

Public Health Implications of Commercializing Marijuana

Rachel Ann Barry

July 6, 2016

Marijuana is not harmless

The State of California has identified marijuana smoke as a cause of cancer (**CalEPA, 2009**)

Smoking marijuana is associated with an increased risk for cardiovascular disease, heart attack, and stroke in young adults (**Hall, 2016**)

One minute of exposure to marijuana smoke significantly impairs vascular function and increases risk for cardiovascular disease (**Wang, 2016**)

Risk for marijuana dependence is lower (25%) than risk for nicotine addiction (67%) and higher than alcohol dependence (16%) (**Cogle, 2016**)

Highly potent marijuana products increase acute risk for unpleasant experiences (i.e., anxiety, panic attacks, paranoia, and schizophrenia) (**World Health Organization, 2016**)

Health impacts after legalization

Prevalence among adults is increasing in Colorado, Washington, and Oregon

Teenagers perceive marijuana to have little to no health risks in Colorado and Washington

Calls to poison control centers involving accidental marijuana ingestion in children doubled between 2013 and 2014 in Colorado and Washington

More adults report unpleasant psychological feelings experiences (i.e., anxiety, panic attacks, paranoia, and schizophrenia) and severe vomiting after using highly potent marijuana products

Public health harms will likely increase as legal barriers that have kept major corporations out of the market are removed

**Corporations prioritize profits over
public health...bottom line.**

Original Investigation

Waiting for the Opportune Moment: The Tobacco Industry and Marijuana Legalization

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Context: In 2012, Washington State and Colorado legalized the recreational use of marijuana, and Uruguay, beginning in 2014, will become the first country to legalize the sale and distribution of marijuana. The challenge facing policymakers and public health advocates is reducing the harms of an ineffective, costly, and discriminatory “war on drugs” while preventing another public health catastrophe similar to tobacco use, which kills 6 million people worldwide each year.

Methods: Between May and December 2013, using the standard snowball research technique, we searched the Legacy Tobacco Documents Library of previously secret tobacco industry documents (<http://legacy.library.ucsf.edu>).

Findings: Since at least the 1970s, tobacco companies have been interested in marijuana and marijuana legalization as both a potential and a rival product. As public opinion shifted and governments began relaxing laws pertaining to marijuana criminalization, the tobacco companies modified their corporate planning strategies to prepare for future consumer demand.

Conclusions: Policymakers and public health advocates must be aware that the tobacco industry or comparable multinational organizations (eg, food and beverage industries) are prepared to enter the marijuana market with the intention of increasing its already widespread use. In order to prevent domination of the market by companies seeking to maximize market size and profits, policymakers should learn from their successes and failures in regulating tobacco.

Rationale for Compliance with Justice Department Request

The Department of Justice has asked us to perform some chemical analyses

We can hardly refuse this request under any circumstances. Actually, though, we regard it as an opportunity to learn something about this controversial product, whose usage has been increasing so rapidly among the young people.

wedded to a product are sometimes trapped by its obsolescence. In other words, companies selling transportation equipment convert to the internal to survive.

We are in the business of relaxing people who are tense and providing a pick up for people who are bored or depressed. The human needs that our product fills will not go away. Thus, the only real threat to our business is that society will find other means of satisfying these needs.

Many regard marihuana as an alternate, and perhaps superior, method of satisfying the needs that cigarette smoking satisfies. Others stress their conviction it is not a sound alternate. In this situation, business theory strongly suggests that we should learn as much as possible about this threat to our present product. We have done nothing so far because of the product's illegality and out of concern for our image. This request from the Justice Department, therefore, seems opportune.

"Asked if marihuana should be legalized, Mr. Lindsay said that there were 'a lot of irrational laws' concerning possession of marihuana."

Markets | Tue Jan 19, 2016 6:50am EST

Related: STOCKS, MARKETS

Philip Morris to invest \$20 mln in firm developing inhaler -report



Jan 19 Cigarette giant Philip Morris International will invest about \$20 million in an Israeli start-up that developed a metered-dose vaporiser of raw plants for medical use, Israeli news website Calcalist reported on Tuesday.

