

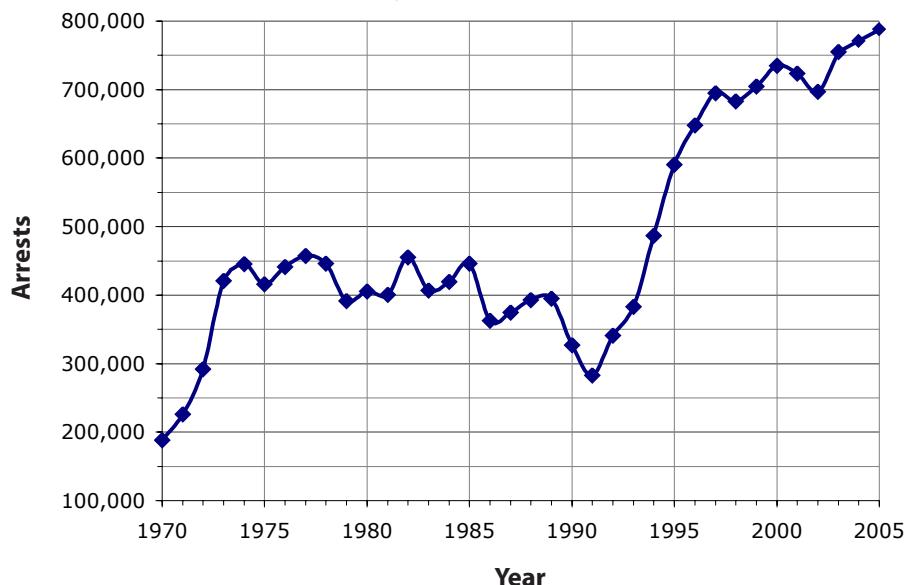
# Does Prohibition of Marijuana for Adults Curb Use by Adolescents?

Marijuana Policy Project Foundation

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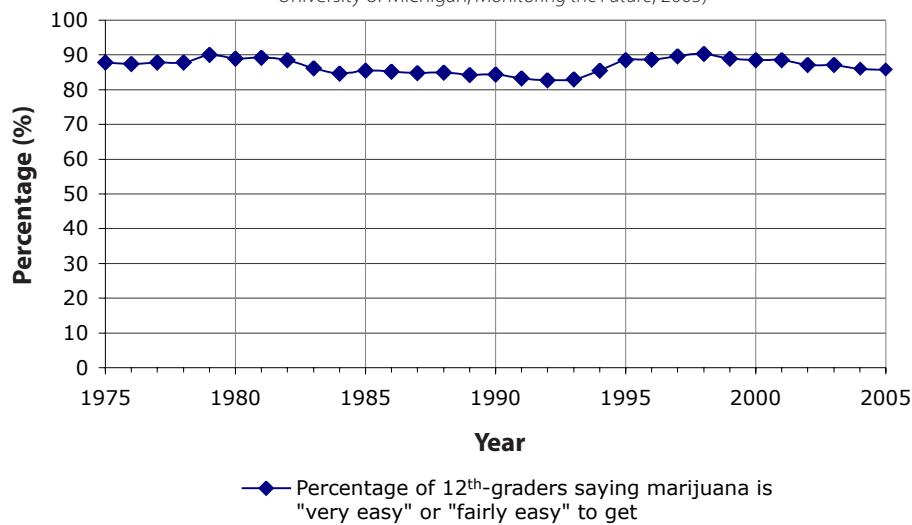
## U.S. Marijuana Arrests

(Source: FBI, *Uniform Crime Reports*) Note: Approximately 88% of arrests are for possession, not sale or manufacture.



## U.S. Marijuana Availability as Reported by 12<sup>th</sup>-Graders

(Source: U.S. Department of Health and Human Services/  
University of Michigan, *Monitoring the Future*, 2005)



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## **EXECUTIVE SUMMARY**

U.S. government officials frequently argue that prohibiting marijuana use by adults is necessary to curb, and hopefully eliminate, marijuana use by teenagers. But empirical evidence contradicts this assumption and, in fact, shows that marijuana prohibition may actually be responsible for increasing teen marijuana use.

