# Inquiry into the use of Cannabis in Victoria

Dr Kevin Sabet

**Organisation Name:** 

Your position or role:

# **SURVEY QUESTIONS**

Drag the statements below to reorder them. In order of priority, please rank the themes you believe are most important for this Inquiry into the use of Cannabis in Victoria to consider::

Public health, Public safety, Education, Mental health, Social impacts, Young people and children, Accessing and using cannabis, Criminal activity

What best describes your interest in our Inquiry? (select all that apply):

Academic and research, Advocacy body

Are there any additional themes we should consider?

# Select all that apply. Do you think there should be restrictions on the use of cannabis? :

Use of cannabis should remain legal for medical treatment only. ,Sale should remain illegal. ,Personal use of cannabis should be decriminalised.

(Decriminalised: there are no criminal or civil penalties instead a person is referred to a drug diversion program or other health/ treatment service)

### YOUR SUBMISSION

**Submission:** 

Do you have any additional comments or suggestions?:

### **FILE ATTACHMENTS**

File1: 5f3c1eaa9555f-18Aug2020 Sabet Victoria.pdf

File2: File3:

Signature:

Kevin Sabet

# Written Testimony Parliament of Victoria Legislative Council Legal and Social Issues Committee

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Thank you, Honorable Chair Fiona Patten, for inviting me to submit testimony to the Parliament of Victoria on the use of cannabis (hereby referred to as marijuana). This testimony is based on my own expertise and that of over a dozen top scientists who serve on the Advisory Board of Smart Approaches to Marijuana (SAM). Co-founded by former U.S. Representative Patrick Kennedy, SAM is the leading non-partisan, non-profit organization working around the world, offering a science-based approach to marijuana policy.

I have studied, researched, and written about drug and criminal justice policy for more than 25 years. Most recently, from 2009-2011, I served in the Obama Administration as a senior drug policy advisor. I am currently the co-founder, with former Congressman Patrick J. Kennedy, of SAM (Smart Approaches to Marijuana). I am also an Adjunct Professor at Yale University, and the author of *Reefer Sanity: Seven Great Myths About Marijuana*.

Smart Approaches to Marijuana (SAM) maintains that the best means of preventing negative consequences associated with marijuana is to (1) implement science-based prevention campaigns to stop marijuana use before it starts, (2) intervene on early use in health-care and related settings, (3) treat cannabis use disorder, (4) not criminalize users for low-level possession, (5) refrain from legalizing the drug, and (6) generally discourage use.

This testimony focuses on the consequences of recently enacted relaxed policies in several US states. These policies go against both the letter and spirit of the three international conventions Australia and the United States are signatory to, and more immediately demonstrate the negative impact of legalization on society. Experiences shows us that legalization coincides with greater youth use; encroachments on public health and safety; decreased perceptions of harms; increases in criminal activity and illicit marijuana trafficking; and increases in hospitalizations, emergency room visits and mental illness incidences.

# Introduction

As the U.S. takes an increasingly relaxed approach toward the legalization and normalization of marijuana use, we are watching its consequences play out in real time. The drug, known by scientists to be addictive, <sup>1</sup> is being used more frequently than ever before.

<sup>&</sup>lt;sup>1</sup> See <a href="https://www.drugabuse.gov/publications/research-reports/marijuana/marijuana-addictive">https://www.drugabuse.gov/publications/research-reports/marijuana/marijuana-addictive</a>; <a href="https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2764234?resultClick=1;">https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2764234?resultClick=1;</a>; <a href="https://www.sciencedirect.com/science/article/pii/S0955395920300815?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S0955395920300815?via%3Dihub</a>

Marijuana is more potent than ever before. In previous decades, plant potency consistently registered at around 3-4% THC. Today's marijuana is believed to be an average of 17.1% THC; coming in much higher in "legal" states. Concentrates have gained increasing popularity and average around 55.7% THC, though the top sellers can reach 96% THC.<sup>2</sup> Potency is associated with increased risk of negative consequences yet no state in the U.S. has established a cap on marijuana potency.

The introduction of a new and powerful addiction-for-profit industry paves the way for a serious reckoning down the road. This industry has followed the playbook of Big Tobacco, and has taken on billions in investment from the largest companies in the industry—an industry well known for its insidious negligence.

One recent study highlights this issue. Silver et al. concluded: "Where marijuana was legalized, many lessons from tobacco control to reduce demand, limit harm, and prevent youth use were not adopted, potentially creating greater risk of harm." The study only scratches the surface of shortcomings in U.S. marijuana policy approaches.