As part of the deal, Tel Aviv-based Syqe Medical will develop technologies for Phillip Morris that will help reduce health risks associated with smoking, Calcalist said, but provided no further details.

Officials at Syqe would not comment on the report and officials at Philip Morris could not be reached for immediate comment.

Syqe, which was formed in 2011, says it has already developed an inhaler that allows

BREAKINGVIEWS

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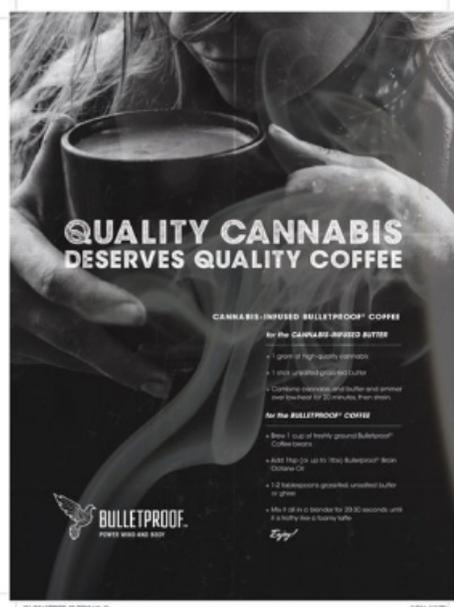
It's the wrong time to play games



High Times and Agency Unite to Sell Marijuana to Mainstream

Advertising

By MATT KRUPNICK MAY 1, 2016



An executive at Sparks & Honey suggested cannabis-infused food could be the industry's first widely advertised products.

MARIJUANA advocates are teaming up with Madison Avenue to try to make pot palatable to mainstream Americans — and to the advertisers that want to reach them.

High Times, the 42-year-old must-have magazine for the cannabis enthusiast, has collaborated with Sparks & Honey, an Omnicom advertising agency, on a report meant to prompt big-picture thinking in the marijuana industry. The paper, “[Rebranding Marijuana](#),” was released April 20, the [unofficial pot holiday](#).

“Through the slow legal and regulatory processes,” the report noted, “marijuana is opening up opportunities across a variety of industries, most of which have nothing to do with yesterday’s stoner

Rebrand marijuana

Sophisticated audience

weed.”

The First Big Company to Say It's Serving the Legal Marijuana Trade? Microsoft.

By NATHANIEL POPPER JUNE 16, 2016



“We do think there will be significant growth,” said Kimberly Nelson, the executive director of state and local government solutions at Microsoft. “As the industry is regulated, there will be more transactions, and we believe there will be more sophisticated requirements and tools down the road.”

David Dinenberg, the founder and chief executive of Kind: “Every business that works in the cannabis space, we all clamor for legitimacy.” Elizabeth Lippman for The New York Times

**It is possible to legalize marijuana
without excessive commercialization**

**So far, the four US states did not use
best practices to protect public health**

Warning Labels

Tobacco

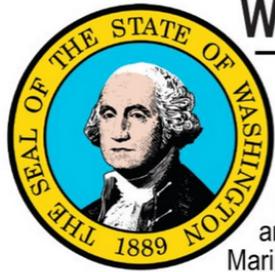


Wine

GOVERNMENT WARNING: (1) ACCORDING TO THE SURGEON GENERAL, WOMEN SHOULD NOT DRINK ALCOHOLIC BEVERAGES DURING PREGNANCY BECAUSE OF THE RISK OF BIRTH DEFECTS. (2) CONSUMPTION OF ALCOHOLIC BEVERAGES IMPAIRS YOUR ABILITY TO DRIVE A CAR OR OPERATE MACHINERY, AND MAY CAUSE HEALTH PROBLEMS. **CONTAINS SULFITES**

Ineffective Warning Labels

Washington



Washington Retail Marijuana

There may be health risks associated with consumption of this product. Smoking is hazardous to your health. Should not be used by women that are pregnant or breast feeding. For use only by adults twenty-one and older. Keep out of reach of children.

Marijuana and products containing marijuana can impair concentration, coordination, and judgment. Do not operate a vehicle or machinery under the influence of this drug. This product is infused with marijuana or active compounds of marijuana.