- Marijuana prohibition has not prevented a dramatic increase in marijuana use by teenagers. In fact, the overall rate of marijuana use in the United States has risen by roughly 4,000% since marijuana was first outlawed. In the latest federal Monitoring the Future survey, 16.5% of eighth-graders reported having tried marijuana.
- Independent studies by RAND Europe and the U.S. National Research Council have reported that marijuana prohibition appears to have little or no impact on rates of use.
- For three decades running, about 85% of U.S. high school seniors have reported that marijuana is “easy to get,” despite a near-tripling of marijuana arrests since 1991.
- Since Britain ended most marijuana possession arrests in 2004, the rate of past-year marijuana use among 16-to-19-year-olds has *dropped* from 24.7% to 21.8%.
- In the U.S., rates of teen marijuana use in states that have decriminalized adult marijuana possession are statistically equal to rates in those that have retained criminal penalties. The latest state to decriminalize marijuana, Nevada, has seen a drop in teen marijuana use since the decriminalization law took effect in 2001.
- In the Netherlands, where adults have been allowed to possess and purchase small amounts of marijuana from legally regulated merchants since 1976, the overall rate of marijuana use remains less than half that in the U.S.
- Government surveys consistently report rates of marijuana use by U.S. teens to be as high or higher — often much higher — than teens in the Netherlands.
- Paradoxically, prohibition may increase the lure of marijuana for young people and diminish the effects of anti-drug education by forcing educators to make claims that teens recognize as false.
- Prohibition may encourage progression to hard drugs — the so-called “gateway effect” — by putting marijuana into the same illicit market as drugs like cocaine and methamphetamine. In the U.S., the rate of past-month cocaine use among 15-to-16-year-olds is triple that of their Dutch counterparts, and U.S. teens are nine times more likely to use amphetamines than are Dutch teens.

## **INTRODUCTION**

As more and more communities experiment with forms of marijuana decriminalization — including the five local jurisdictions that voted in November 2006 to make marijuana-related offenses the lowest priority for law enforcement — opponents of marijuana policy reform often argue that allowing adult marijuana possession, even under a regulated system similar to that used for alcohol, would lead to increased use by adolescents. Thus, they argue, marijuana must be prohibited for adults in order to protect young people. (Mainstream drug policy reform organizations universally agree that laws barring the sale or distribution of marijuana to minors and marijuana possession by minors should remain in force.)

Such assertions are so widely accepted that they often are treated as self-evident. But are they accurate? The Marijuana Policy Project Foundation undertook an extensive review of the available data, and our findings suggest that marijuana prohibition has done little to curb marijuana use by young people. In some ways, prohibition may actually encourage use of marijuana by young people and contribute to the subsequent use of more dangerous and addictive substances, the so-called “gateway effect.”

## **I. MARIJUANA PROHIBITION AND USE: THE BIG PICTURE**

Most Americans have lived their entire lives under laws prohibiting the possession, sale, and cultivation of marijuana, but in historical terms, marijuana prohibition is a relatively new social experiment. Although marijuana has been used by humans for thousands of years, widespread prohibition did not come about until well into the 20th century. In the United States, national marijuana prohibition began with the Marijuana Tax Act of 1937. Many other countries also introduced prohibition in the early-to-mid-20<sup>th</sup> century.

Before looking at the specific question of marijuana use by young people, we first examine the overall record of marijuana prohibition. Has this relatively new policy generally succeeded in curbing the drug's use and availability?

Of course, the scientifically ideal experiment to determine the relationship between marijuana laws and teen marijuana use has never been done and — due to practical, political, and ethical considerations — never will be done. In such an experiment, two randomly selected nations (or states/provinces), matched as closely as possible for demographics, social/cultural influences, etc., would be randomly assigned to two different legal regimens for marijuana. One would get a prohibitionist system similar to the U.S., while the other would be assigned a different approach, perhaps one in which marijuana is legally regulated for adults in a manner similar to alcohol. Over a period of decades, researchers would monitor the levels of adolescent marijuana use in both societies. As an additional check, after a predetermined period, the two nations would switch systems and marijuana use rates would be monitored for a further time period.

