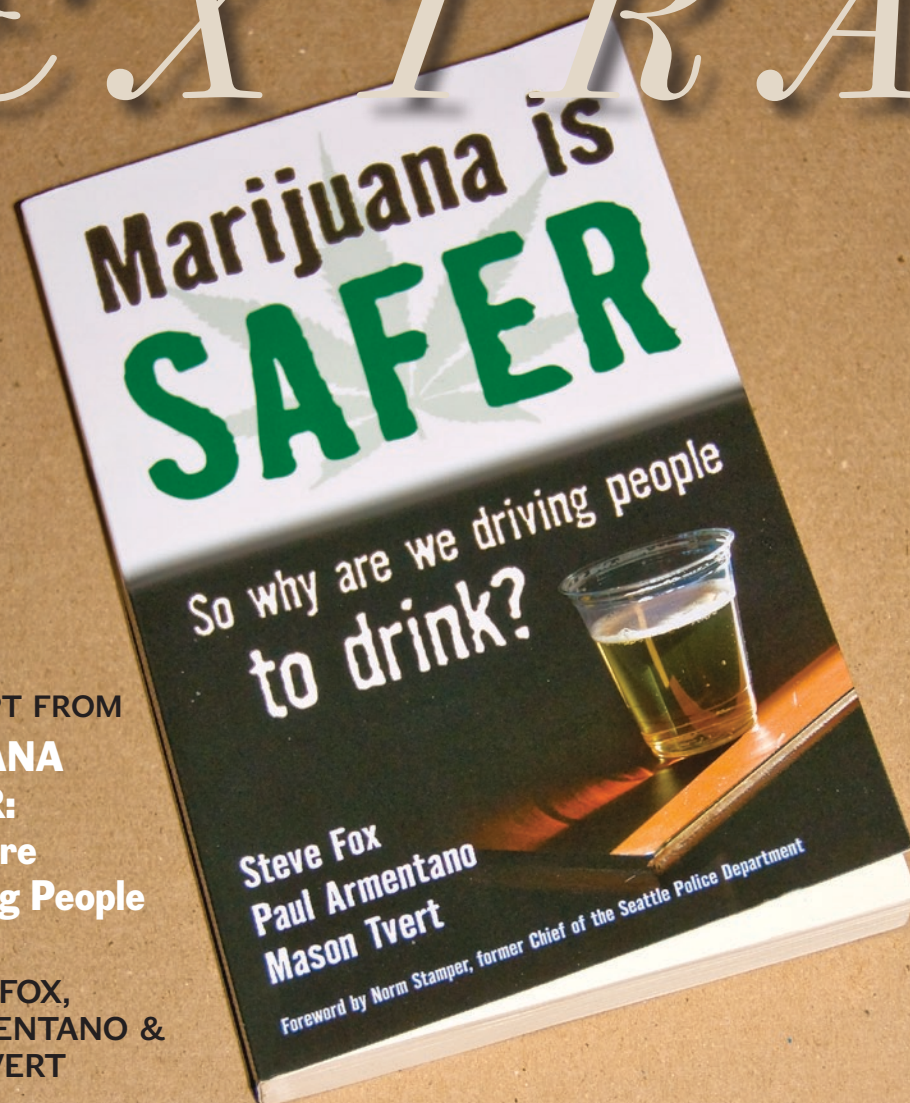


WRITING WORTH READING • ISSUE 39 • SEPTEMBER 2009

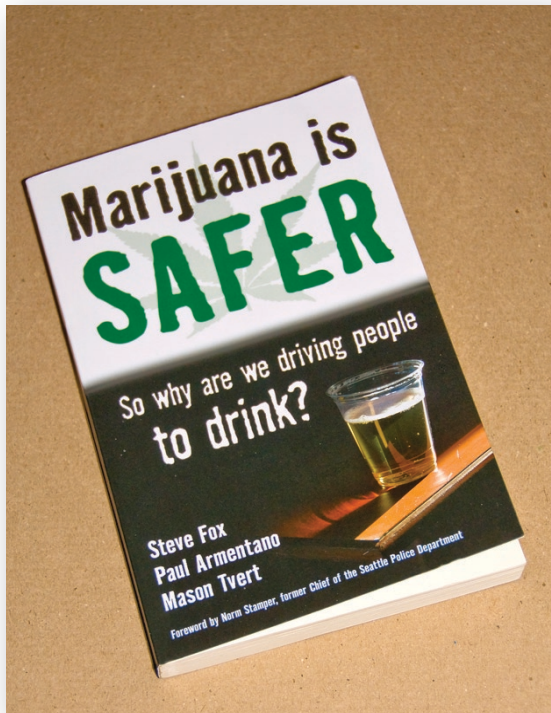
The ^{GoldType} READER EXTRA



AN EXCERPT FROM
**MARIJUANA
IS SAFER:**
So Why Are
We Driving People
To Drink

BY STEVE FOX,
PAUL ARMENTANO &
MASON TVERT

MYTHS ABOUT MARIJUANA



THE AUTHORS

Steve Fox is Director of State Campaigns at MPP, the Marijuana Policy Project – www.mpg.org

Paul Armentano is Deputy Director of NORML, the National Organization for the Reform of Marijuana Laws – www.norml.org

Steve Fox is Executive Director of the Safer Alternative for Enjoyable Recreation, SAFER – www.saferchoice.org

© 2009

This excerpt contains the Introduction and Chapter Five of Marijuana Is Safer: So Why Are We Driving People To Drink?

