Marijuana Policy: Informing a Smart Approach

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Current Uses of Major Substances in General Population, 2011

- **Illicit Drugs**: 8.7%
- **Marijuana**: 6.9%
- **Alcohol**: 51.8%
- **Cigarette**: 26.5%
• New Hampshire drug use rates are above the national average. (10.9% versus 8.8% for 12+)

• Marijuana use among 12-17 year olds in NH: 18.5% versus 14.1% for US as a whole.
Changes in Perceptions Lead to Changes in Reality

MARIJUANA USE AND PERCEIVED RISK AMONG 12TH GRADERS, 1975 TO 2009

Source: The Monitoring the Future study, the University of Michigan
Marijuana and Kids

The adolescent brain is especially susceptible to marijuana use.

That means that when kids use, they have a greater chance of addiction since their brains are being primed.
Marijuana’s Health Effects

Most people who use marijuana once will stop, and not become addicted.

*1 in 6 kids* who try marijuana will become addicted.

For people who keep smoking marijuana, the health harms are underappreciated and costly.
Marijuana’s Potential for Harm

This isn’t your Woodstock Weed – potency 5x stronger than in 1970s

Connected to changes in adolescent brain resulting in learning and memory problems, IQ loss, less life satisfaction

Doubles risk of car crash

Bronchitis/lung complications - Lung cancer link mixed; still learning
Relation to Mental Health

- Increased risk of psychosis
- Risk of schizophrenia increased six-fold

More treatment resistant

Cannabis use in adolescence and risk for adult psychosis: longitudinal prospective study Louise Arseneault, BMJ 2002;325:1212-1213 (23 November)
The Link Between Marijuana & Mental Illness

• Since 2002, almost a dozen studies have shown that regular use of marijuana carries a **significant increased risk** of developing psychotic illnesses like schizophrenia.

  Higher risk for:
  • Those with a family history of the disorders
  • Those with a psychosis-prone personality
  • Those who start using in early adolescence.

• Risks increase with potency and frequency of use.

An early finding: The Link Between Marijuana & Mental Illness


- Researchers did a 15-year examination of 45,570 military conscripts and found that those who had used marijuana on more than 50 occasions had a six-fold risk for developing schizophrenia relative to non-users.

Lancet medical journal: 2007, The survey authors concluded: “The evidence is consistent with the view that cannabis increases [the] risk of psychotic outcomes.”

Meta-analysis was conducted by Australian researchers in 2011 for the Archives of General Psychiatry
- used 83 studies to assess the impact of marijuana use on the early onset of psychotic illness.

The findings were clear and consistent: “The results of meta-analysis provide evidence for a relationship between cannabis use and earlier onset of psychotic illness...[The] results suggest the need for renewed warnings about the potentially harmful effects of cannabis.”

Cannabis use and risk of psychotic or affective mental health outcomes: a systematic reviewTheresa HM Moore MSc,Dr Stanley Zammit PhD,Anne Lingford-Hughes PhD,Thomas RE Barnes DSc,Peter B Jones PhD,Margaret Burke MSc,Glyn Lewis PhD The Lancet - 28 July 2007 ( Vol. 370, Issue 9584, Pages 319-328
2013: Researchers analyzed data from interviews with more than 43,000 respondents over the age of 18 from the National Epidemiologic Survey on Alcohol and Related Conditions.

Study published in the journal *Comprehensive Psychiatry*, researchers at Toronto’s Centre for Addiction and Mental Health (CAMH) found that people with mental illness are **seven times more likely to use marijuana weekly than people without a mental illness.**

Rates elevators for:
• Bipolar disorder
• Other substance abuse disorders.

The mechanism of the connection

Does marijuana use come first, or does mental illness come first?
Answer: Yes to both!

Regardless of the mechanism, it is clear that marijuana is harmful to mental health.
Average THC and CBD Levels in the US: 1960 - 2011

Let’s Not Repeat Mistakes of Alcohol & Tobacco

- Use levels for alcohol and tobacco are much higher than marijuana
- Industries promote addiction and target kids
What incentives do legal corporations have to keep price low and consumption high?

• “Enjoy Responsibly”

• Taxes today for alcohol are 1/5 of what they were during the Korean War (adj for inflation)
Can we trust companies and Big Corporations not to target youth and the vulnerable?
I. THE IMPORTANCE OF YOUNGER ADULTS

Within five years, younger adults (18-24) will drop from 18% to 15% of the total adult population (18+). They will continue to decline in numbers until at least 1995, as the crest of the Baby Bubble pushes farther past age 25.

This shift in the population will cause smokers aged 18-24 to fall from 16% to 14% of all smokers by 1988. Even 14% would not be surprising, since smoking incidence has been declining more rapidly among younger adults than any other age group in recent years (see Appendix A).

Why, then, are younger adult smokers important to RJR?

1. VOLUME

Younger adults are the only source of replacement smokers. Repeated government studies (Appendix B) have shown that:

- Less than one-third of smokers (31%) start after age 18.
- Only 5% of smokers start after age 24.

of total smokers without needing to attract a single brand switcher. This gain was the equivalent of a successful two-style new brand introduction, with no cannibalization and no development/introductory costs.