Since that experiment is unlikely to ever happen, the best that observers can do is look at the evidence that has accumulated over the last century as the U.S. and other nations have tried various approaches to marijuana policy. While these data are not as "clean" as the hypothetical experiment above, there is a wealth of information available.

### **The U.S. Before and During Marijuana Prohibition**

By nearly all accounts, marijuana use in the United States was rare in the pre-prohibition era, and in large sections of the U.S., marijuana was virtually unknown.<sup>1</sup>

The rarity of marijuana use in the pre-prohibition era was verified in a 1996 report from the U.S. Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA), based on data from the 1991, 1992, and 1993 National Household Surveys on Drug Abuse (NHSDA). NHSDA participants were asked the age at which they first used various drugs, and SAMHSA researchers used these responses to retrospectively determine incidence rates over time for use of various substances. These estimates are divided by birth cohort, beginning with individuals born from 1919 to 1929, before the advent of marijuana prohibition.

Only 1.2% of persons born in this earliest age cohort tried marijuana even once by age 35. For those born from 1941 to 1945, the figure had jumped to 24.1%. For every birth cohort from 1951 forward, more than 50% had used marijuana by age 35.<sup>2</sup> Put another way, during the era of marijuana prohibition, use of marijuana by Americans under 35 (who have traditionally been the largest proportion of users) increased by more than 4,000%.

Federal officials sometimes point to recent declines in marijuana use as evidence of progress toward the goal of marijuana "eradication," but present U.S. marijuana use rates remain high by historical standards. The 2005 National Survey on Drug Use and Health (NSDUH, the successor to NHSDA), released in August 2006, reported that 97.5 million Americans admit to having used marijuana, an all-time record figure that comprises over 40% of the U.S. population age 12 and over.<sup>3</sup>

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1. Richard J. Bonnie and Charles Whitehead, "The Forbidden Fruit and the Tree of Knowledge: An Inquiry into the Legal History of American Marijuana Prohibition," Schaffer Library of Drug Policy, [www.druglibrary.org/schaffer/LIBRARY/studies/vlr/vlr2.htm](http://www.druglibrary.org/schaffer/LIBRARY/studies/vlr/vlr2.htm), accessed 11-10-06.
  2. Robert A. Johnson et al., "Trends in the Incidence of Drug Use in the United States, 1919-1992," Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, 1996, p. 83.
  3. Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, National Survey on Drug Use and Health, tables G.1 and G.2.

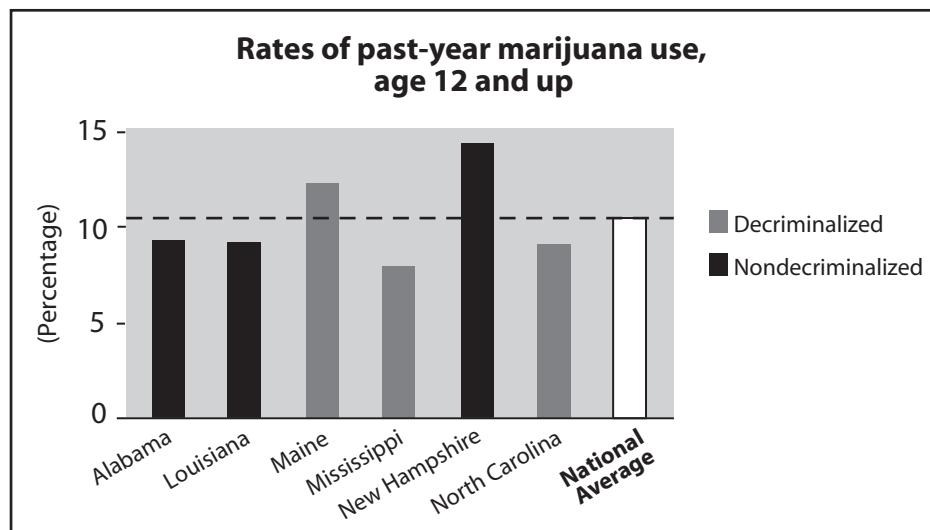
## Marijuana Decriminalization in the U.S. and Australia

Another way to gauge the effectiveness of marijuana prohibition is to compare use rates in countries, states, and provinces with varying legal regimes and by doing before-and-after comparisons when laws or policies are changed. A number of locations in the U.S. and elsewhere have “decriminalized” marijuana, replacing arrest and jail for marijuana possession with noncriminal sanctions, such as a warning or fine but without an arrest, booking, and trial. Numerous studies comparing marijuana use under differing legal schemes have been done in the U.S., Europe, and Australia.