Paperback: 240 pages. Prize \$14.95 (US)

Publisher: Chelsea Green Publishing

978-1603581448

ColdType

WRITING WORTH READING FROM AROUND THE WORLD

www.coldtype.net

MYTHS ABOUT MARIJUANA

AN EXCERPT FROM
MARIJUANA IS SAFER:
So Why Are We Driving People To Drink
BY STEVE FOX, PAUL ARMENTANO & MASON TVERT

INTRODUCTION

It's June 2004 and the city of Lisbon, Portugal, is preparing for war. Not a literal war, but an epic encounter almost as frightening in its potential for violence: England is playing France in the opening round of the Euro 2004 soccer tournament. But the showdown on the field will be nothing compared to the anticipated battle in the stands and in the streets. Soon the city will be overrun with one of Earth's most dreaded species, the English soccer fan. Branded as "hooligans," these fans are notorious for their drunken antics and their propensity to instigate alcohol-fueled fights, assaults, and, in some extreme cases, all-out riots.

So with 50,000 rabid Frenchmen and Englishmen descending upon this normally quiet town, what were the authorities to do? Ban alcohol? Not a bad guess,

“

If you are quietly smoking and a police officer is 10 meters away, what's the big risk in your behavior?”

but no. Instead, the police announced that French and English soccer fans would not be arrested or sanctioned in any way for smoking marijuana. A spokeswoman for the Lisbon police explained the policy to Britain's *Guardian* newspaper this way: "If you are quietly smoking and a police officer is 10 meters away, what's the big risk in your behavior? I'm not going to tap you on the shoulder and ask 'What are you smoking?' if you are posing no menace to others. Our priority is alcohol."

In large part because of Lisbon's novel approach, the highly anticipated match took place without incident. Police made no arrests during the game, and England's infamous hooligans behaved remarkably peacefully, even in the immediate aftermath of England's 2-1 defeat by its hated rival. Unfortunately, while this social experiment proved successful, it

was short-lived. Later that evening, after English fans had drowned their sorrows at the local pubs, violence erupted among clashing fans, and several hundred people were arrested.

What's surprising about the Lisbon experience is not the outcome, which was predictable, especially since a similar lack of violence was observed when England played a soccer match in the Netherlands (where the possession of marijuana by adults is *de facto* legal) during the Euro 2000 tournament. Rather, it is the lack of attention the story received in the U.S. media and among policy makers. Although the Lisbon experiment was not conducted in a scientifically controlled environment, it nevertheless prompts the question: Would the legalization of marijuana reduce alcohol-related harms in society? In a country where, according to the Department of Justice, alcohol plays a pivotal role in some two-thirds of all cases of violence suffered by an intimate (such as a spouse, boyfriend, or girlfriend), and is responsible for approximately 100,000 sexual assaults among young people each year, this is a serious question deserving of serious discussion.

Ironically, just a few years later, the same American media that turned a collective cold shoulder to Portugal's unique experiment in "pot tolerance" became enamored with a campaign by university presidents to spur a national debate about whether to lower the drinking age in the United States to eighteen. This campaign, dubbed the Amethyst Initiative, "aims to encourage moderation and responsibility as an alternative to the drunkenness and reckless decisions about alcohol that mark the experience of many young Americans." Are these university presidents also pushing for a debate about whether the legal use of



Why do we embrace the use of alcohol, a toxic substance whose consumption is responsible for hundreds of acute alcohol-poisoning deaths in the United States each year, while at the same time condemn the use of marijuana, which is incapable of causing a fatal overdose?

marijuana could provide an alternative to "drunkenness and reckless decisions about alcohol"? Not as of this writing.

So we are left with a puzzling dichotomy. Despite knowing that a large percentage of assaults and injuries on their campuses are related to alcohol, university presidents are still willing to consider lowering the legal drinking age. Yet these same officials will not even *discuss* the idea of granting students the legal right to use a substance that is less likely to lead to violent behavior.

This is just one example of our nation's perpetual double standard surrounding the use of marijuana and alcohol. How did we as a society end up in this position? Why do we criminally arrest or discipline people for consuming a substance that is not associated with acts of violence, yet tolerate and at times even celebrate the use of another that is? Why do we embrace the use of alcohol, a toxic substance whose consumption is responsible for hundreds of acute alcohol-poisoning deaths in the United States each year, while at the same time condemn the use of marijuana, which is incapable of causing a fatal overdose? Although marijuana remains the third most frequently consumed drug of choice in America, trailing in popularity only behind alcohol and tobacco, these questions have never been addressed at length by either the media or America's elected officials. This is about to change.

* * * * *

Americans have a unique, if slightly schizophrenic, relationship with Mary Jane. On one hand, the U.S. government reports that over 100 million U.S. citizens – that's nearly 43 percent of the population over twelve years of age – admit that they've smoked pot. On the other hand,

MYTHS ABOUT MARIJUANA

marijuana possession and recreational use is illegal in all fifty states. (We should note, for factual accuracy, that the private use of marijuana inside the home is legal in Alaska, based on a state court determination that it is protected under a right to privacy. In addition, as of this writing, the medical use of cannabis is legal in thirteen states.) Cannabis has been described – by an administrative law judge at the U.S. Drug Enforcement Administration, no less – as “one of the safest therapeutically active substances known to man.” Yet the federal government stubbornly classifies it under federal law as one of society’s most dangerous drugs. Hollywood actors unabashedly simulate pot smoking in movies and on television, much to audiences’ delight. Meanwhile, this same behavior is criticized and discouraged in government-sponsored public service announcements on the very same screens.

One might wonder how a substance so universally demonized by America’s elected officials remains so popular among the American public. Perhaps the answer is that politicians and the mainstream media are just reinforcing each others’ talking points, while much of the rest of America now accepts marijuana for what it is – a relatively benign substance that is frequently used responsibly by millions of people. Well, that may be the case for a certain segment of the population, but this enlightened attitude is far from universal.

