THREE PROPOSALS will go before Missouri voters on the November 6, 2018 ballot to legalize the use of marijuana for medical purposes. This document from the Kansas City Medical Society is designed to inform the public about these proposals, what is known and not known about the effects of marijuana, and the considerations on why we and other physician organizations recommend voting against these proposals.

Physicians have heard patients tell their stories of how medical marijuana has helped relieve their pain and treat certain conditions. We understand this sentiment is strong. As physicians, we share everyone’s desire to find the newest and most effective treatments. However, we do not believe that legalization of medical marijuana at this time is in the best interest of the public and their health. The current level of research on cannabis in medicine is inadequate. We need more research to understand the effects and side effects. What is needed is for the U.S. Food and Drug Administration and the Drug Enforcement Administration to end classification of marijuana as a Schedule I controlled substance. This would allow the needed research to take place.

**Background**

Public attitudes toward marijuana legalization have changed significantly in recent decades. The most recent Gallup poll in October 2017 shows 64% of Americans support full legalization of marijuana. Since 2001 when about a third of Americans favored legalization, support has steadily increased. A majority of Americans have consistently supported legalizing marijuana since 2013.¹

Currently, 31 states and the District of Columbia have legalized marijuana for medical use. Among these, nine states have also legalized full recreational use.² In Missouri, penalties for possession of marijuana have been reduced for first-time offenders.³
Missouri Proposals

Each of the three proposals on the Missouri ballot would allow use of marijuana for medical purposes and would establish regulations and licensing procedures for marijuana dispensary, cultivation, testing and marijuana-infused product manufacturing. Each would impose a tax on the retail sale of marijuana and license fees for marijuana-related facilities.\(^4\) Here is how they differ:

- **Constitutional Amendment 2** would impose a 4% tax on retail sales that would be used by the Missouri Veterans Commission for health and care for military veterans, minus program administrative costs.

- **Proposition C** would impose a 2% tax on retail sales that would be used for veterans’ services, drug treatment, early childhood education and public safety, minus administrative costs.

- **Constitutional Amendment 3** would impose a 15% tax on retail sales along with a wholesale tax. Funds generated by the taxes and license fees would fund a newly created research institute which would regulate and license marijuana facilities. It also would conduct research toward developing cures for cancer and other diseases. Springfield, Mo., attorney and physician Brad Bradshaw would appoint the governing board of the institute and be its research chairman.\(^4\)

Physician Concerns

While physicians recognize the growing support for marijuana legalization and the individual stories of those who have benefited from medical marijuana, we have four areas of concern. These are related to protecting the safety of our patients. Our concerns are 1) lack of research on the effects of marijuana; 2) marijuana is not administered with the evidence-based protocols used for prescription medicines; 3) the impact of marijuana availability on youth; and 4) effects on public safety.

1. Lack of research on the effects of marijuana

Before being introduced to the public, new medications and treatments in the United States undergo vigorous research and testing under recognized standards. Commonly prescribed medications, as well as treatment procedures for diseases and conditions, all have a strong evidence base in which the appropriate conditions and administration of the medication or procedure are well documented. By comparison, there is little known about the effects of marijuana and how to administer it for medicinal purposes.

In January 2017, the National Academies of Sciences, Engineering and Medicine released a comprehensive review of current knowledge of the health effects of the use of cannabis and cannabis-related compounds, both synthetic and natural (cannabinoids). A task force examined more than 10,000 scientific abstracts.\(^5\)

The review found conclusive evidence of modest therapeutic effect of cannabinoids on three conditions: in the treatment of chronic pain, most often neuropathy; in reducing muscle spasms related to multiple sclerosis; and in treating chemotherapy-induced nausea and...
vomiting. Available prescription medications may perform just as well or better, the study noted. In addition, a limitation of these studies is that they were conducted outside of the United States or not using the form of cannabis available commercially in the U.S. “Very little is known about the efficacy, dose, routes of administration, or side effects of commonly used and commercially available cannabis products in the United States,” the report said.5

Insufficient evidence was found to support any therapeutic effects of cannabis and cannabinoids on many other conditions such as glaucoma, cancer, irritable bowel syndrome, anorexia, Tourette syndrome, amyotrophic lateral sclerosis, Huntington’s disease, Parkinson’s disease, dystonia, dementia and more.5

Their overall conclusion: “Despite increased cannabis use and a changing state-level policy landscape, conclusive evidence regarding the short- and long-term health effects—both harms and benefits—of cannabis use remains elusive.”5

The National Academies report recommends the nation address current research gaps, highlighting the need for a national cannabis research agenda that includes clinical and observational research, health policy and health economics research, and public health and public safety research.5

2. Marijuana is not medicine

When a physician prescribes a medication for blood pressure or diabetes, the selection of the drug is based on years of study and evidence of its effectiveness for the condition. In addition, research provides specific guidelines for the size of the dose, frequency, etc. These may vary by the patient’s age, weight, etc. —again, based on years of research and testing. Drugs are approved by the Food & Drug Administration which also supervises their manufacture. If there are safety issues, the FDA can issue a recall. Drugs are dispensed by a pharmacist. No such standards exist for marijuana.