Warning: This product has intoxicating effects and may be habit forming. This product may be unlawful outside of Washington State.

Caution: When eaten or swallowed, the intoxicating effects of this drug may be delayed by two or more hours.

California Initiative

“GOVERNMENT WARNING: THIS PACKAGE CONTAINS MARIJUANA, A SCHEDULE I CONTROLLED SUBSTANCE. KEEP OUT OF REACH OF CHILDREN AND ANIMALS. MARIJUANA MAY ONLY BE POSSESSED OR CONSUMED BY PERSONS 21 YEARS OF AGE OR OLDER UNLESS THE PERSON IS A QUALIFIED PATIENT. MARIJUANA USE WHILE PREGNANT OR BREASTFEEDING MAY BE HARMFUL. CONSUMPTION OF MARIJUANA IMPAIRS YOUR ABILITY TO DRIVE AND OPERATE MACHINERY. PLEASE USE EXTREME CAUTION.”



Contains Marijuana. Keep out of the reach of children.



Protecting the Policy Process

“The involvement of organizations or individuals with **commercial or vested interests in the tobacco industry in public health policies with respect to tobacco control is most likely to have a negative effect...** [Governments] should **not** allow any person employed by the tobacco industry or any entity working to further its interests to be a **member of any government body, committee or advisory group that sets or implements tobacco control or public health policy.**”



Advisory Committee Membership

Name	Affiliation	Interests Represented
Ron Kammerzell - Co-Chair and Task Force Member	Colorado Department of Revenue	Enforcement, including MMED
Representative Dan Pabon, Co-Chair and Task Force Member	State House Representative	Colorado General Assembly
David Blake, Task Force Member	Attorney General's Office, Deputy Attorney General for Legal Policy and Governmental Affairs	Attorney General's Office
Dr. Sam Kamin, Task Force Member	University of Denver, Law Professor	Legal expertise
Meg Sanders, Task Force Member	Medical marijuana industry	Medical marijuana industry
Betty Aldworth	Self-employed	Amendment 64 Campaign
Norton Arbelaez	RiverRock LLC, Compliance Officer	Medical marijuana industry
Donald Burmania	Colorado Department of Revenue	Liquor Enforcement
Robert Dill	Attorney	Experience in medical marijuana law
Laura Harris	Colorado Department of Revenue	MMED Enforcement
Cally King	Governor's Office	Governor's Office
Dr. Jeremy Nemeth	University of Colorado Denver, Assistant Professor, Planning and Design	Policy expertise
Chris Nevitt	Denver City Councilman	Local Government
James Shpall	Applejack Associates, President	Alcohol industry
Mary Beth Susman	Denver City Council, President	Local Government

Advisory Committee Membership

Members of the Tobacco Education and Research Oversight Committee

TEROC is comprised of 13 members. Pursuant to California Health and Safety Code Section 104365, the Governor appoints eight members (one of which is a pending appointment), the Speaker of the Assembly appoints two, the Senate Rules Committee appoints two, and the Superintendent of Public Instruction appoints one member. Current TEROC members are:

Michael K. Ong, M.D., Ph.D., Chair
Associate Professor in Residence
Department of Medicine
University of California, Los Angeles



Denise Adams-Simms, M.P.H.
Executive Director
San Diego Black Health Associates



Lourdes Baézconde-Carbanati, 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



Wendel Brunner, Ph.D., M.D., M.P.H.
Director of Public Health
Contra Costa Health Services



Patricia Etem, M.P.H.
Executive Consultant
CIVIC Communications



Lawrence W. Green, Dr.P.H., Sc.D. (Hon.)
Professor, Department of
Epidemiology and Biostatistics
Helen Diller Family Comprehensive Cancer
Center & Center for Tobacco Control
Research & Education
University of California, San Francisco



Alan Henderson, Dr.P.H., C.H.E.S.
Professor Emeritus
California State University, Long Beach



Pamela Ling, M.D., M.P.H.
Associate Professor, Department of Medicine
University of California, San Francisco



Myron Dean Quon, Esq.
Executive Director, National Asian Pacific
American Families Against Substance Abuse



