

STATE OF CALIFORNIA

TOBACCO EDUCATION AND RESEARCH OVERSIGHT COMMITTEE

MEMBERS:

MICHAEL ONG, M.D., Ph.D.
CHAIRPERSON
Assistant Professor in Residence
Division of General Internal Medicine and
Health Services Research
Department of Medicine
University of California, Los Angeles

LOURDES BAEZCONDE-GARBANATI, Ph.D.,
M.P.H., M.A.
Associate Professor in Preventive Medicine and Sociology
Institute for Health Promotion and Disease Prevention Research
Keck School of Medicine
University of Southern California

VICKI BAUMAN
Prevention Director II
Stanislaus County Office of Education

PATRICIA ETEM, M.P.H.
Executive Consultant
CIVIC Communications

ALAN HENDERSON, Dr.P.H., C.H.E.S.
Professor Emeritus
California State University, Long Beach

DEBRA KELLEY
Advocacy Director
American Lung Association in California

PAMELA LING, M.D., M.P.H.
Associate Professor
Department of Medicine
University of California, San Francisco

WENDY MAX, Ph.D.
Professor in Residence and Director
Institute for Health Aging
University of California, San Francisco

MYRON DEAN QUON, Esq.
Executive Director
National Asian Pacific American Families
Against Substance Abuse



July 17, 2015

Blue Ribbon Commission on Marijuana Policy

Mr. Abdi Soltani, Executive Director
ACLU of Northern California
39 Drumm Street
San Francisco, CA 94111

Mr. Conrad Gregory
Office of Lieutenant Governor Gavin Newsom
State Capitol, Suite 1114
Sacramento, CA 95814

Dr. Keith Humphreys, Professor of Psychiatry and Behavioral Sciences &
Director of Mental Health Policy
Stanford University School of Medicine
291 Campus Drive
Li Ka Shing Building
Stanford, CA 94305

RE: Public Comment on Marijuana Regulation in California

Dear Mr. Soltani, Mr. Gregory, and Dr. Humphreys:

The Tobacco Education and Research Oversight Committee (TEROC) is a legislatively mandated oversight committee (California Health and Safety Code Sections 104365-104370) that monitors the use of Proposition 99 Cigarette and Tobacco Products Surtax Fund revenues for tobacco control, prevention education, and tobacco-related research in California. In performing this mandate, TEROC provides advice to the California Department of Public Health (CDPH), the University of California (UC), and the California Department of Education (CDE) regarding the administration of the Proposition 99-funded programs. TEROC is also responsible for producing a State master plan for tobacco control and tobacco-related research, and making recommendations to the State Legislature for improving tobacco control and tobacco-related research efforts in California.

In consideration of a possible 2016 ballot initiative to legalize recreational marijuana in California, the Blue Ribbon Commission on Marijuana Policy (BRC) was created to conduct policy research and identify problematic issues and alternative solutions for marijuana legalization in California. In March 2015, the BRC released a Progress Report, stating that the commission is studying best policies to achieve three goals should recreational marijuana be legalized: 1) Protect the health and well-being

Blue Ribbon Commission on Marijuana Policy
Mr. Abdi Soltani, ACLU of Northern California
Mr. Conrad Gregory, Office of Lieutenant Governor Gavin Newsom
Dr. Keith Humphreys, Stanford University School of Medicine
Page 2
July 17, 2015

of children and adolescents; 2) Preserve the public safety of Californians on the road and in their communities; 3) Create a fair, enforceable set of taxes and regulations that enhances California's economic and physical health. TEROC shares the BRC's goals on best policies for recreational marijuana legalization, but has concerns that the draft initiative may compromise the progress made in California to prevent and reduce tobacco use.

The following recommendations are offered for the consideration of the BRC in its efforts for a possible 2016 recreational marijuana ballot initiative, or for any other measure to legalize recreational marijuana. These recommendations seek to prevent or mitigate unintended public health consequences of legalization, including youth initiation and increased use, harm of use on the developing brain, exacerbation and earlier onset of mental illness, and exacerbation of health disparities among communities of color and low socioeconomic populations.

In order to minimize the threat to tobacco control efforts, and the negative consequences associated with legalizing and commercializing recreational marijuana, TEROC recommends two broad recommendations. First, a comprehensive marijuana education and prevention campaign should be funded and established to inform and protect young people, non-users, and the general public from the harms of marijuana use. Second, marijuana use should be restricted consistent with clean indoor air and smoke-free laws restricting the use of traditional cigarettes and electronic cigarettes in indoor and outdoor settings. Tobacco-related type policies, which protect the public and help prevent the uptake of tobacco products by young people and reduce tobacco-related disparities, should be applied to marijuana use. These include age-of-sale restrictions, signage about age of sale restrictions, licensing retailers and zoning considerations for retailers, restrictions on youth marketing and advertising, restrictions on free sampling, child-resistant packaging, and strong warning labels to protect children and adults from accidental poisonings. These recommendations are elaborated upon as follows.