Despite pot’s popularity, surveys indicate that many people – nonusers in particular – tend to overestimate the drug’s actual harms. Not necessarily to the same degree as the federal government, mind you, but nonetheless much of the public still holds many misconceptions about the plant and its effects. In fact,



One might wonder how a substance so universally demonized by America’s elected officials remains so popular among the American public

some one-fifth to one-third of Americans assume that pot is *more harmful* than booze. Another one-third of Americans consider marijuana to be equally as harmful as alcohol.

It is our contention that these misconceptions about pot’s alleged dangers are the primary obstacle to changing marijuana laws in this country. Therefore, our goal is to demonstrate to you, the reader, that marijuana is not only less harmful than alcohol, but that the difference is really quite significant.

This is not to say that cannabis is harmless. No rational person would make this assertion, and indeed we have dedicated a portion of this book to addressing pot’s potential health hazards. Nevertheless, almost all drugs, including many that are legal, pose greater threats to individual health than does marijuana. To date, virtually every federally commissioned government study ever conducted on the subject affirms this conclusion.

But don’t expect your government to highlight this fact or even stay neutral on the issue. Rather, most politicians and law enforcement officials today rely on gross distortions and exaggerations regarding pot’s supposed dangers – call it “Reefer Madness redux” – to justify their failed and destructive prohibitionist policies. In this book, we provide ample scientific evidence contradicting a number of the government’s more popular and egregious marijuana myths. Readers will learn the facts surrounding the alleged “new dangers” of today’s supposedly superpotent pot. We will also examine just how harmful marijuana smoke is to the lungs, and what association, if any, there is between the use of cannabis and harder drugs. The answers may surprise you.

One might ask, if marijuana poses so few legitimate harms to health and soci-

ety – in fact, far fewer than those posed by alcohol – then why does the federal government spend tens of millions of dollars annually on Web sites and public advertising campaigns primarily designed to maintain the criminal prohibition of cannabis? Is the feds’ fixation on pot a moral crusade or part of a larger cultural battle? Regardless of the government’s underlying motivation, it is beyond dispute that politicians and members of law enforcement have systematically demonized pot to such a degree that a significant portion of Americans still support criminalizing the recreational use of marijuana – even though it could lead to the arresting and jailing of their friends, neighbors, and perhaps, even family members.

Of course, the dissemination of anti-marijuana propaganda is not our government’s sole means of marijuana demonization. Where persuasion does not suffice, there is always the threat of punishment. The federal government, as well as every state in the nation (except Alaska), prohibits the possession and cultivation of marijuana for recreational use, with state penalties ranging from \$100 fines (in Ohio) to life in prison (in Oklahoma). Since 1965, police have arrested an estimated twenty million Americans for marijuana-related crimes – mostly for simple possession. This figure is roughly equal to the combined populations of Colorado, Massachusetts, and New Jersey. While a relatively small portion of first-time offenders arrested for marijuana possession are sentenced to time in jail, the fact remains that the repercussions of the arrest alone are significant. The potential sanctions include:

- loss of driving privileges;
- loss of federal college aid;
- loss of personal private property;
- revocation of professional driver’s



Depending on the circumstances, individuals who test positive for having consumed pot at some previous, unspecified point in time may lose their jobs, be suspended from school or barred from participating in extracurricular activities, be forced to enter a “drug treatment” program, have their parole revoked, or even be stripped of an Olympic medal

license;

- loss of certain welfare benefits such as food stamps;
- removal from public housing; and
- loss of child custody.

Cannabis consumers are also subject to additional punishments stemming from the now nearly ubiquitous specter of drug testing. Depending on the circumstances, individuals who test positive for having consumed pot at some previous, unspecified point in time may lose their jobs, be suspended from school or barred from participating in extracurricular activities, be forced to enter a “drug treatment” program, have their parole revoked, or even be stripped of an Olympic medal.

We contend that the ultimate, if unintended, impact of the government’s extreme anti-marijuana laws and propaganda is to push people away from cannabis and toward consuming alcohol. If students learn that they may lose their financial aid if they use cannabis, but will most likely receive a slap on the wrist – at worst – for drinking alcohol while underage, which option are they likely to choose? A similar incentive is created in many workplaces that impose random drug testing. Employees know that they can spend their off-hours drunk as skunks with nothing more to fear than some lost productivity if they arrive to work hungover the next morning. Yet if an employee at the same company is randomly drug tested on Monday after relaxing with friends and enjoying a joint the preceding Friday, he or she may be searching for a new job within the week.

The irony is that these policies implicitly motivate people to use what is an objectively more harmful substance. Studies by the National Academy of Sciences and others have demonstrated that alcohol is

MYTHS ABOUT MARIJUANA

significantly more addictive than marijuana. Moreover, chronic alcohol use, as well as acute intoxication, can lead to organ damage and death. According to the National Institute on Alcohol Abuse and Alcoholism, more than 35,000 Americans die annually as the direct result of alcohol consumption. By contrast, no study to date has ever identified a link between long-term marijuana use and increased mortality – meaning, researchers have not identified *any* way in which long-term marijuana use hastens death.

Alcohol has also been shown, in contrast to marijuana, to fuel aggressive, violent behavior. In one study of domestic violence, researchers found that men were eight times more likely to be abusive on days when they consumed alcohol as compared to days when they did not. Overall, the U.S. government estimates that alcohol contributes to 25 to 30 percent of *all* violent crime in America. In the United Kingdom, the association between alcohol and violence may be even more pronounced. In 2004, the *Guardian* newspaper reported that the police minister planned to “blitz alcohol violence [that coming] summer, in the face of Home Office research showing that alcohol is the root cause of nearly half of all violent crime, and of 70% of hospital emergency and accident admissions at peak times.”

