



Americans Against Legalizing Marijuana

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March 24, 2021

Surgeon General Dr. Vivek Murthy
200 Independence Ave SW, Suite 701-H
Washington, DC 20201

Dear Dr. Murthy

We are medical doctors, scientists and researchers from the health policy communities, reaching out to you for help. Our nation is in urgent need of public leadership on marijuana. Our country has acknowledged the opioid and vaping epidemic and needs to acknowledge the marijuana epidemic due to its legalization and commercialization. We are writing to you to inform you about the recent science on marijuana use and we respectfully request that you speak out about the dangers of marijuana use and marijuana legalization and take action to protect our children.

Our concerns

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.

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 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.

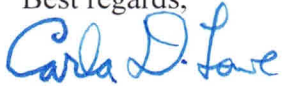
Attached is the recent science on marijuana. We know you will consider the science on this matter carefully.

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

We will do all we can to help you fight this growing threat to our children, but steadfast resolve from you is essential to reduce the enormous human and economic cost that marijuana has inflicted on our nation.

Best regards,



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The Signers²

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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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Dr Voth is an internationally recognized expert for 40 years on marijuana, addiction, and chronic pain. He is a former member of the Centers for Substance Abuse Treatment as well as consultant to numerous Congressional committees and the White House ONDCP since the early 1990s

Topeka, Kansas

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 <http://www.chd.dphe.state.co.us/cohid/> 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]

The Surgeon General has 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 paranoid ideas 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]

References³

1. Bhattacharyya S, Crippa JA, Allen P, Martin-Santos R, Borgwardt S, Fusar-Poli P, Rubia K, Kambeitz J, O'Carroll C, Seal ML, Giampietro V, Brammer M, Zuardi AW, Atakan Z, McGuire PK. Induction of psychosis by $\Delta 9$ -tetrahydrocannabinol reflects modulation of prefrontal and striatal function during attentional salience processing. *Arch Gen Psychiatry*. 2012; 69(1):27-36.
2. Morrison PD, Nottage J, Stone JM, Bhattacharyya S, Tunstall N, Brenneisen R, Holt D, Wilson D, Sumich A, McGuire P, Murray RM, Kapur S, Ffytche DH. Disruption of frontal θ coherence by $\Delta 9$ -tetrahydrocannabinol is associated with positive psychotic symptoms. *Neuropsychopharmacology*. 2011; 36(4):827-836.
3. Niemi-Pynttari JA, Sund R, Putkonen H, Vormaa H, Wahlbeck K, Pirkola SP. Substance-induced psychoses converting into schizophrenia: a register-based study of 18,478 Finnish inpatient cases. *J Clin Psychiatry*, 2013; 74(1): e94-9.
4. Nielsen, S. M., Toftdahl, N. G., Nordentoft, M., & Hjorthøj, C. Association between alcohol, cannabis, and other illicit substance abuse and risk of developing schizophrenia: a nationwide population based register study. *Psychological Medicine*, 2017; 47(9):1668-1677.
5. Starzer MSK, Nordentoft M, Hjorthøj C. Rates and Predictors of Conversion to Schizophrenia or Bipolar Disorder Following Substance-Induced Psychosis. *Am J Psychiatry*, 2018; 175(4): 343-350.
6. Di Forti M, Marconi A, Carra E, Fraietta S, Trotta A, Bonomo M, Bianconi F, Gardner-Sood P, O'Connor J, Russo M, Stilo SA, Marques TR, Mondelli V, Dazzan P, Pariante C, David AS, Gaughran F, Atakan Z, Iyegbe C, Powell J, Morgan C, Lynskey M, Murray RM. Proportion of patients in south London with first-episode psychosis attributable to use of high potency cannabis: a case-control study. *Lancet Psychiatry*. 2015;2(3):233-238.
7. Miller CL. The disconnect between the science on cannabis and public health campaigns. *Addiction*. 2017;112(10):1882-1883.
8. Clarke MC, Coughlan H, Harley M, Connor D, Power E, Lynch F, Fitzpatrick C, Cannon M. The impact of adolescent cannabis use, mood disorder and lack of education on attempted suicide in young adulthood. *World Psychiatry*. 2014;13(3):322-323.
9. Silins E, Horwood LJ, Patton GC, Fergusson DM, Olsson CA, Hutchinson DM, Spry E, Toumbourou JW, Degenhardt L, Swift W, Coffey C, Tait RJ, Letcher P, Copeland J, Mattick RP, for the Cannabis Cohorts Research Consortium. Young adult sequelae of adolescent cannabis use: an integrative analysis. *Lancet Psychiatry* 2014; 1(4): 245-318.
10. Arendt M, Munk-Jørgensen P, Sher L, Jensen SO. Mortality following treatment for cannabis use disorders: predictors and causes. *J Subst Abuse Treat*. 2013;44(4):400-406.
11. Agrawal A, Nelson EC, Bucholz KK, Tillman R, Grucza RA, Statham DJ, ... Lynskey MT. Major depressive disorder, suicidal thoughts and behaviours, and cannabis involvement in discordant twins: a retrospective cohort study. *The Lancet Psychiatry*, 2017; S2215-0366(17)30280-8.
12. Cogle JR, Hakes JK, Macatee RJ, Chavarria J, Zvolensky MJ. Quality of life and risk of psychiatric disorders among regular users of alcohol, nicotine, and cannabis: An analysis of the National Epidemiological Survey on Alcohol and Related Conditions (NESARC). *Journal of Psychiatric Research*, 2015; 66-67, 135-141.