COMPREHENSIVE HEALTH EDUCATION PROGRAM

A comprehensive health education program is a crucial component of an initiative or any other measure to legalize recreational marijuana, in order to prevent and reduce the uptake of marijuana by youth and to counter well-funded marketing and social media campaigns promoting marijuana use. Even as the perceived risk associated with marijuana use has declined (Johnston, et al., 2013), emerging research shows that the real risk for negative health effects associated with marijuana use is increased,

Blue Ribbon Commission on Marijuana Policy
Mr. Abdi Soltani, ACLU of Northern California
Mr. Conrad Gregory, Office of Lieutenant Governor Gavin Newsom
Dr. Keith Humphreys, Stanford University School of Medicine
Page 3
July 17, 2015

especially among young people and people susceptible to mental illness. Persistent marijuana use has shown to permanently impair cognitive functioning and brain development, with impairment concentrated among adolescent-onset marijuana users, and more persistent use associated with greater cognitive decline (Meier, et al., 2015). In addition, studies have shown that regular marijuana use is linked with psychoses, especially among users with preexisting genetic profiles, and heavy usage may exacerbate and be associated with an earlier onset of schizophrenia (Volkow, et al., 2014).

The evidence indicates that dual-use of tobacco with marijuana products has increased. A 2015 study showed that from 2003-2012, co-use of tobacco and marijuana increased overall in adults, was highest among adults aged 18-25 years, and at each time point, co-use was increasingly higher for African Americans, suggesting disparities in co-use (Schauer, et al., 2015). Emerging products gaining popularity, especially among young people, include Butane Hash Oil (BHO), derived from soaking marijuana trimmings in what is essentially lighter fluid. The resulting product is super-concentrated tetrahydrocannabinol (THC), the psychoactive ingredient in marijuana, in varying forms of viscosity, and is often smoked with vaping devices, which is popular with adolescents. The THC concentration in BHO has been reported to be up to 90 percent potency, compared to THC potency of today's typical joint of 15-20 percent. In addition, the illegal method of manufacturing BHO is often done in home garages by untrained people, is extremely and inherently dangerous, and has resulted in an increase of home explosions and severe burns requiring long-term hospitalizations in California (Sangree, 2015).

California should consider Colorado's 2012 experience in the legalization and commercialization of recreational marijuana, and findings of concern related to use patterns and impacts on vulnerable populations. Colorado's 2014 Behavioral Risk Factor Surveillance System showed that over a third of users were daily marijuana users, and a third of 18-24 year olds were using. In addition, findings showed a disproportionate rate of use and suggest a possible exacerbation of health disparities among certain communities: marijuana usage among African American adults was almost 50 percent higher than the state average for adults; low income adults were using at higher rates than the state average; and nearly one third of Lesbian, Gay, Bisexual, and Transgender (LGBT) adults were using marijuana – more than twice the state average for adults (2014).

The scientifically documented harm of persistent and early onset usage to the developing brain, increased mental health risks, the super-concentrated THC potency in today's marijuana products, and highly hazardous manufacturing methods are public health and safety concerns, and the realities about the negative aspects of recreational marijuana legalization are impacts the public should be made aware of. There is a need for especially rigorous market research and valid science-based approaches and message development. This is especially important, considering the decreased perceived risk of harm, combined with what will be a large increase of accessibility and usage.

Similar to California's experiences with the tobacco industry, giving the resulting marijuana industry free reign on marijuana legalization and commercialization without checks and balances to safeguard the health of the public could be disastrous. Since 1990, the California Tobacco Control Program (CTCP) has been a leader in efforts and practices of a comprehensive health education program for tobacco use prevention and cessation. **TEROC recommends that the ballot initiative language incorporate a comprehensive health education program similar to the mandate of CTCP (Health and Safety Code § 104350-104480), to include:**

1. **Statewide health communication campaign, including mass-media campaigns directed at the general public.** Media campaign topics should include, but not be limited to, harms of marijuana usage, reducing secondhand marijuana smoke exposure, countering the resulting marijuana industry's marketing tactics to entice new users, motivating marijuana users to quit and promoting free services to help them succeed, the harms and consequences of drugged driving, potency education and preventing accidental poisonings, and education on the adverse effects to the environment resulting from the manufacturing and cultivating of marijuana products (Patterson 2015).
2. **Community-based education, reflective of cultural and ethnic nuances of diverse communities,** including education being provided in languages besides English, such as Spanish, Mandarin/Cantonese, Korean, and Vietnamese. In addition, education should be tailored to specific populations, like African Americans, college-aged youth, and LGBT communities.
3. **School-based education, to prevent youth and young adults from beginning to use marijuana and to improve school retention and performance.** In TEROC's 2015-2017 Master Plan, *Changing Landscape: Countering New Threats*, TEROC recommends studying the relationships

between the onset of tobacco use and the initiation of other risky behaviors, including marijuana use, as a research priority.