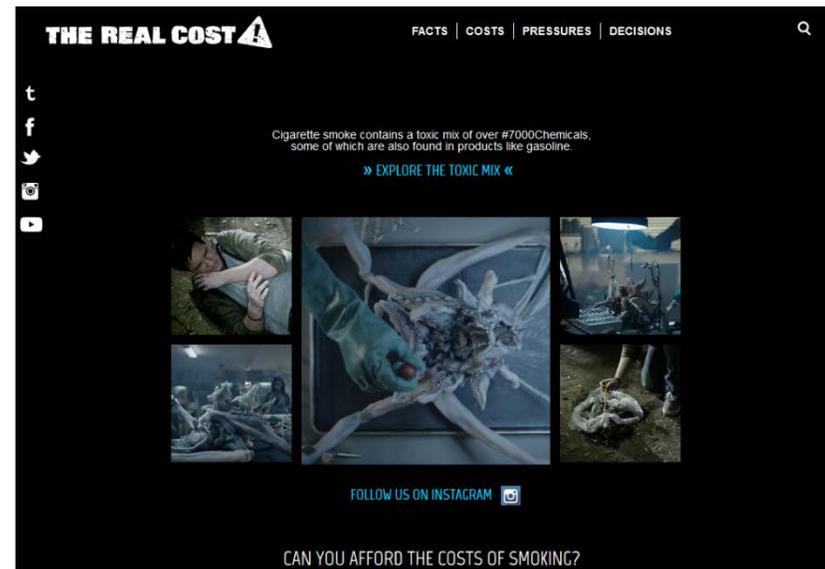
Dorothy Rice, Sc.D. (Hon.)
Professor Emeritus, Institute for Health and Aging
School of Nursing
University of California, San Francisco



Shu-Hong Zhu, Ph.D., M.S.
Professor, Department of Family
and Preventive Medicine
University of California, San Diego



Denormalization Campaigns



Ineffective Prevention



Y
MA
IS LEGA
START

NA
MEDICINE.
ANSWER?
.ORG

MY TE
MA
BUT WOULD SHE EAT IT IN A BROWNIE?

NA
NOW WHAT?
STARTTALKINGNOW.ORG

STARTTALKINGNOW.ORG

Washington State Department of Health

Washington State Department of Health

LearnAboutMarijuanaWA.org

Washington State Department of Health

Center for Multicultural Health

DON'T WAIT TO TALK WITH YOUR KIDS

TALK WITH YOUR KIDS TODAY. THEY REALLY DO LISTEN.

Tobacco Industry Messaging



You've Got Influence — Use It!

You can help the young person in your family be tobacco free by:

- being a good example or role model
 - teaching him or her the facts about tobacco use and how to say "no"
- Whether you're the young person's primary caregiver or an adult family member providing guidance and support, your words can make a difference. If you're not the primary caregiver, be sure to talk with the primary caregiver(s) about discussing tobacco use with the young person and what sorts of messages you want to convey.
- survey result in mind: Almost all of the middle-schoolers surveyed were glad their parents discussed smoking with them.*
- Establish consequences. Let your youngster know what will happen if he or she uses tobacco, and why you chose the consequences.

RAISING KIDS WHO DON'T SMOKE VOL. 1: ISSUE 3

Could your kid be smoking?



Talk. They'll Listen

Youth Smoking Prevention Philip Morris USA

Talk. They'll Listen.

Ineffective Advertising Restrictions



Code of Colorado Regulations
Secretary of State
State of Colorado

DEPARTMENT OF REVENUE

Marijuana Enforcement Division

RETAIL MARIJUANA CODE

1 CCR 212-2

Editor's Notes follow the text of the rules at the end of this CCR Document 1

minors. Voluntary standards adopted by the alcohol industry direct the industry to refrain from advertising where more than approximately 30 percent of the audience is reasonably expected to be under the age of 21. After reviewing the rulemaking record, the State Licensing Authority has determined that in order to prevent advertising that has a high likelihood of reaching minors, it is appropriate to model the Retail Marijuana Advertising restrictions on this voluntary standard used by the alcohol industry. This standard is

R 102 – Severability

If any portion of the rules is found to be invalid, the remaining portion of the rules shall remain in force and effect.

