

JOINT
SENATE HEALTH & WELFARE COMMITTEE
AND
HOUSE HEALTH & WELFARE COMMITTEE
Friday, February 12, 2016

ATTACHMENT 20

Region I Behavioral Health Board

Fact Sheet on Marijuana Legalization

Myth: Marijuana is safe

Fact: Tetrahydrocannabinol or THC, the psychoactive ingredient in pot, increases heart rate and risk of heart attack and interferes with attention, motivation, memory, and learning. Smoking pot can lead to lung problems and suppresses the immune system. ^{1 2}

THC appears to cause increased cravings for other drugs such as opiates. This effect may be passed epigenetically on to offspring even if the parent is not using at the time of conception. It is addictive. It causes an irreversible IQ drop of up to 8 points in youth who use it regularly.

Addiction in youth is highest in states with "medical marijuana" programs and youth exposed to medical marijuana ads are twice as likely to use or intend to use the drug according to a California survey of 6th through 8th graders. ^{3 4 5 6 7 8 9}

THC may cause psychosis or precipitate schizophrenia in vulnerable people. It alters brain development, impairs neural connectivity and can cause depression, anxiety, agitation, hallucinations and paranoia.

Marijuana in the 60's was between 3-9% THC, but today's is between 8-16% THC. The process of "dabbing", creating a resin from the plant containing upwards of 90% THC has caused explosions and fires when people try to make it their homes using butane. Poisonings and exposures to children through candy-like edibles and other marijuana infused products increase over 600% in states that have legalized marijuana. ^{3/4} of the victims were under 3 years old. ¹⁰

Myth: Marijuana helps you relax and perform better

Fact: Studies have repeatedly shown marijuana diminishes productivity and performance, lowers GPAs of student users ¹¹and increased DUIs in states where it is legal. It is the most prevalent illegal drug in impaired drivers, fatally injured drivers and crash victims¹²

Myth: Medical marijuana is safer because the THC is removed

Fact: So-called CBD products tested in other marijuana-legal states revealed some contained as little as .1% CBD and as much as 18% THC. Some products claiming to be low in THC have 5% THC. 5% THC is high. Cannabidiol or CBD is being studied to help epilepsy and other disorders, but THC induces seizures and does not have any known health benefits.^{13 14}

Myth: Marijuana smoke is safer than cigarette smoke

Fact: Marijuana smoke contains the same tars and carcinogens as cigarette smoke but pot smokers inhale and hold the smoke which increases their exposure. For immunocompromised people there is additional risk of exposure to aspergillus, a mold contaminant in marijuana plants.^{15 16 17 18 19 20}

Myth: If we legalize marijuana and tax it, it will pay for itself

Fact: The cost of substance abuse in the US, including loss of productivity, health and crime-related costs is over \$600 billion/year including \$235 billion for alcohol, \$193 billion for tobacco and \$181 billion for illicit drugs of which marijuana is the most prevalent. Taxes for alcohol and tobacco only cover a small percentage of the cost they impose on society. We will not recover our societal costs by taxing marijuana. ²¹ Based on other states' experiences we can expect increases of 200-400% in drug addiction and mental health treatment costs,^{22 23 24 25} law enforcement costs due to impaired driving, motor vehicle accidents, increased crime rates,^{26 27} and other societal costs related to inability to self support such as joblessness and homelessness.