While other factors can affect usage rates as well — meaning that such comparisons must be approached with a degree of caution — there is surprising unanimity in the scientific literature that decriminalization has had little effect on rates of use. In a report prepared for the government of the Netherlands, RAND Europe stated: “Our overall conclusion is that the evidence does not support the notion that policy and prevalence of cannabis use are strongly connected. However, neither does the evidence support a definitive lack of connection, but the weight of the evidence leans toward a lack of connection.”<sup>4</sup>

In the U.S., the National Research Council (NRC) reached a similar conclusion in 2001, in a report commissioned by the White House: “In summary, existing research seems to indicate that there is little apparent relationship between severity of sanctions prescribed for drug use and prevalence or frequency of use, and that perceived legal risk explains very little in the variance of individual drug use.” The bulk of the evidence cited by NRC in support of this conclusion comes from studies of “the impact of decriminalization on the prevalence of marijuana use among youths and adults” in the U.S. and Australia.<sup>5</sup>

In the U.S., rates of marijuana use vary widely from state to state, but these variations seem to depend more on geographical, cultural, or social factors than on legal penalties. Overall, according to the latest state statistics available from NSDUH, past-year marijuana use averaged 10.96% in the 11 decriminalized states, a statistical tie with the 10.6% national average. In the south, the nation’s most religious and culturally conservative region, marijuana use generally runs below the national average, but again the severity of laws seems to have little impact. In Mississippi, a decriminalized state, 7.83% of those aged 12 and up reported using marijuana in the past year. Next door in Alabama and Louisiana, both of which continue to jail marijuana users, the rates were 9.01% and 8.93%, respectively.<sup>6</sup>



4. Mirjan van het Loo et al., “Cannabis Policy, Implementation and Outcomes,” RAND Europe, 2003, p. xi.

5. Charles F. Manski, John V. Pepper, and Carol V. Petrie, “Informing America’s Policy on Illegal Drugs: What We Don’t Know Keeps Hurting Us,” National Research Council, National Academy Press, 2001, p. 192-193.

6. Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, “State Estimates of Substance Use From the 2003-2004 National Surveys on Drug Use and Health,” April 4, 2006, Table B.2.

Australia, like the U.S., has seen some states decriminalize marijuana possession, while others have retained criminal penalties, including jail. Studies by both government-funded and private researchers have consistently found that decriminalization had little or no effect on marijuana use rates<sup>7</sup>, with one researcher stating flatly, “[I]t is now beyond reasonable doubt that applying criminal sanctions for minor cannabis offenses does not deter cannabis use.”<sup>8</sup>

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DOES NOT DETER CANNABIS USE.”**

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## **Regulated Marijuana Sales in the Netherlands**

Since 1976, the cultivation, sale, and possession of small amounts of marijuana have been officially tolerated by the government of the Netherlands. While technically illegal, a written policy of “tolerance” has permitted hundreds of retail marijuana businesses (“coffee shops”) to operate with impunity. The anti-marijuana laws are only enforced against those creating a nuisance or violating quantity limits. Sales of hard drugs and sales to minors are strictly forbidden.

As in the U.S., Dutch marijuana use rates have risen and fallen in the last 30 years. Overall, though, marijuana use rates in the Netherlands remain dramatically lower than in the U.S. The latest Dutch government figures, from 2001, show that 17% of Netherlands residents age 12 and up have ever used marijuana.<sup>9</sup> In contrast, 40.1% of Americans aged 12 and up have used marijuana.<sup>10</sup>

A detailed comparison of youth marijuana use rates in the Netherlands and the U.S. appears in Section II.

