



Americans Against Legalizing Marijuana

December 4, 2018

Dr. Jerome Adams
Surgeon General of the United States
U.S. Department of Health and Human Services
200 Independence Ave SW
Humphrey Bldg. Suite 701H
Washington, DC 20201

Dear Surgeon General Adams:

We are medical doctors, scientists and researchers from the bio-medical and related health policy and drug abuse prevention communities reaching out to you for help. Our nation is in urgent need of public health leadership on marijuana. We are writing to you to ask you to speak out about the medical dangers of marijuana use and marijuana legalization. Your voice will save lives and protect America's future!

1. We request that you update the Surgeon General's warning about marijuana that was issued in 1982 (attached). Based on that updated warning, we ask you to speak out and educate the public about the harmful mental and physical medical dangers of marijuana use and legalization.
2. We request that you meet with our delegation to hear from them about the medical consequences of marijuana use and legalization in the states that have legalized marijuana in some form.
3. We request that you create a task force to report on what is happening medically in the states that have legalized marijuana in some form.

The rollback of cigarette use began with Surgeon General Koop's bold warnings in the 1980's and it would be an outstanding move for you to take a similar step with marijuana.

Americans Against Legalizing Marijuana (AALM) is an all volunteer IRS approved non-profit 501(c)(3) EIN 47-2120025, dedicated to providing information on the harms of marijuana to individuals and our Country based on the premise of No Use of Any Illegal Drug and No Illegal Use of Legal Drugs.

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Marijuana is the most widely used illicit addictive drug and yet it garners a diminishing perception of risk, even though the research demonstrating its harmful effects is known and rapidly accumulating. In the current environment, marijuana is largely overshadowed by opioids, as communities ravaged by opioid addiction and overdose deaths have summoned calls to action for this form of chemical slavery.

Unlike heroin and other opioids, whose risks are widely disseminated by the media and absorbed by our people, the hazards of marijuana are both insidious and minimized. Marijuana is capable of wreaking havoc on the health, safety, economic strength and cognitive function of our nation's citizens. Yet, for no other drug is the gap so large between current scientific evidence of adverse consequences and the public perception. The gap has been driven by many factors, including major financial investments in promoting misinformation about marijuana safety. It also has been fueled by celebrities who openly promote its use and by a marijuana industry that advertises aggressively and avails itself of unregulated social media sites. Our politicians have been disappointing in their lack of leadership on this issue, for many have absorbed misinformation without the counterbalancing information derived from the biomedical community. Constituents self-report a positive attitude towards marijuana that cannot be counterbalanced by widely disseminated scientific information. Political leadership and prevention funding have remained weak and ineffective.

The public, as a result, is ill-informed or uninformed concerning the effects of marijuana, including the potential, even in normal human subjects in experimental settings for marijuana use, to trigger idiosyncratic psychotomimetic effects. (H. Isbell et al., Psychopharmacologia, 1967) Research linking marijuana use to the triggering of psychosis and schizophrenia and acts of violence, including homicides, has been nearly uniformly ignored by proponents of marijuana use. Research showing that the chronic use of marijuana has led to suicidal depression and acts of suicide has been largely ignored. Marijuana is the number one substance now found in suicides of young people in Colorado who are 10-19 years old.¹

It is estimated that hundreds of thousands of male and female users of marijuana are having children. It has been known for decades that marijuana use adversely affects human reproduction causing impaired neurodevelopment, as well as other damage from paternal and maternal and fetal exposure to the adverse effects of marijuana.

No other drug is allowed to be sold in this country without a listing of side effects, yet marijuana is given a free pass. The list of side effects that result from exposure to or the use of marijuana should preclude its use in the first place by all who value mental and physical health. The

¹ Go to the below Colorado website and click on the box at the top of the page that lists "methods, circumstances and toxicology" and then click on the two boxes for 10-19 years olds. The marijuana data will appear.

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)

scientific evidence concerning the harmful effects of marijuana to current and future generations means that its present FDA and DEA classification and status should remain unchanged and that a massive education campaign should be undertaken to discourage its legalization and use.

Marijuana use by parents has been present in child abuse and child death situations. Parental drug use as a source of child abuse is documented in the 2016 Surgeon General's report "Facing Addiction in America." The link between parental marijuana use and child abuse and child deaths needs further research and public awareness.

Many parents are alarmed and concerned about the growing normalization of marijuana in schools, in workplace and at home. This is a social change that has no positive outcomes.

Attached is the recent science on marijuana. We know you will consider the science on this matter carefully.

We would be honored to meet with you. It may be helpful for you and your staff to hear first hand about what is going on medically in the states that have legalized marijuana.

