

### CBHDA TALKING POINTS ON MARIJUANA AND YOUTH SAFETY

## May 2015

Since enactment of the voter-approved Compassionate Use Act of 1996 (Proposition 215), California's discussions on marijuana policy have been characterized by multiple conflicting interpretations and confusion about the ability and limits of local government authority to regulate marijuana availability in social and commercial settings, with serious inconsistencies between federal, state and local laws.

While many local governments now have ordinances or policy provisions to address marijuana businesses, and while concerns often include references to the health and safety of children and youth, few communities have carefully considered the science on the harmful effects of marijuana use on the developing teen brain and the relationship between availability and teen use. 

I ii iii iv v

#### Marijuana Use Poses Serious Risks to Teen Brain Development

- 1. Research strongly suggests that marijuana use during adolescence and early adulthood results in impaired neural connectivity in several areas of the brain, including the hippocampus, a critical region associated with learning and memory.<sup>vi</sup>
- 2. Developmental problems associated with regular marijuana use during adolescence include reduced IQ scores, poorer school performance, vii higher school dropout rates, as well as decreased attention, and impaired cognitive and verbal performance. viii
- 3. There are no definitive findings on whether or not these impairments are reversible with abstinence or reduced consumption, but research supports an abundance of caution with respect to increased availability and resulting teen marijuana exposure and use.
- 4. Chronic marijuana use can lead to addiction, based on the criteria for dependence established in the *Diagnostic and Statistical Manual of Mental Disorders*, 4<sup>th</sup> Edition. Approximately 9% of those who use marijuana are estimated to be dependent, with the risks of dependency increasing sharply up to 17% as the age of initiation decreases into adolescence.<sup>ix</sup>
- 5. Like alcohol, marijuana and associated THC-containing products are intoxicants with considerable potential for abuse and dependence, but they also contribute to impaired judgment and increased susceptibility to psychiatric problems, including depression, insomnia and paranoid delusions.<sup>x</sup>
- 6. Heavy use can exacerbate the course of illness in patients with schizophrenia and other mental disorders, particularly when there is early age onset.xi

In addition to pending state legislation regarding medical marijuana (e.g. AB 266, SB 634), California is likely to have at least one ballot measure in 2016 to legalize non-medical use. Many prevention professionals are concerned that widespread availability of an intoxicant like marijuana will lead to more widespread use, and will compound problems already posed by legal substances like alcohol and tobacco. Indeed, a recent New England Journal of Medicine article, "Adverse Effects of Marijuana Use," concludes:

Repeated marijuana use during adolescence may result in long-lasting changes in brain function that can jeopardize educational, professional, and social achievements. However, the effects of a drug (legal or illegal) on individual health are determined not only by its pharmacologic properties but also by its availability and social acceptability. In this respect, legal drugs (alcohol and tobacco) offer a sobering perspective, accounting for the greatest burden of disease associated with drugs not because they are more dangerous than illegal drugs, but because their legal status allows for more widespread exposure.xii

# **Preparing for 2016 and Beyond**

Marijuana is more widely available and more potent than ever before. The national average potency of THC has increased from approximately 4% in 1998 to 15% in 2012, with some dispensaries advertising potencies up to 30%. Increased potency levels, decreasing perception of harm, the increased risk of addiction with adolescent use, the impact on mental health, coupled with the academic consequences of use, have led to increased concern about marijuana use in California teens and young adults.

Research on the effects of marijuana on the developing brain, together with experience from alcohol and tobacco policy in California, provide important guidance for any initiative that would make marijuana legal, including established ways to manage an array of likely negative consequences.

Therefore, the Substance Abuse Prevention and Treatment (SAPT) Committee of the County Behavioral Health Directors Association of California (CBHDA) finds that:

### A. California Should Adopt Strong Policies Shown to Protect Public Health

Any statewide initiative to legalize marijuana should require both state and local health agencies to play a leadership role in adopting, monitoring and enforcing regulations. The following evidence-based strategies should form the foundation for marijuana policy should legalization occur:

- I. Adequate revenues for funding effective prevention, treatment and education programs must be ensured;
- II. Adoption of a 21-year age limit for the use and possession of non-medical marijuana;

- III. Strict enforcement of laws prohibiting sales or furnishing of marijuana to underage youth conducted by local law enforcement agencies;
- IV. Adequate funding of compliance check operations through state and local fees and taxes;
- V. Restrictions on the types, number, and location of retail outlets, avoiding youth locations;
- VI. Prohibition of products that are likely to appeal to youth; and
- VII. Strict regulation of marijuana marketing—with limits on advertising and messaging attractive to youth—within constitutional limitations that protect commercial speech.