## **After Over Half a Century of Prohibition Worldwide, Marijuana “Is Everywhere”**

What is unmistakable from both U.S. and international data is that during the prohibition era, marijuana use has become pervasive in much of the world, and the drug has become readily available to people of all ages. In January 2006, the U.S. Justice Department reported, “Most national-level data and law enforcement reporting indicate that marijuana availability is high and stable or increasing slightly.”<sup>11</sup> This occurred despite near-record seizures of marijuana plants and processed marijuana by law enforcement in 2004 and 2005<sup>12</sup> and despite an all-time record number of U.S. marijuana arrests in 2005.<sup>13</sup>

In its 2006 annual report, the United Nations Office on Drugs and Crime stated simply: “Cannabis is everywhere.”<sup>14</sup>

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7. Neil Donnelly, Wayne Hall and Paul Christie, “Effects of the Cannabis Expiation Notice Scheme on Levels and Patterns of Cannabis Use in South Australia: Evidence from the National Drug Strategy Household Surveys 1985-1995,” Commonwealth of Australia, National Drug Strategy, Monograph No. 37, 1999.
  8. Simon Lenton, “Cannabis Policy and the Burden of Proof: Is It Now Beyond Reasonable Doubt that Cannabis Prohibition Is Not Working?” *Drug and Alcohol Review*, March 2000, p. 95-100.
  9. The Netherlands National Drug Monitor Annual Report 2005, Trimbos Institute, 2006, table 2.1.
  10. Substance Abuse and Mental Health Services Administration, *ibid*, table G.2.
  11. National Drug Intelligence Center, U.S. Department of Justice, “National Drug Threat Assessment 2006,” January 2006.
  12. *Ibid.*
  13. Federal Bureau of Investigation, “Crime in the United States 2005,” September 2006, Table 29 and Arrest Table: Arrests for Drug Abuse Violations.
  14. United Nations Office on Drugs and Crime, “2006 World Drug Report,” 2006, p. 158.