4. Build up existing surveillance systems to monitor marijuana use among youth and adults, such as the California Student Tobacco Survey, Behavioral Risk Factor Survey, and California Health Interview Survey. TEROC also suggests conducting underage decoy purchase surveillance similar to the Stop Tobacco Access to Kids Enforcement (STAKE) Act.

PROHIBIT MARIJUANA USE WHEREVER TOBACCO SMOKING IS PROHIBITED

Smoke-free policies are designed not only to protect non-smokers from secondhand smoke exposure, but also to provide incentives to quit smoking and to de-normalize smoking, as adolescents are particularly vulnerable to visual cues and social norms (2012 Surgeon General's Report). Non-smokers need protections from secondhand smoke exposure, as the chemical composition of secondhand smoke from tobacco and marijuana are similar, and both kinds of smoke can impair blood vessel function and effect cardiovascular health (Springer, et al., 2015). In order to protect the public from all forms of secondhand smoke exposure, incentivize quitting and de-normalize smoking, **TEROC recommends prohibiting any marijuana use wherever tobacco smoking and vaping is prohibited, including college campuses.** Tobacco smoke-free laws at the state and local levels should be applied to marijuana usage.

APPLY TOBACCO-RELATED TYPES OF POLICIES TO MARIJUANA

Objective 7 of TEROC's 2015-2017 Master Plan, *Minimizing the Tobacco Industry Influences and Activities*, is an objective that could apply to what will surely be a burgeoning and powerful industry resulting from the legalization and commercialization of marijuana. Objective 7 includes a focus on increasing adoption and enforcement of local policies that regulate the sale, distribution, and marketing of tobacco products, including e-cigarettes. Similar to the regulation of tobacco products, the state should not preempt cities and counties from regulating the marijuana retail sales environment, as it is not in the best interest of public health (Glantz, 2015). Community-based entities and their intervention efforts are less susceptible to industry campaign donations and influence, than are state or local government level officials (Roeseler, et al., 2010), and the benefits of local mobilization and action include constituency demand that local representatives pass policies in the best interests of the community and its members.

TEROC therefore recommends applying tobacco-related types of policies to marijuana, including:

1. Levy an adequate marijuana excise tax, comparable to tobacco products, and designate a portion of the tax for prevention and surveillance. Taxes should be levied by THC concentration in the marijuana product, rather than marijuana weight.
2. Require marijuana retailers to be licensed.
3. Restrict sales to persons aged 21 and over and require ID checking prior to sale.
4. Prohibit vending machine sales.
5. Prohibit self-service displays, with vendor assisted only sales.
6. Prohibit advertising on billboards, television, and radio, and no advertising in youth-oriented magazines, similar to the requirements of the Master Settlement Agreement between most states and the tobacco companies (1998).
7. Prohibit marketing to minors, including no advertising within 1,000 feet of schools and playgrounds, and no use of cartoon characters. This would decrease the visibility and impact the use by everyone, but especially children.
8. Prohibit free sampling, no sponsorship of sporting and cultural events, similar to the requirements of the Master Settlement Agreement (1998).
9. Prohibit payments to promote marijuana products in movies and other forms of media, similar to the requirements of the Master Settlement Agreement (1998).
10. Prohibit coupon redemption.
11. Require labeling of THC levels in marijuana products, and child resistant packaging to protect adults and children from accidental poisonings.

The BRC's goal of conducting policy research to identify problematic issues and alternative solutions for marijuana legalization in California aligns with TEROc's experience and knowledge of problematic issues and solutions regarding tobacco, and its mission to eliminate tobacco-related illness, death, and economic burden. Accordingly, TEROc recommends to the agencies it advises that their tobacco control experts in the CDPH California Tobacco Control Program, the UC Tobacco-Related Disease Research Program, and the CDE Coordinated School Health and Safety Office collaborate closely with the BRC to assist in its efforts to identify problematic issues and alternative solutions for marijuana legalization in California. California has been a proven leader in tobacco use prevention and cessation for over 25 years, with one of the lowest youth smoking rates in the nation. Emerging research and experiences from other states having legalized recreational marijuana highlight public health concerns for possible legalization in California, and suggest that a new generation of young people

Blue Ribbon Commission on Marijuana Policy
Mr. Abdi Soltani, ACLU of Northern California
Mr. Conrad Gregory, Office of Lieutenant Governor Gavin Newsom
Dr. Keith Humphreys, Stanford University School of Medicine
Page 7
July 17, 2015

may become addicted to marijuana, that accidental poisonings of marijuana products will occur due to super-concentrated THC levels and inadequate product labeling and packaging, and that involuntary exposure to secondhand marijuana smoke will occur. Additionally, TEROC is concerned that if these recommended measures are not incorporated in the language of the legalization initiative or any other measure to legalize recreational marijuana, it is likely that California's more than two decades of progress to prevent and reduce tobacco use will erode as marijuana use re-normalizes smoking behavior.