So what can we do to ensure that individuals have the freedom to choose marijuana instead of alcohol without risking arrest, jail, and their very livelihoods? The obvious answer is that we need to amend federal and state laws that criminalize the possession and use of marijuana by adults. But how does one go about doing so?

On this topic we speak from experience, having worked for more than twen-



In one study of domestic violence, researchers found that men were eight times more likely to be abusive on days when they consumed alcohol as compared to days when they did not

ty-three years combined at three of the nation’s most prominent organizations dedicated to reforming marijuana laws – the Marijuana Policy Project (MPP), the National Organization for the Reform of Marijuana Laws (NORML), and Safer Alternative for Enjoyable Recreation (SAFER). Through public-education campaigns, state and federal lobbying efforts, and state and local ballot initiative campaigns, these three groups have helped to diminish antimarijuana sentiment in America. However, prior to the establishment of SAFER in 2005, no organization had single-mindedly engaged in the strategy outlined in this text: that is, a high-profile, public-education campaign focused entirely on the fact that marijuana is objectively safer than alcohol, both for the user and for society.

Past efforts to reform marijuana laws in this country have typically made only passing references to the marijuana-versus-alcohol comparison. Instead, they have emphasized other, more conventional arguments, many of which we will discuss in greater detail later in this book. One such contention is that it is a waste of law enforcement resources to arrest and prosecute marijuana users. Although arguments like this are valid, they have so far failed to convince our elected officials – or even a majority of the American public – to legalize, tax, and regulate marijuana. Instead, reformers are all too often confronted by citizens and elected officials echoing one common refrain: “Why should society legalize another vice?” In essence, much of the public and its elected officials, having witnessed firsthand the many problems associated with alcohol, are hesitant to give a green light to another intoxicant – regardless of what its relative harms may be.

In the face of this obstacle, many ad-

vocates have downplayed discussing the relative harms of the two substances. Instead they have simply argued that marijuana should be “treated like alcohol” – in other words, it should be sold legally and regulated. Although we agree with this conclusion, the call to treat marijuana like alcohol does little to alter the underlying public perception that marijuana is “bad” or “dangerous” and, therefore, is no more than another unnecessary vice. Until we force the public to appreciate that the legalization of marijuana would not be “adding a vice,” but instead would be providing adults with a less harmful recreational alternative, legalization will likely remain – pardon the pun – a pipe dream.

Of course, educating the public about the relative harms of cannabis and alcohol will not be accomplished through a top-down, government-run advertising campaign. It will require a broad movement of citizens willing to speak honestly and openly about the relative harms and benefits of the two substances. We hope this book, which is designed to both educate and inspire, will become an essential part of that movement. Whether you are a cannabis connoisseur seeking to educate friends and family or someone who has never even seen a marijuana plant outside of a television or movie screen, we are certain that you will benefit from reading the pages that follow.

* * * * *

This book is divided into three parts. In part 1 we compare and contrast the so-



Until we force the public to appreciate that the legalization of marijuana would not be “adding a vice,” but instead would be providing adults with a less harmful recreational alternative, legalization will likely remain – pardon the pun – a pipe dream

cial and public health impact of cannabis and alcohol. We examine the popularity of each drug, as well as the potential harms each one presents to the user and to society. Part 2 details the various ways our government has attempted to outlaw and demonize marijuana over the past seventy-plus years, and explains how these policies are driving people to drink. In part 3 we provide an overview of past attempts to reform America’s marijuana laws and propose an alternative, citizen-driven public-education campaign based on the message that marijuana is safer than alcohol. Finally, we offer our vision for a future in which cannabis is regulated and controlled like alcohol, with laws limiting pot’s sales to licensed establishments and mandating the enforcement of proper age controls.

In the latter part of the book, we have also included tips and resources for those of you who want to spread the “marijuana is safer than alcohol” message among your friends, on your campus, or in your communities. If this book touches you, we hope you will join us in our mission to educate the public and help us bring about an end to marijuana prohibition.

Steve Fox
Director of State Campaigns, MPP

Paul Armentano
Deputy Director, NORML

Mason Tvert
Executive Director, SAFER

CHAPTER FIVE

REALITY CHECK: THE TRUTH BEHIND COMMON MARIJUANA MYTHS

As we discussed in chapter 4, the origins of cannabis prohibition were steeped in prejudice, misinformation, and fear mongering. Inflammatory accusations against marijuana and marijuana consumers were typically unsubstantiated, while evidence refuting these claims often went ignored. Troublingly, nearly one hundred years later, little has changed.

Today, the U.S. government and many law enforcement officials continue to justify the need for cannabis prohibition by promoting alarmist myths that distort the truth about marijuana. Some of these distortions, such as the claim that pot smoking is linked to violent and psychotic behavior, date back to the “Reefer Madness” era of the 1930s. Other myths, like the claim that today’s cannabis is highly addictive, are more recent yet equally specious. Nonetheless, this propaganda serves as the basis for the criminal prohibition of marijuana today.

Therefore, what we intend to do in this chapter is to provide you with an advanced course in the truth about mari-



Today, the U.S. government and many law enforcement officials continue to justify the need for cannabis prohibition by promoting alarmist myths that distort the truth about marijuana

juana. In the pages that follow, we will dispel some of the more prominent myths about cannabis by providing sound scientific, health, criminal justice, and economic data. We hope that you will keep these facts in mind the next time you hear government officials spreading lies about cannabis.

MYTH: Today’s marijuana is significantly stronger and thus more dangerous than the marijuana of the past.