Best regards,



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The Signers ²

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1994 Ove Ferno Award for Clinical Research in Nicotine and Tobacco
1996 Council on Addiction Psychiatry, American Psychiatric Association
1998 Best Doctors in America
1999 Advisory Council, Center for Substance Abuse Treatment
2002 America's Top Psychiatrists
2002 Board of Directors, College on Problems of Drug Dependence
2007 Top 25 Most Cited Tobacco Researcher
Former chair of the Vermont Tobacco Evaluation and Review Board.

² The signers listed have accepted the invitation of AALM to sign this letter. This does not mean that they are affiliated with AALM in any way or agree with any positions AALM has taken. It only means that they have signed on to this particular letter.

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THE MEDICAL AND SOCIAL DANGERS POSED BY MARIJUANA USE AND LEGALIZATION

The dangers of marijuana containing THC extend far beyond its role as an initiator for other drug abuse and we have enumerated the most serious below:

1. Mental Health

Even for those who stay with “just” marijuana, there are serious effects on mental health, where it can trigger measurable psychotic symptoms (observable in clinical studies of purified THC) in 40% of individuals with no family history of psychosis;[1-2] and in regular recreational users, full-fledged chronic psychotic disorders at a greater rate than any other recreational drug, i.e. more than LSD, PCP, cocaine, methamphetamine, amphetamine or alcohol (observable in large epidemiological and register-based studies [3-5]). The risk is elevated about 5-fold by regular use of high strength marijuana.[6] The elements illustrating marijuana is a causal factor for psychosis was published recently in the journal Addiction.[6] The risk for suicide attempts has been shown to be elevated 7-fold in regular users [8-9], and for completed suicides, as high as 5-fold.[10]. Studies in identical twins have demonstrated a clear impact to increase depression 2-fold in the twin who uses,[11] and a large epidemiological study conducted in the U.S. demonstrated a 2.6-fold increased risk for bipolar disorder, along with an increased risk for panic disorder with agoraphobia.[12] PTSD patients who were marijuana users have been found to make less progress in overcoming their condition and were more likely to be violent.[13] All study outcomes are obviously affected by the strength of the product prevalent at the time of the study, and by the frequency of use.

An unfortunate but classic example of the severe mental health effects is contributed by one of the signatories to this letter, an Emergency Department physician in the town of Pueblo, Colorado:

A 16 Year old recently seen in the ED in Colorado had his first psychotic break while on vacation. His parents had to drive him back to Colorado due to the significance of the acute psychosis. He came to the ED for evaluation. He was admitted to an offsite adolescent unit. He had no personal or family history of psychosis, mental illness, or schizophrenia. He had another psychotic episode at the adolescent unit. He attacked 3 health care workers and cut open a security guard's face. He was tased 3 times and this did not stop him. He was ultimately chemically sedated. Due to poor mental health funding, he was released in about 2 weeks. He had another psychotic break at home. He injured family members to the extent that he gave one a subdural hematoma. He only tested positive for marijuana.

2. Mental Ability

Impacts on mental prowess are obvious to all when a person is high, yet longitudinal MRI studies have shown the changes extend well beyond the time period of obvious impairment.[14] Meier et al. demonstrated that the peak effects of regular teen use on IQ may not become obvious until after the brain has finished maturation, when studied in subjects over the age of thirty.[15]

3. Cardiac Damage

There is an emerging literature on serious cardiac events being triggered by potent marijuana use in the young, [16] including some fatalities.[17] Stroke,[18] arrhythmias,[19] and cardiomyopathies [20] are major outcomes of concern.

4. Risk of Cancer

Although the risk for lung cancer does not appear to be consistently increased by marijuana use,[21] three independent studies have shown that the risk for testicular cancer is doubled by regular use.[22-24]

5. Use by Pregnant Women

Use by pregnant women to curb the nausea of morning sickness is a growing problem, [25-26] particularly in light of the fact that no drug should be taken during pregnancy until proven safe. As we are sure you realize, the first trimester during which morning sickness most often occurs is the trimester during which the fetus is most vulnerable to teratogenic insults. Indeed, Colorado is currently exhibiting a continued rise in a category of birth defect that was included in an AHA position paper as one suspected outcome of marijuana use during pregnancy: ventricular septal defects.[27] Major gastrointestinal defects are also on the rise, and both seem to correspond with two events: 1. the sharp rise in medical marijuana availability that followed the Ogden memo in 2009 (which stated that the federal government would look the other way in regards to medical marijuana dispensaries) and 2. the vote to legalize possession of recreational marijuana in 2012. The most recent data posted on the Colorado Department of Public Health and Environment website is for 2013 (they wait 3 years for defect confirmation in medical review). The 2014 data has not yet been posted.