Basis and Purpose – R 103

The statutory authority for this rule is found at subsection 12-43.4-202(2)(b), C.R.S. The purpose of this rule is to provide necessary definitions of terms used throughout the rules. Defined terms are capitalized where they appear in the rules, to let the reader know to refer back to these definitions. When a term is used in a conventional sense, and not intended to be a defined term, it is not capitalized.

With regard to the definition of Child-Resistant, the State Licensing Authority relied extensively upon written commentary provided by a public health agency within a Colorado hospital, which had conducted a health impact assessment of packaging regulations, looking at accidental ingestion of medical marijuana. The assessment was supported by others in the public, including industry representatives and a physician specializing in medical toxicology.

With regard to the definition of Restricted Access Area, the State Licensing Authority relied extensively upon written commentary provided by a consumer advocate.



CAPITOL ALERT

JUNE 28, 2016 6:05 PM

California marijuana legalization measure on November ballot

HIGHLIGHTS

Election officials qualified the initiative based on a random sample of 606,520 signatures submitted in May

Supporters say legalization will improve upon an “ineffective system of prohibition”

Law enforcement opponents have been heavily outraged so far



Gavin Newsom to politicians: Take a stance on legalizing pot 0:50

“If you come out against it, I’m all ears, you got a better idea, let’s hear it.”

Immense Public Health Threat



What legal or policy issues should ChangeLab address over the next two years?



“Given that marijuana legislation may be in the near future, it would be great if we could have support on how marijuana and tobacco policies intersect in California and locally.”



What can **local governments** do **now** to proactively create a social and legal environment to protect **public health**?



**Pass local resolutions to
prevent marijuana industry
influence in policy process**

ENCOURAGING STATE LEGISLATURE TO ADOPT LEGISLATION FOR STRICT CONFLICT OF INTEREST REQUIREMENTS IN PUBLIC HEALTH DECISIONMAKING FOR RETAIL MARIJUANA



HOW TO PROTECT MY FAMILY AND FRIENDS!

Nicotine is a poison. Never leave e-cigarettes or e-liquids where children can get them. Immediately call the California Poison Control System at 1-800-222-1222 if any e-liquid is swallowed, gets on the skin or in the eyes.

Never allow the use of e-cigarettes in your home. They pollute the air and are harmful to you and your family.

Pregnant and breastfeeding women, children and teens should never use e-cigarettes or be exposed to the aerosol due to the harm nicotine may cause to brain development.

Support policies that do not allow e-cigarettes to be used indoors and where children are present.

If you use e-cigarettes or other tobacco products, call for free help with quitting: 1-800-NO BUTS (1-800-662-8887).

For more information, visit www.cdph.ca.gov/programs/tobacco

CDPH
California
Public Health

Funded by the Centers for Disease Control and Prevention
Grant # 5U49CE000508-01-10-14

PROTECT YOUR FAMILY FROM E-CIGARETTES
The Facts You Need to Know

A close-up photograph of a hand holding a lit e-cigarette, with a small bottle of e-liquid nearby.

BOARD OF TRUSTEES OF THE DIXON UNIFIED SCHOOL DISTRICT

RESOLUTION NO. 13-1495

Resolution Encouraging the Food and Drug Administration to Ban the Use of Menthol in Cigarettes and Menthol and Flavorings in Other Tobacco Products

Findings and Resolution:

WHEREAS, in Dixon 6% of 11th graders reported smoking cigarettes daily for the past 30 days;ⁱ

WHEREAS, in Dixon 8% of 9th graders reported using smokeless tobacco at age 13-14 years old;ⁱⁱ

WHEREAS, in Dixon in December 2010, 100% of tobacco retailers surveyed sold menthol flavored products, 77% sold cigarillos, blunts and little cigars, and 69% sold chewing tobacco, snuff and dipping tobacco;ⁱⁱⁱ

WHEREAS, in Dixon 54 different menthol and flavored tobacco brands and brand variations were sold;^{iv}

WHEREAS, tobacco industry documents clearly show how the tobacco industry designed flavored tobacco products to target youth;^v