“We’re no longer talking about the drug of the 1960s and 1970s. This is Pot 2.0.” – *John P. Walters, U.S. drug czar (2001–8)*

“This ain’t your grandfather’s or your father’s marijuana. This will hurt you. This will addict you. This will kill you.” – *Mark R. Trouville, U.S. Drug Enforcement Agency chief (DEA Miami division)*

FACT: The potency of today’s cannabis is only slightly higher, on

average, than the pot of twenty or thirty years ago. Marijuana's increased potency, however, is not associated with increased health risks.

As best we can interpret it, the implication of the myth of increased pot potency is that the marijuana of past generations was impotent enough to have rendered it largely innocuous – unless of course you were Mexican or African American, in which case it made you violent, insane, and sexually deviant. In fact, those of you reading this who experimented with weed twenty, thirty, or forty years ago *didn't* actually get high; the 1960s and '70s were all just a population-wide placebo effect – or so the “not your father's marijuana” crowd claims.

Prohibitionists argue that today's marijuana is so strong that it will literally blow your mind. Never mind that police and lawmakers made these same dire claims about the suddenly not-as-dangerous-as-we-once-said-it-was pot of the 1960s and '70s. This time, they *really* mean it.

So what does the science say? Is today's pot, on average, significantly stronger than the cannabis that was available some ten, twenty, or thirty years ago? And if so, does this increase in potency make it more harmful to one's health?

According to marijuana-potency data compiled annually the University of Mississippi at Oxford – which has been randomly testing seized samples of cannabis for THC content since the late 1970s – the average amount of THC in domestically produced marijuana is around 5 percent. By comparison, the average THC content of marijuana during the 1980s, as reported by UMiss, hovered around 3 percent. (The federal government did not consistently test the strength of marijuana



Is today's pot, on average, significantly stronger than the cannabis that was available some ten, twenty, or thirty years ago? And if so, does this increase in potency make it more harmful to one's health?

prior to this time, and the small number of samples that were assessed during the late 1970s were primarily sampled from dried Mexican “kilobricks” of atypically low potency.) Does this increased potency equate to an increased safety risk? Not at all.

As we explained previously, THC – regardless of potency – is virtually non-toxic to human cells or organs, and is incapable of causing a fatal overdose. Currently, doctors prescribe Marinol, a legal prescription medication that is 100 percent synthetic THC, and nobody at the drug czar's office seems overly concerned about its health effects. (Nobody at the U.S. Food and Drug Administration is particularly concerned either. In 1999, FDA officials downgraded Marinol from a Schedule II controlled substance to a Schedule III drug – a change made largely because of its low abuse potential and impeccable safety record.)

Furthermore, survey data gleaned from cannabis consumers in the Netherlands – where users may legally purchase pot of known quality – indicates that most cannabis consumers prefer less potent pot, just as the majority of those who drink alcohol prefer beer or wine rather than 190 proof Everclear or Bacardi 151. When consumers encounter unusually strong varieties of marijuana, they adjust their use accordingly and smoke less.

Specifically, a 1989 John Hopkins University study reported that marijuana users readily differentiate between varying strengths of pot, taking “smaller puff and inhalation volumes and shorter puff duration for the high marijuana dose compared to the low dose.” A 2007 University of California study assessing cannabis users' pot intake reaffirmed this conclusion. In short, the stronger the herb, the less smoke consumers inhale into their

MYTHS ABOUT MARIJUANA

lungs. You'd think the drug czar would be celebrating.

MYTH: Using marijuana will inevitably lead to the use of “harder” drugs like cocaine and heroin.

“Marijuana is a gateway drug. In drug law enforcement, rarely do we meet heroin or cocaine addicts who did not start their drug use with marijuana.” – *Karen Tandy, U.S. DEA administrator (2005–7)*

FACT: The overwhelming majority of marijuana users never try another illicit substance.

Predictably, Ms. Tandy neglects to mention that virtually everyone who has ever used cannabis tried tobacco and alcohol first. Of course, it is not our intention to imply that alcohol and cigarettes are any more culpable than pot for driving folks to hard drug use. I believe, however, that it is important to state for the record that, sequentially, virtually all people dabble in the use of these two intoxicants prior to ever experimenting with marijuana. Yet it is hard to imagine that even the most ardent prohibitionist would argue that this sequential correlation would justify criminally prohibiting the use of booze or tobacco by adults.

As for the rest of Ms. Tandy's assertion, it should come as no surprise that the minority of people who use highly dangerous drugs like heroin or crack cocaine have previously used the far more popular and safer drug marijuana. But despite pot's popularity – more than four in ten adults have tried it according to the federal government – Americans' use of other illicit substances remains comparatively low. For example, data provided by



If U.S. policymakers legalized marijuana in a manner similar to alcohol – thereby allowing its sale to be regulated by licensed, state-authorized distributors rather than by criminal entrepreneurs and pushers of various other, hard drugs – the likelihood is that *fewer*, not more, marijuana smokers would ever go on to try any another illicit substance

the U.S. Department of Health and Human Services indicates that only 3.5 percent of U.S. citizens have ever tried crack, and fewer than 2 percent of Americans have ever tried heroin. As for cocaine, the next most commonly used illicit drug in America after cannabis, fewer than 15 percent of Americans have tried it.

But what about those minority of cannabis users who *do* go on to use other illicit drugs? Isn't the pot to blame? Not at all. In fact, experts generally identify “environmental circumstances,” not the prior use of a drug, as the primary reason why a handful of people transition from the use of marijuana to harder drugs. As noted in a report published by the Netherlands Institute of Mental Health and Addiction:

As for a possible switch from cannabis to hard drugs, it is clear that the pharmacological properties of cannabis are irrelevant in this respect. There is no physically determined tendency towards switching from marijuana to harder substances. Social factors, however, do appear to play a role. The more users become integrated in an environment (“subculture”) where, apart from cannabis, hard drugs can also be obtained, the greater the chance that they may switch to hard drugs. Separation of the drug markets is therefore essential.