6. Opiate use

Of note, several epidemiological studies have been published recently on whole populations purporting to show that states with more medical marijuana have a lower rate of opiate abuse. In fact, the raw data for the states show quite the opposite.[28] Using obscure statistical methods to correct for unspecified demographic differences between the states, some authors achieve a complete reversal in the trends. Apart from the fact that such “population ecology” studies are considered the weakest form of epidemiological research,[29] their results are contrary to several

published case control studies which are considered a more exacting type of epidemiology, affording the ability to control for variables measured at the individual level. These case control studies demonstrated marijuana users are more likely, not less likely, to abuse opiates.[30-33] In point of fact, marijuana use is not curbing the opioid epidemic in any state, and Colorado experienced the most opioid overdose deaths of all time in 2017. [34]

It seems unlikely that marijuana use will be effective in dealing with the opiate epidemic or in dealing with chronic noncancer pain. [35]

7. Damage to children

Research shows that infants exposed to THC before birth suffer a wide array of neurocognitive and neurobehavioral deficits that cascade throughout childhood and adolescence, resulting in adverse social, health, educational and economic consequences. [36]

In the 2018 Arizona Child Fatality Review of the substance use related deaths, marijuana was identified in 46% of deaths (n=62). [37]

Marijuana related emergency room visits by Colorado teens is substantially on the rise. They see more kids with psychotic symptoms and other mental health problems and chronic vomiting due to marijuana use. [38]

The rate of marijuana exposures among children under the age of six increased by 610% in the “medical” marijuana states according to a study published in Clinical Pediatrics. The data comes from the National Poison Data System. 75% percent of the children ingested edible marijuana products such as marijuana-infused candy. Clinical effects include drowsiness or lethargy, ataxia, agitation or irritability, confusion and coma, respiratory depression, and single or multiple seizures. [39]

As you have stated “We know that exposing the developing brain to marijuana can prime the brain to addiction and have potential negative consequences including promoting cancer.” [40]

8. Violence

According to research studies, marijuana use is linked to aggressive behavior, causes or exacerbates psychosis and produces paranoias all of which lead to violence and homicide. [41]

9. DUI

Epidemiology data from road traffic arrests and fatalities indicate that after alcohol, marijuana is the most frequently detected psychoactive substance among driving populations. The data clearly shows a reduced ability to drive safely after marijuana use. [42] As stated in the Surgeon General’s 2016 report Facing Addiction in America, marijuana is a serious threat to the physical

and mental health of our children and that its use is a major hazard to public safety. [43]

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³ We expect that research in many of these areas will be ongoing and will add to the substantial body of knowledge that exists.

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This whole area needs further research and public awareness.

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Surgeon General's 1982 Warning on Marijuana.

<https://www.cdc.gov/mmwr/preview/mmwrhtml/00001143.htm>

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The Surgeon General's Warning on Marijuana

The Surgeon General of the Public Health Service has issued the following warning on marijuana:

Marijuana use is a major public health problem in the United States. In the past 20 years, its use has increased 30-fold; it is estimated that more than a quarter of the American population has used it. The age at which persons first use marijuana has decreased gradually to the junior high school years. Until recently, nearly 11% of high school seniors used it, and although that figure has declined to 7%, its daily use still exceeds that of alcohol; more high school seniors use marijuana than smoke cigarettes. In a recent study, 32% of those surveyed had used marijuana during the previous 30 days, while 25% had smoked tobacco.

On March 24, 1982, the Department of Health and Human Services submitted to Congress a report reviewing the consequences of marijuana use. Marijuana and Health, 1982, ninth in a series, is primarily based on two recently conducted, comprehensive, scientific reviews by the Institute of Medicine of the National Academy of Sciences, the Canadian Addiction Research Foundation, and the World Health Organization (WHO). Both independent reviews corroborate the Public Health Service's findings of health hazards associated with marijuana use: Acute intoxication with marijuana interferes with many aspects of mental functioning and has serious, acute effects on perception and skilled performance, such as driving and other complex tasks involving judgement or fine motor skills.

Among the known or suspected chronic effects of marijuana are:

1. short-term memory impairment and slowness of learning.
2. impaired lung function similar to that found in cigarette smokers. Indications are that more serious effects, such as cancer and other lung disease, follow extended use.
3. decreased sperm count and sperm motility.
4. interference with ovulation and pre-natal development.
5. impaired immune response.
6. possible adverse effects on heart function.
7. by-products of marijuana remaining in body fat for several weeks, with unknown consequences. The storage of these by-products increases the possibilities for chronic, as well as residual, effects on performance, even after the acute reaction to the drug has worn off. Of special concern are the long-term developmental effects in

children and adolescents, who are particularly vulnerable to the drug's behavioral and psychological effects. The "amotivational syndrome," characterized by a pattern of energy loss, diminished school performance, harmed parental relationships, and other behavioral disruptions, has been associated with prolonged marijuana use by young persons. Although more research is required, recent national surveys report that 40% of heavy users experience some or all of those symptoms.

The Public Health Service concludes that marijuana has a broad range of psychological and biological effects, many of which are dangerous and harmful to health, and it supports the major conclusion of the National Academy of Sciences' Institute of Medicine.

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