WHEREAS, mentholated and flavored products have been shown to be “starter” products for youth who begin smoking;^{vi, vii, viii}

WHEREAS, the tobacco industry has been manipulating the dose of menthol in cigarettes to ensure the uptake and continued use of tobacco, especially by young people and other vulnerable populations for many years;^{ix}

WHEREAS, in the United States 46% of children aged 12-17 who smoke,^x and 51% of Asian American and Hispanic, 79% of African American, and 37% of white high school-aged smokers use menthol cigarettes, compared to only 31% of smokers over 25;^{xi, xii}

WHEREAS, in the United States 90% of smokers started smoking by the age of 18;^{xiii}

WHEREAS, sales of other tobacco and nicotine products have risen dramatically over the last decade in California;^{xiv}

WHEREAS, the 18-24 age group has the highest smoking prevalence in California, increasing from 12.3% in 2010 to 14.6% in 2011;^{xv}

NOW, THEREFORE, BE IT RESOLVED, that the Dixon Unified School Board hereby supports the Food and Drug Administration’s exercise of its authority to ban the use of menthol in cigarettes and menthol and flavoring in other tobacco products in the United States;

RESOLUTION 13-021 N.C.

**SUPPORTING THE FOOD AND DRUG ADMINISTRATION'S BAN ON THE USE OF
MENTHOL IN CIGARETTES AND MENTHOL AND FLAVORINGS IN OTHER
TOBACCO PRODUCTS**

WHEREAS, in the US 44% of children aged 12-17 years who smoke, and 51% of Asian American and Hispanic, 79% of African American, and 37% of white high school-aged smokers use menthol cigarettes; and

WHEREAS, tobacco industry documents clearly show how the tobacco industry designed flavored tobacco products to target youth; and

WHEREAS, in Vallejo, 5% of students reported have tried smoking by the 5th grade; and

WHEREAS, mentholated and flavored products have been shown to be "starter" products for youth who begin smoking; and

WHEREAS, the tobacco industry has been manipulating the dose of menthol in cigarettes to ensure the uptake and continued use of tobacco, especially by young people and other vulnerable populations for many years; and

WHEREAS, in the US 71% of Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) smokers, particularly youth, smoke menthol cigarettes; and

WHEREAS, in Vallejo 100% of tobacco retailers surveyed sold menthol flavored products, 88% sold cigarillos, blunts and little cigars, and 64% sold chewing tobacco; and

WHEREAS, in Vallejo 95 different menthol and flavored tobacco brands and brand variations were sold; and

WHEREAS, the tobacco industry has targeted African Americans with mentholated products and as a result nearly 83% of African American smokers smoke menthol cigarettes, compared with 24% of white smokers; and

WHEREAS, Vallejo is Solano County's largest city by population, 115,928, and is the most racially diverse of the cities with 22% African American, 24.9% Asian American, 32.8% White residents, and with 23% of Vallejo's residents of Hispanic or Latino origin; and

WHEREAS, the U.S. Food and Drug Administration (FDA) has the authority to issue product standards to promote public health, which can include eliminating or reducing certain ingredients; and

WHEREAS, the FDA already prohibits cigarettes from having candy, fruit, and spice as characterizing flavors because these flavors make tobacco products especially appealing to kids, and can lead to a lifetime of tobacco addiction; and

NOW, THEREFORE, BE IT RESOLVED, that the City Council of Vallejo hereby supports and encourages the Food and Drug Administration's exercise of its authority to ban the use of menthol in cigarettes and menthol and flavoring in other tobacco products in the United States.

Conclusions & Recommendations

Marijuana has adverse health effects, including cancer, heart disease, dependence, and unpleasant psychological effects

Tobacco companies interested in **marijuana** since at least 1960s

Protecting public health has not been a priority in marijuana legalization

May be impossible to change or improve regulatory controls once a large industry emerges

Possible to legalize marijuana in California without excessive commercialization through a tobacco control frame at day one

Local governments should act **now** and work with ChangeLab Solutions to pass strict conflict of interest resolutions to prevent marijuana industry involvement in regulatory process