Or, to put it another way: If U.S. policymakers legalized marijuana in a manner similar to alcohol – thereby allowing its sale to be regulated by licensed, state-authorized distributors rather than by criminal entrepreneurs and pushers of various other, hard drugs – the likelihood is that *fewer*, not more, marijuana smokers would ever go on to try any another illicit substance. In short, it is marijuana prohibition, not the use of marijuana itself, that functions as a gateway to the

potential use of harder drugs.

MYTH: Marijuana is highly addictive. Millions of Americans seek treatment every year because they become dependent upon marijuana.

“Marijuana is a much bigger part of the American addiction problem than most people ... realize. There are now more teens going into treatment for marijuana dependency than for all other drugs combined.” – *John P. Walters, U.S. drug czar (2001–8)*

FACT: Marijuana lacks the physical and psychological dependence liability associated with other intoxicants – including tobacco and alcohol. Very few cannabis users voluntarily seek drug treatment for pot “addiction.” The majority of marijuana smokers in drug treatment were arrested for pot possession and ordered into treatment as a condition of their probation.

Is cannabis addictive? All of us have probably known at least one person in our lives who we thought “smoked too much pot.” But there is certainly a difference between doing something too much (in the opinion of others) and being addicted. Are marathoners “addicted” to running? Are Red Sox season ticket holders “addicted” to baseball? Putting aside these analogies for a moment, let’s look at what the science tells us. Numerous reports, including one by the prestigious British medical journal the *Lancet* and another cited in the *New York Times*, have found cannabis’s risk of physical or psychological dependence to be mild compared to most other drugs, including



Numerous reports, including one by the prestigious British medical journal the *Lancet* and another cited in the *New York Times*, have found cannabis’s risk of physical or psychological dependence to be mild compared to most other drugs, including alcohol and tobacco

alcohol and tobacco. In fact, two experts in the field – Drs. Jack E. Henningfield of the U.S. National Institute on Drug Abuse and Neal L. Benowitz of the University of California at San Francisco – reported to the *New York Times* that pot’s addiction potential is no greater than caffeine’s.

Pot’s relatively low risk of dependency was affirmed by the nonpartisan National Academy of Sciences Institute of Medicine, which published a comprehensive federal study in 1999 assessing marijuana’s impact upon health. Its authors determined, “[M]illions of Americans have tried marijuana, but most are not regular users [and] few marijuana users become dependent on it.” The researchers added, “[A]lthough [some] marijuana users develop dependence, they appear to be less likely to do so than users of other drugs (including alcohol and nicotine), and marijuana dependence appears to be less severe than dependence on other drugs.”

How less likely? According to the 267-page report, fewer than 10 percent of those who try cannabis ever meet the clinical criteria for a diagnosis of “drug dependence” (based on DSM-III-R criteria). By contrast, investigators reported that 32 percent of tobacco users, 23 percent of heroin users, 17 percent of cocaine users, and 15 percent of alcohol users meet the criteria for “drug dependence.”

But what about the oft-repeated claims that more people are in drug treatment for pot than for all other drugs combined? As usual, the devil is in the details. According to published statistics, up to 70 percent of all Americans enrolled in drug “treatment” for cannabis were ordered there by the criminal justice system.¹⁶ By no definition are these people “addicts” in any literal sense of the word. According to 2006 statistics provided by the U.S.

MYTHS ABOUT MARIJUANA

government Substance Abuse Mental Health Services Association (SAMHSA), more than one-third of those in treatment for pot *hadn't even used the drug* in the thirty days prior to admission. Rather, they are average Americans who have experienced the misfortune of being busted for possessing a small amount of weed who are forced to choose between rehab or jail. Yet, prohibitionists disingenuously claim that these admission rates justify the need to continue arresting pot users – even though they are well aware that it is America's marijuana *policy*, not marijuana use – that is fueling the surge in drug treatment.

MYTH: Smoking cannabis is more harmful to health than smoking tobacco and causes lung cancer.

“Someone who smokes marijuana regularly may have many of the same respiratory problems that tobacco smokers do. . . . Marijuana has the potential to promote cancer of the lungs and other parts of the respiratory tract because marijuana smoke contains 50 percent to 70 percent more carcinogenic hydrocarbons than does tobacco smoke.”

– *U.S. Drug Enforcement Administration*

FACT: Smoking cannabis is not associated with higher incidences of lung cancer or any other types of cancer. Compounds in marijuana may even be protective against the spread of various forms of cancer.

Okay, first the bad news. Inhaling noxious smoke of any kind, including cannabis smoke, isn't good for you. Like tobacco smoke, marijuana smoke contains levels of select polycyclic aromatic hydrocarbons (though, unlike the DEA claims, most of these agents are present in mari-



Cannabis consumers can greatly reduce or eliminate their consumption of most, if not all, of these unwanted elements by engaging in vaporization rather than smoking

juana smoke at levels *lower* than those found in cigarette smoke.)

Now for the good news. Cannabis consumers can greatly reduce or eliminate their consumption of most, if not all, of these unwanted elements by engaging in vaporization rather than smoking. Cannabis vaporization heats marijuana to a temperature where active cannabis vapors form, but below the point of combustion – therefore enabling consumers to significantly reduce their intake of gaseous combustion toxins, including carbon monoxide. In 2007, a team of investigators at San Francisco General Hospital in California compared the combustible contents of smoked marijuana cigarettes to pot vapors. They determined: “Vaporization of marijuana does not result in exposure to combustion gases and [was] preferred by most subjects compared to marijuana cigarettes. . . . [It] is an effective and apparently safe vehicle for THC delivery.”