### Youth and Adolescent Use

Marijuana use and its normalization and ubiquity pose a unique threat to young people. While marijuana use among young people is on the rise across the country, state-level data show important differences between use rates in "legal" and non-legal states. Recent data show that concurrent with legalization, youth and adolescent youth perceptions of risk decrease, and use increases. In "legal" states, past year and past month use registers at 16.4% and 9.4% respectively; compared with 12.1% and 6.4% reporting past year and past month use in non-legal states. More recently in Colorado, the Healthy Kids Survey found that 20.6% of high schoolers in the state reported past month marijuana use, and there has been a significant increase in marijuana use among those 15 and younger since legalization was implemented.

This is incredibly harmful for many reasons. Studies have shown that the developing brain is particularly vulnerable to adverse impacts of the drug<sup>7</sup> and can lead to an increased rate of

https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp.2018.18020202; https://www.sciencedirect.com/science/article/abs/pii/S2215036614703074

<sup>&</sup>lt;sup>2</sup> See <a href="https://doi.org/10.1007/s00406-019-00983-5">https://hightimes.com/dabs/most-potent-thc-concentrates/</a>

<sup>&</sup>lt;sup>3</sup> See <a href="https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2767359">https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2767359</a>

<sup>&</sup>lt;sup>4</sup> See <a href="https://www.samhsa.gov/data/nsduh/state-reports-NSDUH-2018">https://www.samhsa.gov/data/nsduh/state-reports-NSDUH-2018</a>

<sup>&</sup>lt;sup>5</sup> See <a href="https://www.samhsa.gov/data/nsduh/state-reports-NSDUH-2018">https://www.samhsa.gov/data/nsduh/state-reports-NSDUH-2018</a>

<sup>&</sup>lt;sup>6</sup> See <a href="https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data">https://www.colorado.gov/pacific/cdphe/healthy-kids-colorado-survey-data</a>

<sup>&</sup>lt;sup>7</sup> See https://www.jneurosci.org/content/39/10/1817;

addiction<sup>8</sup> and adverse mental health outcomes such as depression,<sup>9</sup> drug abuse,<sup>10</sup> and suicidality.<sup>11</sup> In Colorado, where suicide is the cause of one in five adolescent deaths,<sup>12</sup> marijuana was discovered in 22.7% of toxicology reports conducted on youth suicide victims.<sup>13</sup> Governments are ill-prepared to handle the fallout from these phenomena.

### **Youth Prevention and Awareness**

It has been shown through preliminary data that youth prevention tactics have thus far failed to keep pace with the rapid expansion of the commercial marijuana market. Most states where marijuana is legal have failed to prohibit marijuana companies from advertising, and where advertising is limited, marijuana companies are finding loopholes. In Massachusetts, companies use the "adopt-a-highway" program to ensure their names are well-advertised on state highways.<sup>14</sup>

Social media restrictions on marijuana advertising are both limited and difficult to enforce. This has allowed marijuana companies to reach youth with a wide variety of innovative methods, such as social media influencers and organic online advertising. Exposure to marijuana marketing via social media is associated with increased odds of marijuana use among youth. <sup>15</sup> In fact, Trangenstein et al. found that youth exposure to marijuana marketing on social media was associated with an 5x increased likelihood of marijuana use. <sup>16</sup>

A lack of packaging restrictions, or the industry's powerful lobbying efforts in finding loopholes, also inhibits the ability for states to prevent marijuana companies from targeting youth. Marijuana products often take the form of candies, baked goods, gummies, and colas. <sup>17</sup> Products such as high-potency vapes are often flavored, appealing to younger demographics.

https://cohealthviz.dphe.state.co.us/t/HSEBPublic/views/CoVDRS\_12\_1\_17/Story1?:embed=y&:showAppBanner=false&:showShareOptions=true&:display\_count=no&:showVizHome=no#4

<sup>&</sup>lt;sup>8</sup> See <a href="https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2755276?guestAccessKey=3cd6baa3-b7f9-44f4-81bb-">https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2755276?guestAccessKey=3cd6baa3-b7f9-44f4-81bb-</a>

<sup>9</sup> See <a href="https://www.jwatch.org/na44954/2017/09/12/cannabis-use-may-be-causally-related-depression-and">https://www.jwatch.org/na44954/2017/09/12/cannabis-use-may-be-causally-related-depression-and</a>

<sup>&</sup>lt;sup>10</sup> See <a href="https://www.nature.com/articles/1301127#citeas">https://pubmed.ncbi.nlm.nih.gov/25168081/</a>; <a href="https://pubmed.ncbi.nlm.nih.gov/25168081/">https://pubmed.ncbi.nlm.nih.gov/25168081/</a>; <a href="https://journals.sagepub.com/doi/full/10.1177/0706743716645289">https://journals.sagepub.com/doi/full/10.1177/0706743716645289</a>