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

13. Wilkinson ST, Stefanovics E, Rosenheck RA. Marijuana use is associated with worse outcomes in symptom severity and violent behavior in patients with posttraumatic stress disorder. *J Clin Psychiatry*. 2015;76(9):1174-1180.
14. Camchong J, Lim KO, Kumra S. Adverse Effects of Cannabis on Adolescent Brain Development: A Longitudinal Study. *Cereb Cortex*. 2017 Mar 1;27(3):1922-1930.
15. Meier MH, Caspi A, Ambler A, Harrington H, Houts R, Keefe RS, McDonald K, Ward A, Poulton R, Moffitt TE. Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proc Natl Acad Sci U S A*. 2012 Oct 2;109(40):E2657-2664.
16. Jouanjus E, Lapeyre-Mestre M, Micallef J; French Association of the Regional Abuse and Dependence Monitoring Centres (CEIP-A) Working Group on Cannabis Complications*. Cannabis use: signal of increasing risk of serious cardiovascular disorders. *J Am Heart Assoc*. 2014 Apr 23;3(2):e000638.
17. Hartung B, Kaufenstein S, Ritz-Timme S, Daldrup T. Sudden unexpected death under acute influence of cannabis. *Forensic Sci Int*. 2014;237:e11-13.
18. Singh NN, Pan Y, Muengtaweponsa S, Geller TJ, Cruz-Flores S. Cannabis-related stroke: case series and review of literature. *J Stroke Cerebrovasc Dis*. 2012;21(7):555-60.
19. Goyal H, Awad HH, Ghali JK. Role of cannabis in cardiovascular disorders. *J Thorac Dis*. 2017;9(7):2079-2092.
20. Singh A, Saluja S, Kumar A, Agrawal S, Thind M, Nanda S, Shirani J. Cardiovascular Complications of Marijuana and Related Substances: A Review. *Cardiol Ther*. 2017 Dec 7. doi: 10.1007/s40119-017-0102-x. [Epub ahead of print]
21. Ladin DA, Soliman E, Griffin L, Van Dross R. Preclinical and Clinical Assessment of Cannabinoids as Anti-Cancer Agents. *Front Pharmacol*. 2016;7:361. eCollection 2016.
22. Lackson et al. Population-based case-control study of recreational drug use and testis cancer risk confirms an association between marijuana use and nonseminoma risk. *Cancer* 2012; 188:5374-83.
23. Trabert et al. Marijuana use and testicular germ cell tumors. *Cancer* 2011; 117:848-53.
24. Daling JR , et al. Association of marijuana use and the incidence of testicular germ cell tumors. *Cancer* 2009;115(6):1215-1223.
25. Brown QL, Sarvet AL, Shmulewitz D, Martins SS, Wall MM, Hasin DS. Trends in Marijuana Use Among Pregnant and Nonpregnant Reproductive-Aged Women, 2002-2014. *JAMA*. 2017;317(2):207-209.
26. Alaniz VI, Liss J, Metz TD, Stickrath E. Cannabinoid hyperemesis syndrome: a cause of refractory nausea and vomiting in pregnancy. *Obstet Gynecol*. 2015;125(6):1484-1486.
27. Jenkins KJ, Correa A, Feinstein JA, Botto L, Britt AE, Daniels SR, Elixson M, Warnes CA, Webb CL; American Heart Association Council on Cardiovascular Disease in the Young. Noninherited risk factors and congenital cardiovascular defects: current knowledge: a scientific statement from the American Heart Association Council on Cardiovascular Disease in the Young: endorsed by the American Academy of Pediatrics. *Circulation*. 2007;115(23):2995-3014.
28. Bachhuber MA, Saloner B, Cunningham CO, Barry CL. Medical cannabis laws and opioid analgesic overdose mortality in the United States, 1999-2010. *JAMA Intern Med*. 2014;174(10):1668-73.
29. Ayres JG, Harrison RM, Nichols GL, Maynard. *Environmental Medicine*, 1st Edition, CRC Press, 2010.
30. Olfson M, Wall MM, Liu SM, Blanco C. Cannabis Use and Risk of Prescription Opioid Use Disorder in the United States. *Am J Psychiatry*. 2018;175(1):47-53.