Of course, most marijuana consumers don't have access to a vaporizer. In fact, federal and statewide prohibitions outlawing the use of so-called drug paraphernalia make the use and possession of marijuana vaporizers illegal in most places. So then, is the average pot smoker at risk for developing cancer?

The answer to this question, as of this writing, appears to be no. Unlike tobacco smoking, marijuana inhalation has not been positively associated with increased incidences of cancers of the lung, mouth, upper aerodigestive tract (e.g., pharynx, larynx, or esophagus), breast, colon, skin, or prostate.

In 2006, the results of the largest case-controlled study ever to investigate the respiratory effects of marijuana smoking reported that pot use was not associated with lung-related cancers, even

among subjects who reported smoking more than 22,000 joints over their lifetime. “We hypothesized that there would be a positive association between marijuana use and lung cancer, and that the association would be more positive with heavier use,” the study’s lead researcher, Dr. Donald Tashkin of the University of California at Los Angeles, told the *Washington Post*. “What we found instead was no association at all, and even a suggestion of some protective effect” among marijuana smokers who had lower incidences of cancer compared to nonusers of the drug.

MYTH: Smoking marijuana impairs driving in a manner that is worse than alcohol. Marijuana consumption is responsible for tens of thousands of traffic accidents every year.

“The extent of the problem of marijuana-impaired driving is startling. . . . Marijuana smoking [has] disastrous effects . . . on driving.” – *Karen Tandy, U.S. DEA administrator (2005–7)*

FACT: Marijuana intoxication appears to play, at most, a minor role in traffic injuries.

While it is well established that alcohol consumption increases motor vehicle accident risk, evidence of marijuana’s culpability in on-road driving accidents and injury is nominal by comparison. That’s not to say that smoking marijuana won’t temporarily impair psychomotor skills. Given a strong enough dose, it most certainly will. However, pot’s psychomotor impairment is seldom severe or long lasting, and variations in driving behavior after marijuana consumption are notice-



Pot’s psychomotor impairment is seldom severe or long lasting, and variations in driving behavior after marijuana consumption are noticeably less pronounced than the impairments exhibited by drunk drivers

ably less pronounced than the impairments exhibited by drunk drivers.

Unlike motorists under the influence of alcohol, individuals who have recently smoked pot are aware of their impairment and try to compensate for it accordingly, either by driving more cautiously or by expressing an unwillingness to drive altogether. As reported in a 2008 Israeli study assessing the impact of marijuana and alcohol on driving performance, “[S]ubjects seemed to be aware of their impairment after THC intake and tried to compensate by driving slower; alcohol seemed to make them overly confident and caused them to drive faster than in control sessions.”

A previous report by Toronto’s Centre for Addiction and Mental Health reached a similar conclusion, finding: “[S]ubjects who have received alcohol tend to drive in a more risky manner. The more cautious behavior of subjects who have received marijuana decreases the impact of the drug on performance, whereas the opposite holds true for alcohol.”

Of course, none of this information is meant to imply that smoking marijuana makes you a “safe” driver. Smoking marijuana can alter driving performance. In closed-course and driving-simulator studies, marijuana’s acute effects on driving include minor impairments in tracking (eye-movement control) and reaction time, as well as variation in lateral positioning, headway (drivers under the influence of cannabis tend to follow less closely the vehicle in front of them), and speed (as previously noted, drivers tend to decrease speed following cannabis inhalation). Moreover, a handful of studies have reported a positive association between very recent cannabis exposure and a gradually increased risk of vehicle accident, though this increased risk is

MYTHS ABOUT MARIJUANA

far lower than the risk presented by the consumption of even small amounts of alcohol.

For example, a 2007 case-control study published in the *Canadian Journal of Public Health* reviewed ten years of U.S. auto-fatality data. Investigators found that U.S. drivers with blood alcohol levels of .05, a level *below* the legal limit for intoxication in the United States, experienced an elevated crash risk that was more than *three times higher* than individuals who tested positive for marijuana. A prior review of auto accident fatality data from France reported similar results, finding that drivers who tested positive for *any* amount of alcohol had a *four times greater* risk of having a fatal accident than did drivers who tested positive for marijuana.²⁹ Both studies noted that, overall, few traffic accidents appeared to be attributed to a driver's operating a vehicle while impaired by cannabis.

To summarize, a motorist who has just smoked marijuana is a safer driver than one who has just consumed alcohol (even quantities of alcohol that are well within the legal limit for drinking and driving in most countries), but he or she is arguably not a “safe” driver. As with alcohol or most over-the-counter cold remedies, cannabis consumers are best advised to abstain from operating a motor vehicle for several hours after imbibing, and they should always designate at least one person to act as a sober designated driver.

MYTH: Smoking marijuana causes permanent damage to the brain.

“Long-term effects of using marijuana include ‘burnout’ . . . and permanent damage to thinking skills” – *Syndistar/Fox Pro Media antidrug educational pamphlet*



As with alcohol or most over-the-counter cold remedies, cannabis consumers are best advised to abstain from operating a motor vehicle for several hours after imbibing, and they should always designate at least one person to act as a sober designated driver

FACT: Marijuana use by adults – even long-term, heavy use of the drug – has, at most, only a negligible residual impact on cognition and memory skills.

Of all of the myths surrounding marijuana use, the allegation that smoking pot will cause permanent brain damage is the most pervasive. Yet there is little-to-no scientific evidence to substantiate it.

Unlike alcohol, marijuana use – even heavy use – appears to have, at most, only “subtle” effects on brain development. In 2009, investigators at San Diego State University and the University of California at San Diego reported:

Recent research has indicated that adolescent substance users show abnormalities on measures of brain functioning, which is linked to changes in neurocognition over time. Abnormalities have been seen in brain structure volume, white matter quality, and activation to cognitive tasks, even in youth with as little as one to two years of heavy drinking and consumption levels of 20 drinks per month, especially if [more than] four or five drinks are consumed on a single occasion. Heavy marijuana users show some subtle anomalies too, but generally not the same degree of divergence from demographically similar non-using adolescents.