- ¹ National Institute on Drug Abuse. www.drugabuse.gov
- ² The Marijuana Report.Org
- ³ Reference: Adverse Health Effects of Marijuana Use, by Nora D. Volkow, M.D., Ruben D. Baler, Ph.D., Wilson M. Compton, M.D., and Susan R.B. Weiss, Ph.D., published online June 4, 2014 in The New England Journal of Medicine
- ⁴ Szutorisz, H.; DiNieri, J.A.; Sweet, E. et al. Parental THC exposure leads to compulsive heroin-seeking and altered striatal synaptic plasticity in the subsequent generation. *Neuropsychopharmacology*. 39(6):1315-1323, 2014.
- ⁵ Cerda, M. et al. (2011). Medical marijuana laws in 50 states: investigating the relationship between state legalization of medical marijuana and marijuana use, abuse and dependence. *Drug and Alcohol Dependence*. Found at <http://www.columbia.edu/~dsh2/pdf/MedicalMarijuana.pdf>; and Wall, M. et al (2011).
- ⁶ Adolescent Marijuana Use from 2002 to 2008: Higher in States with Medical Marijuana Laws, Cause Still Unclear, *Annals of epidemiology*, Vol 21 issue 9 Pages 714-716.
- ⁷ Substance Abuse and Mental Health Services Administration (SAMHSA), State Estimates from the 2008- 2009 National Surveys on Drug Use and Health
- ⁸ Wagner, F.A. & Anthony, J.C. (2002). From first drug use to drug dependence; developmental periods of risk for dependence upon marijuana, cocaine, and alcohol. *Neuropsychopharmacology*, 26, 479-488.
- ⁹ The National Center on Addiction and Substance Abuse (CASA) at Columbia University. CASA white paper, *Non-Medical Marijuana II: Rite Of Passage Or Russian Roulette?* 2008.
- ¹⁰ Letter from Amy Brooks-Kayal, MD President, American Epilepsy Society, Chief and Ponzio Family Chair, Children's Hospital Colorado, Professor of Pediatrics and Neurology, University of Colorado School of Medicine, to Representative Matthew Baker, Chair, Pennsylvania House of Representatives Health Committee. http://www.legis.state.pa.us/cfdocs/legis/TR/transcripts/2015_0040_0001_T5TMNY.pdf Accessed May 16, 2015.
- ¹¹ Substance Abuse and Mental Health Services Administration's (SAMHSA), 2010 National Survey on Drug Use and Health (NSDUH).
- ¹² National Highway Traffic Safety Administration, 2010. Office of Traffic Safety, California, 2010. Press Release: "Drug Use Rises In California Fatal Crashes".
- ¹³ Bill Briggs. "Colorado Marijuana Study Finds Legal Weed Contains Potent THC Levels." NBC News, March 23, 20-15. <http://www.nbcnews.com/storyline/legal-pot/legal-weed-surprisingly-strong-dirty-tests-find-n327811>
- ¹⁴ White House Office of National Drug Control Policy, Marijuana Facts, page 2. https://www.whitehouse.gov/sites/default/files/ondcp/Fact_Sheets/marijuana_fact_sheet_jw_10-5-10.pdf.
- ¹⁵ National Institute on Drug Abuse. DrugFacts: Marijuana
- ¹⁶ Volkow ND, Baler RD, Compton WM, Weiss SRB. Adverse health effects of marijuana use. *N Engl J Med*. 2014;370(23):2219-2227
- ¹⁷ Hoffmann D, Brunneemann KD, Gori GB, Wynder EL. On the Carcinogenicity of Marijuana Smoke. In: Runeckles VC, ed. *Recent Advances In Phytochemistry*. Springer US; 1975:63-81.
- ¹⁸ Wu T-C, Tashkin DP, Djahed B, Rose JE. Pulmonary hazards of smoking marijuana as compared with tobacco. *N Engl J Med*. 1988;318(6):347-351.
- ¹⁹ Howden ML, Naughton MT. Pulmonary effects of marijuana inhalation. *Expert Rev Respir Med*. 2011;5(1):87-92.
- ²⁰ Polen MR, Sidney S, Tekawa IS, Sadler M, Friedman GD. Health Care Use by Frequent Marijuana Smokers Who Do Not Smoke Tobacco. *West J Med*. 1993;158(6):596-601.
- ²¹ Office of National Drug Control Policy, 1992 – 2002 Report, *The Economic Costs of Drug Abuse in the United States*. Available at: https://www.ncjrs.gov/ondcppubs/publications/pdf/economic_costs.pdf
- ²² SAMHSA, "2010 Annual Survey on Drug Use and Health", October 2011
- ²³ SAMHSA, "National Household Survey on Drug Use and Health" State Estimates on Substance Use, 2006-07 Washington State Healthy Youth Survey, 2010
- ²⁴ *Annals of Epidemiology*, "Adolescent Marijuana Use from 2002 to 2008; Higher in States with Medical Marijuana Laws", 2011
- ²⁵ Washington State Treatment Assessment Report Generation Tool (TARGET), November 2011
- ²⁶ Office of National Drug Control Policy (ONDCP) report May 2013. Marijuana is most common drug found in systems of individuals arrested for criminal activity.
- ²⁷ Colorado DOT data: Fatalities involving drivers testing positive for marijuana increase 114% between 2006-2007

Other sources:

- American Society of Addiction Medicine: <http://www.asam.org/docs/default-source/public-policy-statements/marijuana-cannabinoids-and-legalization-9-21-2015.pdf?sfvrsn=0> This is a very recent and well-done position statement
- American Lung Association
- Northwest High Intensity Drug Trafficking Areas: www.mfiles.org
- Drug Free Action Alliance: www.DrugFreeActionAlliance.org
- Community Anti-Drug Coalitions of America
- National Families in Action (Excellent background paper prepared for Georgia legislature which asks good questions for legislatures to consider in terms of enforcement and hidden costs of legalization): www.nationalfamilies.org