31. Nugent SM, Yarborough BJ, Smith NX, Dobscha SK, Deyo RA, Green CA, Morasco BJ. Patterns and correlates of medical cannabis use for pain among patients prescribed long-term opioid therapy. *Gen Hosp Psychiatry*. 2018; 50:104-110.

32. DiBenedetto DJ, Weed VF, Wawrzyniak KM, Finkelman M, Paolini J, Schatman ME, Herrera D, Kulich RJ. The Association Between Cannabis Use and Aberrant Behaviors During Chronic Opioid Therapy for Chronic Pain. *Pain Medicine*, pnx222, <https://doi.org/10.1093/pm/pnx222>

33. Smaga S and Gharib AMR. In adults with chronic low back pain, does the use of inhaled cannabis reduce overall opioid use? *Evidence Based Practice* 2017; 20(1):e10

34. <https://www.colorado.gov/pacific/cdphe/vital-statistics-program>

35.

https://www.cannabiskunksense.co.uk/uploads/site-files/Cannabis_and_cannabinoids_for_the_treatment_of.6.pdf

Why Marijuana Will Not Fix the Opioid Epidemic, by Kenneth Finn, MD

https://www.msma.org/uploads/6/2/5/3/62530417/why_marijuana_will_not_fix_the_opioid_epidemic_mayjune_2018_momed.pdf

Finn, K, Current research on marijuana for pain is lacking.

<http://www.poppot.org/2017/06/26/current-research-marijuana-pain-lacking/>

36. Volkow ND, Compton WM, Wargo EM. The risks of marijuana use during pregnancy. *JAMA*. 2017;317(2):129-130.

<https://www.drugabuse.gov/publications/research-reports/marijuanalletter-director>

<https://www.drugabuse.gov/publications/research-reports/marijuanalmarijuana-safe-effectivemedicine>

Risk of Selected Birth Defects with Prenatal Illicit Drug Use, Hawaii, 1986-2002, *Journal of Toxicology and Environmental Health, Part A*, 70: 7-18, 2007

<https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Marijuana-Use-During-Pregnancy-and-Lactation>

37.

<https://www.azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/child-fatality-review-annual-reports/cfr-annual-report-2018.pdf>

This whole area needs further research and public awareness.

38.

<https://www.reuters.com/article/us-health-marijuana-kids/marijuana-related-er-visits-by-colorado-teens-on-the-rise-idUSKBN1HO38A>

39. <http://journals.sagepub.com/doi/full/10.1177/0009922815589912>

40. <https://www.thefix.com/surgeon-general-wary-marijuana-opioid-alternative>

41. Marijuana Violence and Law, *Journal of Addiction Research & Therapy*, January 2017, <https://www.omicsonline.org/open-access/marijuana-violence-and-law-2155-6105-S11-014.pdf>

https://www.secretservice.gov/data/press/releases/2018/18-MAR/USSS_NTAC-Mass_Attacks_in_Public_Spaces-2017.pdf

42.

http://www.wsp.wa.gov/breathtest/docs/webdms/DRE_Forms/Publications/drug/Human_Performance_Drug_Fact_Sheets-NHTSA.pdf

<https://www.drugabuse.gov/publications/drugfacts/drugged-driving>. For more information see:
www.drugabuse.gov/related-topics/drugged-driving

<https://obamawhitehouse.archives.gov/ondcp/drugged-driving>
www.drugabuse.gov/drugs-abuse/marijuana

43. Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health, November, 2016, Chapters One and Two and Appendix D pp.65-66 at:

<https://www.surgeongeneral.gov/library/2016alcoholdrugshhealth/index.html>

Surgeon General's 1982 Warning on Marijuana.

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