Further, in adults cannabis consumption is not associated with residual deficits in cognitive skills, as measured by magnetic resonance imaging, neurocognitive performance testing, or functional magnetic resonance imaging.

For example, Harvard Medical School researchers performed magnetic resonance imaging on the brains of long-term cannabis users (reporting a mean of 20,100 lifetime episodes of smoking)

and controls (subjects with no history of cannabis use). Imaging displayed “no significant differences” between heavy marijuana smokers compared to non-smokers.

Additional clinical trials have reported similar results. An October 2004 study published in the journal *Psychological Medicine* examined the potential adverse effects of marijuana on cognition in monozygotic male twins. It reported “an absence of marked long-term residual effects of marijuana use on cognitive abilities.” Likewise, a 2002 clinical trial published in the *Canadian Medical Association Journal* determined, “Marijuana does not have a long-term negative impact on global intelligence.”

Though a handful of studies have reported that current marijuana users sometimes score slightly lower than nonusers on certain cognitive tests, these same studies also report that cannabis consumers score the same as nonusers once they have abstained from the drug for several days or weeks. Notably, a 2001 study published in the journal *Archives of General Psychiatry* found that long-term cannabis smokers who abstained from the drug for one week “showed virtually no significant differences from control subjects (those who had smoked marijuana less than 50 times in their lives) on a battery of 10 neuropsychological tests.” Investigators further added, “Former heavy users, who had consumed little or no cannabis in the three months before testing, [also] showed no significant differences from control subjects on any of these tests on any of the testing days.”

Far from damaging the brain, it appears that many of the active components in marijuana may, in some instances, actually be good for it. Scientific studies indicate that pot’s ingredients can prevent



Far from damaging the brain, it appears that many of the active components in marijuana may, in some instances, actually be good for it. Scientific studies indicate that pot’s ingredients can prevent against brain damage due to stroke, traumatic brain injury, and ironically enough, alcohol poisoning

against brain damage due to stroke, traumatic brain injury, and ironically enough, alcohol poisoning. Recently, researchers at the University of Saskatchewan in Saskatoon, Canada, reported that the administration of synthetic cannabinoids in rats stimulated the proliferation of newborn neurons (nerve cells) in the hippocampus region of the brain. The results stunned investigators, who noted that virtually all other psychoactive substances – including alcohol, cocaine, nicotine, and opiates – *suppress* rather than promote neurogenesis. “This is quite a surprise,” team investigator Xia Zhang told the Canadian newspaper the *Globe and Mail*. “Chronic use of marijuana may actually improve learning memory when the new neurons in the hippocampus can mature in two or three months.”

MYTH: Smoking marijuana is linked to violence and psychotic behavior.

“Boy on Skunk Cannabis Butchered Grandmother”

“Cannabis Drove Brighton Man to Kill Himself”

“Cannabis Users Risk Their Sanity”

– *Assorted British tabloid newspaper headlines between 2007–8, as compiled by the authors*

FACT: Smoking cannabis does not cause the user to engage in violent or delinquent behavior. Marijuana does not appear to be a cause of mental illness in otherwise healthy individuals.

If you think the headlines above were plucked from 1937, think again. Yes, it’s true: some myths never die.

Despite decades of anecdotal claims,

MYTHS ABOUT MARIJUANA

no credible research has shown marijuana use to be a causal factor in violence, aggression, or delinquent behavior. As concluded by the National Commission on Marihuana and Drug Abuse, “[M]arihuana is not generally viewed by participants in the criminal justice community as a major contributing influence in the commission of delinquent or criminal acts.”

More recently, a 2002 Canadian Special Senate Committee review affirmed: “Cannabis use does not induce users to commit other forms of crime. Cannabis use does not increase aggressiveness or anti-social behavior.” By contrast, research has demonstrated that certain legal drugs, such as alcohol, do induce aggressive behavior.

“Cannabis differs from alcohol . . . in one major respect. It does not seem to increase risk-taking behavior,” the British Advisory Council on the Misuse of Drugs concluded in 2002. “This means that cannabis rarely contributes to violence either to others or to oneself, whereas alcohol use is a major factor in deliberate self-harm, domestic accidents and violence.”

More recently, a logistical retrogression analysis of approximately nine hundred trauma patients by SUNY-Buffalo’s Department of Family Medicine reported



Fewer than 5 percent of state and local law enforcement agencies in the United States identify marijuana as a drug that significantly contributes to violent crime in their areas

that use of cannabis is not independently associated with either violent or nonviolent injuries requiring hospitalization. Alcohol and cocaine use were associated with violence-related injuries, the study found. Accordingly, fewer than 5 percent of state and local law enforcement agencies in the United States identify marijuana as a drug that significantly contributes to violent crime in their areas.

Attempts to link marijuana use and the development of mental illness in otherwise healthy adults are equally specious. A comprehensive review by the British Advisory Council on the Misuse of Drugs determined, “The evidence for the existence of an association between frequency of cannabis use and the development of psychosis is, on the available evidence, weak.” Additionally, a 2005 University of Oxford meta-analysis regarding cannabis use and its impact on mental health reported that marijuana smoking, even over the long term, will not cause “any lasting physical or mental harm. . . . Overall, by comparison with other drugs used mainly for ‘recreational’ purposes, cannabis could be rated to be a relatively safe drug.”

In short, smoking pot won’t make you crazy – that is, unless you’re the drug czar or the head of the DEA, in which case all bets are off.

WRITING WORTH READING FROM AROUND THE WORLD

ColdType

www.coldtype.net