# B. State and Local Governments Play a Critical Role in Protecting Teen Health and Safety

Legal drugs in California provide important lessons about efforts to protect youth from exposure and to delay the age of first drug use. Chief among these is the critical role of state *and* local government in developing, enhancing and enforcing effective strategies to protect the health and safety of young people, while operating within state regulatory structures.

#### Therefore, CBHDA also:

- Recognizes the constitutional powers of California counties and cities to protect the health and welfare of their communities and its residents—including, especially, youth;
- II. Supports legislative judgments made by locally-elected officials about potentially dangerous or unhealthy land uses, with deference given to protecting youth; and,
- III. Urges local governments, under existing and proposed California state policies on marijuana regulation, to consider the research on marijuana and teen brain development, and to exercise their duty and discretion to either: adopt a program, modify a program, or to opt out entirely.

#### **Impacts Support an Abundance of Caution**

At this time CBHDA neither supports nor opposes proposals for legalization of marijuana for non-medical purposes. However, great caution is warranted for all policy makers given the lessons learned over the last eighty years since Prohibition was repealed, and given more than thirty years of tobacco prevention policy.

Legal drugs are extremely profitable industries, yet extremely costly for Americans; both in terms of mortality and impacts to public services.

 A leading cause of disease and a major contributor to health care costs, tobacco kills some 480,000 Americans every year.xiii  In 2004 diabetes cost society \$131.7 billion, cancer cost society \$171.6, while alcohol cost \$185 billion. The total cost of substance abuse addiction that year was \$559 billion.xiv

#### Conclusion

To protect youth from long-term harms, policymakers must develop regulatory strategies that are far more robust and sustainable than currently envisioned. Increased youth use leads to increased addiction, and increased addiction leads to an increase in the health and social problems that accompany addiction, such as lost productivity and diminished quality of family life.

Policy deliberations about marijuana in California continue to focus largely on the proposed benefits of making marijuana legal, and frequently point to alcohol regulation as a model. However, the public health impacts of alcohol to California communities suggest something quite different. Marijuana cannot be treated like any other "ordinary commodity," and marijuana policy must be health-driven, not profit-motivated. These important decisions will affect all of California for generations to come.

Volkow, N., Baler, R., Compton, W., Weiss, S. (2014). Adverse health effects of marijuana use. New England Journal of Medicine.

Jager, G., Ramsey, N.F. (2008). Long-term consequences of adolescent cannabis exposure on the development of cognition, brain structure and function: an overview of animal and human research. *Current Drug Abuse Reviews*, 1(2), 114-123.

Rubino T., Parolaro D. Long lasting consequences of cannabis exposure in adolescence. *Mol Cell Endocrinol*. 2008;286(1-2 Suppl 1):S108–13.

iv Jacobus, J., Bava, S., Cohen-Zion, M., Mahmood, O., and Tapert, S.F. (2009). Functional Consequences of Marijuana Use in Adolescents. *Pharmacology Biochemistry and Behavior* 92.4.

v Ammerman, S., Ryan, S. (2015). The impact of marijuana policies on youth: Clinical, research, and legal update. *Pediatrics*; 135(3):1-17.

vi Ventura County. (2015) "Marijuana and Your Kid's Brain." *Marijuana in Ventura County: A Gateway for Discussion,* © 2014, Ventura County Behavioral Health. http://venturacountylimits.org.s94613.gridserver.com//resources/article/E413A9/marijuana-and-your-kids-brain-video

Fergusson, D.M. et al. (2010). Cannabis and Educational Achievement: Findings from Three Australian Cohort Studies. *Drug and Alcohol Dependence*, Vol 110, Issue 3, August 2010.

wiii Meier M.H., Caspi A., Ambler A., et al. Persistent cannabis users show neuropsychological decline from childhood to midlife. *Proc Natl Acad Sci USA*. 2012;109:E2657-2664.

ix National Institute on Drug Abuse (NIDA). *DrugFacts: Marijuana*. http://www.drugabuse.gov/publications/drugfacts/marijuana April 2015.

x National Alliance on Mental Illness (2013) *Marijuana and Mental Illness* Fact Sheet. Duckworth, K., Freedman, J., reviewers. http://www2.nami.org/Content/NavigationMenu/Hearts\_and\_Minds/Smoking\_Cessation/Marijuana\_and\_Mental\_Illness.htm xilbid.

xii Volkow, N., Baler, R., Compton, W., Weiss, S. (2014). Adverse health effects of marijuana use. *New England Journal of Medicine* xiii U.S. Department of Health and Human Services. (2014). *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

xiv NIDA. Drug abuse and addiction: One of America's most challenging public health problems. http://archives.drugabuse.gov/about/welcome/aboutdrugabuse/magnitude