As a company, Philip Morris held more than 60% of these 18-year-olds in 1983 versus RJR’s 15-20%, yielding PM a .5 point in-going SOM advantage due to “new” smokers.

* This assumes 18-year-olds are 10% of the 18-24 group rather than a “fair share” of 14% because of population decline and the fact that some smokers start after age 18.
Of course, children aren't the only targets of the tobacco industry. Once, when I asked an R.J. Reynolds executive why he and his colleagues didn't smoke, he responded point-blank that "We don't smoke the sh--, we just sell it . . . We reserve that 'right' for the young, the poor, the black and the stupid."
Realistically, if our Company is to survive and prosper, over the long term, we must get our share of the youth market. In my opinion this will require new brands tailored to the youth market;
Youth Cigarette - New concepts

MI suggests new ideas for the breath-freshener field...

COLA-FRAGRANCE

While the government would not permit us to add caffeine to a cigarette, it may be possible to use artificial ingredients to obtain the effects of caffeine.

APPLE FLAVOR

Apples connote goodness and freshness and we see many possibilities for our youth-oriented cigarette with this flavor. Apple cider is also a possibility.

SWEET FLAVOR CIGARETTE

We believe that there are pipe tobaccos that have a sweet aromatic taste. It's a well-known fact that teenagers like sweet products. Honey might be considered.
TO: FILE
SUBJECT: SEDGEFIELD IDEA SESSIONS
June 6-7, 1979

The following paragraph will summarize the discussions held at the joint sessions in which everyone participated. A later report will document the ideas and suggestions which were discussed within the individual groups but rejected for use in the general meeting.

3. Fruit Flavored Chewing Products

Several avenues were explored in this area with the idea being directed toward younger chewers coming into the market. Many people felt that younger chewers would be attracted to products with less tobacco taste. For example, it was suggested that we investigate the possibility of borrowing switching study data from the company which produces "Life Savers" as a basis for determining which flavors enjoy the widest appeal.
“The use of marijuana ... has important implications for the tobacco industry in terms of an alternative product line. (We) have the land to grow it, the machines to roll it and package it, the distribution to market it. In fact, some firms have registered trademarks, which are taken directly from marijuana street jargon. These trade names are used currently on little-known legal products, but could be switched if and when marijuana is legalized. Estimates indicate that the market in legalized marijuana might be as high as $10 billion annually.”

From a report commissioned by cigarette manufacturer Brown and Williamson (now merged with R.J. Reynolds) in the 1970s.
Will Big Marijuana become the new Big Tobacco?
MEDICAL MARIJUANA
EVALUATIONS
GET YOURS TODAY
THE DOCTOR IS IN

MEDICAL MARIJUANA
CARDS
TRUSTED & EXPERIENCED
FOR OVER 5+ YEARS
(888)436-2420
www.DOC420.com
Marketing to Children
Past month prevalence of marijuana use –

Source: National Survey on Drug Use and Health
Number substance treatment admissions for marijuana - Denver metro

Source: Drug/Alcohol Coordinated Data System
Blood tests for DUID positive for THC - Colorado

Source: Colorado Department of Public Health and the Environment
Use of “regulated” marijuana by Denver teens

Substance treatment = 74% YES

Primary Care = 72% NO

Source: Salomonse-Sautel et al. (2012), JAACAP 51:694-702; Thurstone et al., under review
Colorado: Drug Testing Company Sees Spike in Children Using Marijuana

Levels of THC (Nano Grams) after passage of

- High School Student: “I’ve seen a lot more people just walking down the street smoking (joints)...it has kind of gotten out of hand.”
Average urine drug screen results

Source: Thurstone et al., in preparation
Drug-Related Suspensions/Expulsions - Colorado

Source: Colorado Department of Education
4/20 Rally in Denver
4/20 Rally in San Francisco
Responsible Regulations?

• Heavily influenced by CO’s massive medical marijuana industry

• Allowing character packaging, edibles, candies
  • Can grow much more than you sell

• Advertising allowed in “Adult Periodicals”
The Straight Facts on Marijuana
If you’re concerned about the economy in New Hampshire -- you need to care about the legalization of marijuana
Alcohol & Tobacco
Money Makers or Dollar Drainers

Alcohol Costs
- $185 billion
- $14 billion

Tobacco Costs
- $200 billion
- $25 billion

Money Makers or Dollar Drainers
“If Only We Treated It Like Alcohol…”

2.7 million
Arrests for alcohol-related crimes in 2008
(Does NOT include violence;
Includes violations of liquor laws and
driving under the influence)

847,000
Marijuana-related arrests in 2008
Increased marijuana use will cost taxpayers more money in societal costs such as accidents, crime, regulation hassles, and lost productivity.
If you care about academic achievement, you need to care about the legalization of marijuana.
FACTS:
More Drug Use = More Problems

Heavy Marijuana Use Lowers IQ

• A recent study found that those who used cannabis heavily in their teens and continued through adulthood showed a permanent drop in IQ of 8 points.

• A loss of 8 IQ points could drop a person of average intelligence into the lowest third of the intelligence range.