Where cannabis is legalized for medicinal use, physicians can only “certify” or “recommend a qualifying patient” for the medical use of cannabis. Physicians cannot prescribe cannabis for medical purposes because it is illegal under federal law. Cannabis is classified as a Schedule I controlled substance.6 The physician’s supervision of a patient using medical cannabis is no more specific than a recommendation to exercise or take vitamins.

3. Effect on youth

Data shows that marijuana use among young people is higher in states where it is legal for medical or recreational use. In non-medical marijuana states, an average of 6.19% of youth ages 12-17 report using marijuana in the last 30 days. This compares to 8.25% in medical marijuana states and 10.09% in recreational marijuana states.7 In Colorado, youth usage in the past 30 days grew from 7.6% in 2006 to 10.5% in 2012 as legal medical marijuana expanded but before full recreational usage began in 2013.7

For young people, marijuana use can have permanent impact on the developing brain. Research suggests that the effects on attention, memory, and learning can be long-term
and even permanent in people who begin using marijuana regularly as teens. Marijuana use has been linked to a range of mental health problems in teens such as depression or anxiety. Research shows that about 1 in 6 teens who repeatedly use marijuana can become addicted. Evidence also suggests that cannabis use in adolescence and early adulthood is associated with poor social outcomes, including unemployment, lower income, and lower levels of life and relationship satisfaction.

Another concern for children and youth is accidental exposure to marijuana. In Colorado, the average annual number of marijuana-related calls to the poison and drug control center concerning youth age 18 and under grew from 24 to 40 between 2006-2008 and 2009-2012 when medical use of cannabis was expanded.

4. Public safety

Impaired driving under the influence of marijuana has increased significantly in Colorado after medical marijuana legalization was expanded in 2008. Marijuana-related traffic deaths when a driver tested positive for marijuana grew from 33 deaths in 2006 to 65 deaths in 2012, to 125 in 2016 after full legalization. These deaths represented 6.2% of all traffic fatalities in 2006 compared to 13.8% in 2012. Compared to alcohol, it is more difficult to measure the level of intoxication related to the amount of marijuana consumed.

Hospital emergency departments nationally treated some 455,000 cases of marijuana intoxication in 2011, according to the Drug Abuse Warning Network. The yearly rate of marijuana-related hospitalizations in Colorado increased from 810 per 100,000 hospitalizations in 2006 to 1,417 in 2012, a 75% increase. Another study showed that marijuana-related hospitalizations in California were 6.8% higher among individuals living within one square mile of a dispensary.

Other Medical Organization Positions

Physician organizations are universally opposed to medical marijuana legalization.

The Missouri State Medical Association on August 17 announced its opposition to all three Missouri proposals: “The Missouri State Medical Association opposes the three “medical” marijuana ballot questions that will be offered to Missouri voters in November 2018. MSMA acknowledges there are a limited number of patients who may receive limited relief from minor pain and nausea, but numerous studies have identified negative health effects for a large number of diagnoses. Until the DEA reclassifies marijuana to allow extensive scientific research, MSMA remains concerned Missourians will be gambling with their health using an unregulated drug.”

The American Medical Association previously has gone on record as opposing state measures to legalize medical use: “Our AMA: (1) believes that scientifically valid and well-controlled clinical trials conducted under federal investigational new drug applications are necessary to assess the safety and effectiveness of all new drugs, including potential cannabis products for medical use; (2) believes that cannabis for medicinal use should not be legalized through the state legislative, ballot initiative, or referendum process …”
Others that have gone on record as opposing the Missouri medical marijuana proposals include Missouri Association of Osteopathic Physicians & Surgeons, Missouri Society of Eye Physicians & Surgeons, Missouri Pharmacy Association, St. Louis Metropolitan Medical Society and Greene County Medical Society.

**Conclusion: Now Is Not the Time for Medical Marijuana in Missouri**

Today we know too little about the effects and side effects of cannabis to risk the health of the public, especially our youth. Until further testing and research can be done, the Kansas City Medical Society and other physician organizations recommend that Missouri voters cast their ballots against the three medical marijuana proposals.

**References**


11. Missouri State Medical Association website: [https://www.msma.org/medical-marijuana.html](https://www.msma.org/medical-marijuana.html)