<sup>&</sup>lt;sup>11</sup> See <a href="https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2723657">https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2723657</a>

 $<sup>^{12} \</sup> See \ \underline{https://www.cpr.org/2019/09/17/the-rate-of-teen-suicide-in-colorado-increased-by-58-percent-in-3-years-making-it-the-cause-of-1-in-5-adolescent-deaths/$ 

<sup>13</sup> See

<sup>&</sup>lt;sup>14</sup> See <a href="https://www.bostonherald.com/2020/02/16/pot-shops-turn-to-highway-sponsor-signs-amid-strict-ad-rules-on-advertising/">https://www.bostonherald.com/2020/02/16/pot-shops-turn-to-highway-sponsor-signs-amid-strict-ad-rules-on-advertising/</a>

<sup>&</sup>lt;sup>15</sup> See https://www.jahonline.org/article/S1054-139X(19)30435-5/fulltext

<sup>&</sup>lt;sup>16</sup> See https://www.sciencedirect.com/science/article/abs/pii/S0376871619303175?via%3Dihub

<sup>&</sup>lt;sup>17</sup> See <a href="https://essencevegas.com/">https://essencevegas.com/</a>

# **Public Health and Safety**

One of the greatest concerns that comes with marijuana legalization is the increase in driving under the influence of marijuana. Marijuana-related traffic fatalities have been shown to increase in American states that legalized the drugs. <sup>18</sup> A study conducted by AAA found a doubling in marijuana-impaired driving deaths in Washington State since legalization. <sup>19</sup>

Compounding the problem of marijuana impaired driving is the exceptionally low perception of risk associated with driving while high. While 95% of drivers believe alcohol impaired driving is dangerous, only 70% of drivers believe marijuana impaired driving is dangerous.<sup>20</sup> This represents a serious threat to road safety: one study found that in the U.S., and estimated 6,800 additional traffic fatalities would occur, annually, if the entire country legalized the drug.<sup>21</sup>

In addition to traffic safety, marijuana legalization is associated with significant increases in calls to the poison control center for accidental ingestion or exposure, particularly among children. In "legal" states, marijuana legalization also coincides with an increased number of hospitalizations coded for marijuana.<sup>22</sup>

# **Crime and Black-Market Activity**

Legalization in the United States has coincided with an increase in crime and drug trafficking. The "legal" market both creates a demand for marijuana and provides a cover for illicit activity. In California for example, it's estimated that the underground market outsells the "legal" one three to one.<sup>23</sup>

In 2019, the Drug Enforcement Administration eradicated more than four million illegal outdoor and indoor plants from illegal operations, at which large amounts of cash and firearms were also discovered.<sup>24</sup> The DEA has said definitively, "Domestic production and trafficking of marijuana

<sup>&</sup>lt;sup>18</sup> See <a href="https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2767647?widget=personalizedcontent&previousarticle=2767643;">https://jamanetwork.com/journals/jamainternalmedicine/article=2767643;</a>
<a href="https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2767643?utm\_campaign=articlePDF&utm\_medium=articlePDFlink&utm\_source=articlePDF&utm\_content=jamainternmed.2020.1769</a>

<sup>&</sup>lt;sup>19</sup> See https://www.washingtonpost.com/transportation/2020/01/30/proportion-drivers-fatal-crashes-who-tested-positive-thc-doubled-after-marijuanas-legalization-study-finds/
<sup>20</sup> See

 $<sup>\</sup>frac{https://us.vocuspr.com/Newsroom/ViewAttachment.aspx?SiteName=AAACS\&Entity=PRAsset\&AttachmentType=F\&EntityID=110440\&AttachmentID=dac31258-48b7-4707-8ec6-186932cffb96$ 

<sup>&</sup>lt;sup>21</sup> See <a href="https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2767643?utm">https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2767643?utm</a> campaign=articlePDF&utm</a> medium=articlePDFlink&utm</a> source=articlePDF&utm</a> content t=jamainternmed.2020.1769

<sup>&</sup>lt;sup>22</sup> See https://www.sciencedirect.com/science/article/abs/pii/S0091743517301202?via%3Dihub

<sup>&</sup>lt;sup>23</sup> See <a href="https://www.washingtontimes.com/news/2019/aug/20/californias-marijuana-black-market-outsells-licens/">https://www.washingtontimes.com/news/2019/aug/20/californias-marijuana-black-market-outsells-licens/</a>

<sup>&</sup>lt;sup>24</sup> See <a href="https://www.dea.gov/domestic-cannabis-suppression-eradication-program">https://www.dea.gov/domestic-cannabis-suppression-eradication-program</a>

will likely increase as more states adopt or change current marijuana laws to establish medical or recreational marijuana markets, allowing criminals to exploit state legality."25

Even "legal" operators are known to skirt regulations. The industry has been subject to recalls and tales of unsanctioned pesticide use, for selling product with mold, <sup>26</sup> or for containing vitamin E acetate,<sup>27</sup> a chemical associated with the vaping epidemic in the U.S.