TEROC looks forward to working with the BRC. If you have any questions, please do not hesitate to contact me at MOng@Mednet.ucla.edu.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Michael Ong', with a stylized, cursive script.

Michael Ong, M.D., Ph.D.
Chairperson

Enclosure: References

cc: Rachel Barry, Center for Tobacco Control Research and Education, University of California, San Francisco
Maria Roditis, Division of Adolescent Medicine, Stanford University
April Roeseler, California Tobacco Control Program, California Department of Public Health
Bart Aoki, Tobacco-Related Disease Research Program, University of California
Tom Herman, Coordinated School Health and Safety, California Department of Education

References

- Colorado Behavioral Risk Factor Surveillance System. Marijuana Use in Colorado Adults, Ages 18 and Older, 2014. (2014). Retrieved from <https://www.colorado.gov/cdphe/marijuanause>.
- Glantz, Stanton A. (2015). "Preemption in Marijuana Policy: Never a Good Idea for Public Health". Retrieved from <http://tobacco.ucsf.edu/preemption-marijuana-policy-never-good-idea-public-health>.
- Johnston, Lloyd D., O'Malley, Patrick M., Bachman, Jerald G., Schulenberg, John E. (2013). *Monitoring the Future: National Survey Results on Drug Use 1975-2012*. 2012. Vol. 1: Secondary School Students. Retrieved from http://www.monitoringthefuture.org/pubs/monographs/mtf-vol1_2012.pdf.
- Master Settlement Agreement. (1998). Retrieved from <http://publichealthlawcenter.org/sites/default/files/resources/master-settlement-agreement.pdf>
- Meier, M. H., Caspi, A., Ambler, A., Harrington, H., Houts, R., Keefe, R. S. E., Moffitt, T. E. (2012). Persistent Cannabis Users Show Neuropsychological Decline from Childhood to Midlife. *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 109, E2657–2664.
- Patterson, Brittany. "California's 50,000 Pot Farms are Sucking Rivers Dry." *Scientific American*. 03 July 2015. Retrieved from <https://www.scientificamerican.com/article/california-s-50-000-pot-farms-are-sucking-rivers-dry/>.
- "Preventing Tobacco Use Among Youth and Young Adults. A Report of the Surgeon General." Rockville (MD); US Department of Health and Human Services: 2012. Retrieved from <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf>.
- Progress Report: Blue Ribbon Commission on Marijuana Policy (2015). Retrieved from <https://www.safeandsmartpolicy.org/wp-content/uploads/2015/03/Blue-Ribbon-Commission-report-March-20-2015-FINAL.pdf>.
- Roeseler, April, Burns, David. (2010). The Quarter that Changed the World. *Tobacco Control*. Vol. 19 (Suppl):1, 3 – 15. Retrieved from http://tobaccocontrol.bmj.com/content/19/Suppl_1/i3.full.pdf+html.

References, Continued

- Sangree, Hudson. "Hash-oil Burns are Exploding Danger". *The Sacramento Bee*. 06 June 2015. Retrieved from <http://www.sacbee.com/news/local/health-and-medicine/article22719105.html>.
- Schauer, Gillian L., Berg, Carla J., Kegler, Michelle C., Donovan, Dennis M, Windle, Michael. (2015) Assessing the Overlap Between Tobacco and Marijuana; Trends in Patterns of Co-Use of Tobacco and Marijuana in Adults from 2003-2012. *Addictive Behaviors*. Vol. 25: 26-32.
- Springer, Matthew L., Glantz, Stanton A., (2015). "Marijuana Use and Heart Disease: Potential Effects of Public Exposure to Smoke". Retrieved from <https://tobacco.ucsf.edu/marijuana-use-and-heart-disease-potential-effects-public-exposure-smoke>.
- Tobacco Education Research Oversight Committee Master Plan: Countering New Threats 2015-2017. (2015) Retrieved from https://www.cdph.ca.gov/programs/tobacco/Documents/TEROC/MasterPlan_15-17.pdf
- Volkow, Nora D., Baler, Ruben D., Compton, Wilson M., Weiss, Susan R.B. (2014). Adverse Health Effects of Marijuana Use. *The New England Journal of Medicine*. Vol. 370: 23.