup> Collen, Mark. "Prescribing cannabis for harm reduction." *Harm Reduct J.* 2012; 9:1. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3295721/>

- Preventive youth education about the harms of underage recreational cannabis use
- Taxation of the cannabis trade to fund research, education, and treatment

Note that all of these regulations are provided for by H.B. 110.

I hope I have addressed some of the major public health concerns about marijuana legalization, but I would be happy to answer other questions you may have. Thank you for your time and consideration.

Respectfully submitted,

A handwritten signature in cursive script that reads "D. Nathan, MD". The signature is written in black ink and is positioned above the printed name.

David L. Nathan, MD, DFAPA

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