# Health, Mental Health, and Social Impacts

Public health is adversely impacted by marijuana legalization. States in America that legalized the drug saw drastic increases in hospitalizations and emergency room visits<sup>28</sup> related to marijuana, increases in marijuana use during pregnancy, <sup>29</sup> increases in poison control calls for marijuana exposures of youth and young children.<sup>30</sup> What's more, marijuana use is associated with an increased likelihood of schizophrenia<sup>31</sup> and psychosis.<sup>32</sup> Marijuana also adversely impacts cardiovascular health.<sup>33</sup> Marijuana use is associated with other drug use<sup>34</sup> and legalization appears to coincide with increases in prescription opioid misuse.<sup>35</sup>

More broadly, other societal ramifications associated with relaxed marijuana policies include lower school retention rates, lower academic and professional achievement, <sup>36</sup> and increases in workplace marijuana use.<sup>37</sup>

### Recommendations

As we face the formation of a new addiction-for-profit industry, with pot more potent than ever before, few states have adequately considered the ramifications of legalization prior to introducing the drug for recreational use. While some states have provided funds for studying the consequences of legalization after implementation, none has studied it extensively or reviewed research showing its addictive properties and potential for negative mental health outcomes in

<sup>&</sup>lt;sup>25</sup> See https://www.dea.gov/sites/default/files/2020-01/2019-NDTA-final-01-14-2020 Low Web-DIR-007-20 2019.pdf

<sup>&</sup>lt;sup>26</sup> See https://mjbizdaily.com/three-nevada-marijuana-retailers-accused-of-selling-contaminated-flower/;

<sup>&</sup>lt;sup>27</sup> See https://www.michigan.gov/som/0.4669.7-192-47796-519158--.00.html

<sup>&</sup>lt;sup>28</sup> See <a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/imj.14164">https://onlinelibrary.wiley.com/doi/abs/10.1111/imj.14164</a>;

https://journals.lww.com/journaladdictionmedicine/Abstract/2019/06000/Trends and Related Factors of Cannabis Associated.6.aspx;

<sup>29</sup> See <a href="https://www.nature.com/articles/s41372-019-0576-6">https://www.nature.com/articles/s41372-019-0576-6</a>; <a href="https://www.nature.com/articles/s41372-020-0643-z">https://www.nature.com/articles/s41372-020-0643-z</a>

<sup>&</sup>lt;sup>30</sup> See https://medicalxpress.com/news/2015-06-national-marijuana-exposure-children-years.html

<sup>&</sup>lt;sup>31</sup> See <a href="https://academic.oup.com/schizophreniabulletin/article/46/3/505/5588638">https://academic.oup.com/schizophreniabulletin/article/46/3/505/5588638</a>

<sup>&</sup>lt;sup>32</sup> See https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(19)30048-3/fulltext

<sup>33</sup> See https://www.ahajournals.org/doi/10.1161/JAHA.113.000638; https://www.cureus.com/articles/14405cannabis-use-disorder-in-young-adults-with-acute-myocardial-infarction-trend-inpatient-study-from-2010-to-2014in-the-united-states

<sup>&</sup>lt;sup>34</sup> See https://pubmed.ncbi.nlm.nih.gov/25168081/

<sup>35</sup> See https://pubmed.ncbi.nlm.nih.gov/28946762/

<sup>&</sup>lt;sup>36</sup> See https://journals.sagepub.com/doi/full/10.1177/0706743716645289

<sup>&</sup>lt;sup>37</sup> See http://www.dtidrugmap.com

advance of legalizing it. No state has properly addressed the phenomenon of stoned driving, and few even have the means to properly identify it; few states prevent marijuana companies from advertising or from using social media to target youth; and no state has capped the potency of marijuana products offered in its marketplace.

Legalization has proven so far to have long-term ramifications for public health. In order to avoid these mistakes and ensure that the public is well-informed, we recommend that the Parliament of Victoria explore the consequences of marijuana use and its widespread commercialization. We recommend that the Parliament enlist the expertise of addiction specialists, health administrators, and law enforcement officials, who are well-positioned to advise on this subject. Everywhere legalization has taken place, addiction-for-profit industries have taken over and public health has taken a backseat to profits. We recommend avoiding the mistake of full legalization to ensure better outcomes.