1M.H. Meier, Avshalom Caspi, et al. 2012. “Persistent cannabis users show neuropsychological decline from childhood to midlife.” Proceedings of the National Academy of Sciences
If you care about ensuring the businesses in your state/district have a reliable workforce -- you need to care about the legalization of marijuana.
Facts:

Employees who abuse drugs are:

- **10 times** more likely to miss work
- **3.6 times** more likely to be involved in on-the-job incidents
- **5 times** more likely to file a workers’ compensation claim.
If you care about ensuring the businesses in your state/district have the capacity to hire drug free employees, you need to care about the legalization of marijuana.
Fact:

Nationally, 6.5% of high school seniors smoke marijuana every day¹.

Business owners in your state/district that require pre-employment drug tests will likely find a smaller pool of potential hires if marijuana is widely available.

Small businesses that do not drug test will end up with more employees who use marijuana, affecting job performance and liability issues.
If you care about highway safety -- you need to care about the legalization of marijuana.
Fact:
Marijuana is the most prevalent illegal drug detected in impaired drivers, fatally injured drivers, and motor vehicle crash victims.\(^1\)

CO Traffic Fatalities with a THC+ driver

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Conclusion

- Research shows that the more accessible a drug is, the more likely people are to use it.

- New Hampshire **ALREADY** has some of the highest marijuana use rates in the country; the highest addiction rates in the country; and the highest drugged driving rate in the country.
Legalization = Cheaper Drugs = More Use

RAND Study:

- Pre-Tax Price Could Drop More Than 80%
- Consumption Will Increase
- Tax evasion a major concern
Legalizing marijuana will make it more widely available, and, using alcohol as the example, will not decrease consumption.

Due to the societal costs associated with increased marijuana use, legalizing marijuana could actually COST your constituents money rather than save them money.
So what are our choices for marijuana policy?
All or Nothing?

Legalization vs. Incarceration-Only
We Need

A “SMART APPROACH”

Not about legalization vs. incarceration

We can be against legalization but also for health, education, and common-sense
Chair, Patrick J. Kennedy
Launched January 10th, Denver
Over 5,000 press mentions
Public Health Board of Trustees
1. To inform public policy with the science of today’s marijuana.

2. To have honest conversations about reducing the unintended consequences of current marijuana policies, such as lifelong stigma due to arrest.

3. To prevent the establishment of Big Marijuana that would market marijuana to children — and to prevent Big Tobacco from taking over Big Marijuana. Those are the very likely results of legalization.

4. To promote research of marijuana’s medical properties and produce pharmacy-attainable medications.
Fixing Current Policy

• People should not be stigmatized for their past use

• No sense in incarcerating users

• People need job and economic opportunities; by being blocked from them they will re-enter the illicit market
Drug Possession Offenders in State Prisons

Percent of State Prisoners, 2004

- Drug possession offenders: 6.0%
- Drug offenders, no prior sentences: 4.4%
- Drug offenders held for crimes involving marijuana: 2.7%
- Drug offenders held for crimes involving only marijuana: 1.4%
- Marijuana only drug offenders, no prior sentences: 0.4%
- Marijuana only possession offenders: 0.3%
- Marijuana only possession offenders, no prior sentences: 0.1%

“If Only We Treated It Like Alcohol…”

2.7 million

Arrests for alcohol-related crimes in 2008
(Does NOT include violence; Includes violations of liquor laws and driving under the influence)

847,000

Marijuana-related arrests in 2008
Current Situation

- Less than 3% of state “medical marijuana” users have cancer, HIV, or glaucoma.
  - Could exacerbate symptoms (American Glaucoma Society)

- Vast majority are white males in 30s and 40s with self-diagnosed pain.

- Vast majority of cancer doctors and other physicians do not recommend smoking or ingesting marijuana.
Current Situation

- Relative to areas without them, areas with medical marijuana “dispensaries” connected to crime, youth access, and increased abuse.

- Voting on medicine? Bypassing scientific, FDA process, in favor of larger political and legalization agendas.

- Most major medical groups oppose state-based smoked marijuana as medicine (eg AMA, ACS).
This doesn’t mean that components in marijuana do not have medical properties.

These are being scientifically developed.

However, the process should be improved.
Cannabis-Based Medicines

• Research on the efficacy of cannabinoids is not focused on raw/crude marijuana, but in the individual components that may have medical use.

• *Sativex* is in the process of being studied

• Approved in Canada and across Europe

• Administered via an oral mouth spray, THC:CBD - 1:1
We don’t smoke opium to benefit from morphine.

So we don’t need to smoke marijuana to receive its potential benefits.
We need to decrease access and availability.

So, a smart approach might look like this:

• Increased community-based prevention through community coalitions to empower schools, parents, physicians and other health care professionals to prevent marijuana use among youth
• Increased screening and brief interventions in health care settings
• Increased access to treatment
• Increased access to recovery-oriented services
• Greater number of drug treatment courts and HOPE Probation programs
Future

Nationwide infrastructure to support local partners in getting this message out

SAM Interstate Alliance: Hawaii, Vermont, Massachusetts (so far)