PREVENTION ALLIANCE of TENNESSEE
A STATE OF PREVENTION

White Paper Summary on

MEDICAL MARIJUANA

Current marijuana use among adolescents in Tennessee is reported by the Centers for Disease Control and Prevention (CDC) to be 21.4 percent, which is lower than the national rate of 23.4 percent[1]. States with medical marijuana laws are positively associated with increased marijuana use as access and availability to the substance increases with legalization[2]. Historical research has demonstrated that illegal drug use among youth increases as perception of risk and social disapproval declines; however, national perception of harm for regular marijuana use has declined sharply since 2008, when 52 percent of high school seniors believed using marijuana regularly was dangerous, compared to only 39.5 percent in 2013. The rate of adolescents in Tennessee using marijuana in the past 30 days (21.4 percent) has surpassed those who report smoking cigarettes (15.4 percent).[1]

- Marijuana potency has nearly tripled in the past 20 years[3]
- Marijuana use negatively impacts educational achievement[4]
- More than two-thirds of treatment admissions involving those under the age of 18 cite marijuana as their primary substance of abuse, more than 15 times the rate for alcohol alone[5]
- Marijuana use negatively impacts highway safety: 19 percent of teen drivers report they have driven under the influence of marijuana—only 13 percent of teen drivers report they have driven under the influence of alcohol[6]
- According to a recent RAND study, legalization will cause the price of marijuana to fall and its use to rise, especially among youth[7]

A recent study revealed that heavy marijuana use during the adolescent years that continued through adulthood resulted in a permanent drop in IQ by eight points. A loss of eight IQ points could drop a person of average intelligence into the lowest third of the intelligence range.[2]

Is Marijuana Medicine?

The FDA requires carefully conducted studies to accurately assess the benefits and risks of a potential medication. To date, there have not been enough clinical trials that show the benefits of the marijuana plant outweigh the risks in patients with the symptoms it is meant to treat; therefore, the FDA has not approved marijuana for medical use. Cannabinoids (a large family of chemicals related to THC, marijuana's main psychoactive ingredient) of interest for therapeutic reasons are THC and cannabidiol. THC stimulates appetite and reduces nausea: it may also decrease pain, inflammation, and spasticity. Cannabidiol is a non-psychoactive cannabinoid that may be useful in reducing pain and inflammation, controlling epileptic seizures, and possibly even treating psychosis and addictions. The FDA has approved the drugs Dronabinol (Marinol®) and Nabilone (Cesamet®), both used to treat nausea caused by chemotherapy and wasting disease caused by AIDS. A drug called Sativex® which contains equal parts of THC and cannabidiol is currently approved in the UK to treat spasticity caused by multiple sclerosis and is now in Phase III clinical trials in the U.S. to establish its effectiveness and safety in treating cancer pain. The FDA-approved medications lack the psychoactive ingredient which makes the user feel "high," and are already an alternative to "medical" marijuana.[8]

1 Centers for Disease Control and Prevention. 2013. Youth Risk Behavior Surveillance System. Available: http://nccd.cdc.gov/youthonline/App/Default.aspx
2 M.H. Meier, Avshalom Caspi, et al. 2012. “Persistent cannabis users show neuropsychological decline from childhood to midlife.” Proceedings of the National Academy of Sciences.
3 Potency Monitoring Program Quarterly Report Number 120, Reporting Period December 16, 2012 – March 15, 2013. Mahmoud ElSohly, Director, NIDA Marijuana Project. P.7.
4 Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA’s National Household Survey on Drug Abuse Report—Marijuana Use among Youths. July 19, 2002. Available: http://www.samhsa.gov/oas/nhsda.htm
5 Substance Abuse and Mental Health Services Administration. 2010. Office of Applied Studies. Treatment Episode Data Set (TEDS): 2009 Discharges from Substance Abuse Treatment Services, DASIS. Available: http://wwwdasis.samhsa.gov/webt/quicklink/US10.htm
Also see Non-medical cannabis: Rite of passage or Russian roulette? 2011. Center on Addiction and Substance Abuse, Columbia University.
6 Hazy Logic: Liberty Mutual Insurance/SADD Study Finds Driving Under the Influence of Marijuana a Greater Threat to Teen Drivers Than Alcohol. Available: http://www.sadd.org/press/presspdfs/Marijuana%20Teen%20Release.pdf
7 Kilmer, Beau, Jonathan P. Caulkins, Rosalie Liccardo Pacula, Robert J. MacCoun and Peter H. Reuter. 2010. “Altered State? Assessing How Marijuana Legalization in California Could Influence Marijuana Consumption and Public Budgets.” Santa Monica, CA: RAND Corporation, http://www.rand.org/pubs/occasional_papers/OP315
8 National Institite on Drug Abuse. 2014. “Drug Facts: Is Marijuana Medicine?” Available: http://www.drugabuse.gov/publications/drugfacts/marijuana-medicine