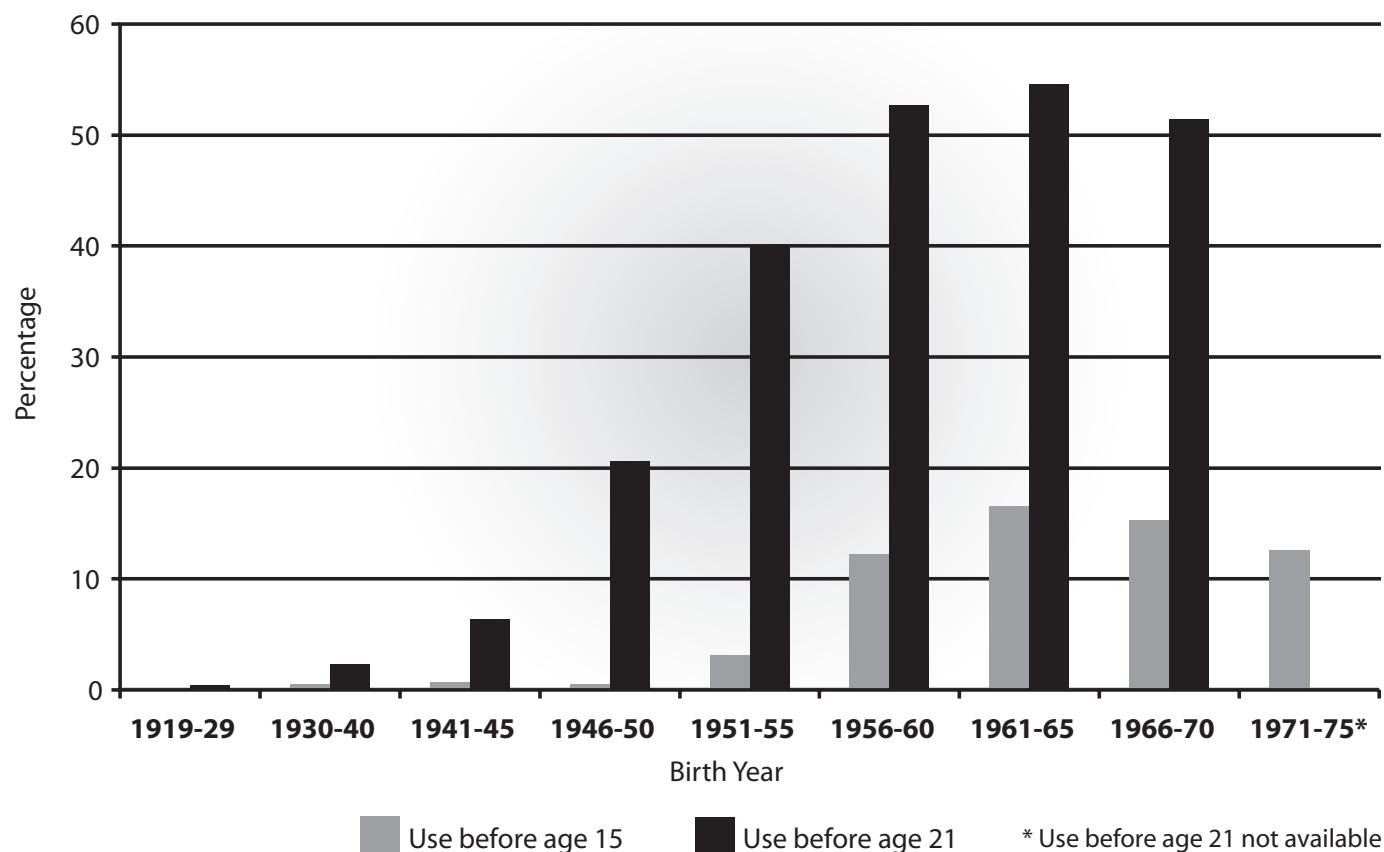
## **II. ADOLESCENT MARIJUANA USE IN THE PROHIBITION ERA**

### **Youth Marijuana Use in the U.S. Since Prohibition**

As noted in Section I, marijuana use in the U.S. was uncommon prior to the advent of national marijuana prohibition in 1937. This was at least as true for teenagers as it was for adults. SAMHSA's 1996 analysis determined the proportions of young people born in various eras who had used marijuana before age 15 and before age 21. Of those born between 1919 and 1929 (many of whom would have turned 15 before marijuana prohibition was instituted), 0.0% had used marijuana before age 15, and only 0.4% had tried it before age 21.

The proportion of Americans trying marijuana increased slowly but steadily through the World War II era: Of those born from 1941 to 1945, 0.7% had used marijuana before age 15 and 6.4% had used it before age 21. In later years, marijuana use exploded. In all birth cohorts from 1956 through 1975 (the last year investigated in SAMHSA's study), over 50% had used marijuana before age 21.<sup>15</sup>

### **Percent of Total Population Using Marijuana Before Ages 15 and 21**



Government surveys have continued to show very high rates of teen marijuana use in the U.S. The 2005 NSDUH found that 8% of eighth-graders, 24.5% of tenth-graders, and 38.7% of twelfth-graders reported having ever used marijuana, with 2.6%, 9.0%, and 15.1%, respectively, having used it in the past month. Another federally funded survey, Monitoring the Future (MTF), reported even higher numbers, with 16.5% of eighth-graders, 34.1% of tenth-graders, and 44.8% of twelfth-graders having used marijuana at least once. For past-month use, the figures were 6.6%, 15.2%, and 19.8%, respectively.<sup>16</sup>

15. Robert A. Johnson, *ibid*.

16. Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, National Survey on Drug Use and Health, 2005, table D.1.

A third survey, the U.S. Centers for Disease Control and Prevention's semi-annual Youth Risk Behavior Surveillance (YRBS), reported yet higher rates of youth marijuana use in 2005. YRBS does not report data for eighth-graders but found that 37.4% of tenth-graders and 47.6% of twelfth-graders reported having used marijuana, with past-month figures of 20.2% and 22.8%, respectively.<sup>17</sup>

U.S. government officials have sometimes touted recent declines in teen marijuana use as an indication of progress, but these declines have generally been modest, and use rates remain high in historical terms. Indeed, based on the figures above, youth marijuana use has increased by a minimum of 2,000%, and perhaps much more, since the advent of national marijuana prohibition.

Another way to measure the success of prohibition is to look at ease of access to marijuana by young people. Since 1975, MTF has asked high school seniors about the availability of marijuana. In 1975, 87.8% of seniors reported that marijuana was "fairly easy" or "very easy" to get. In the three decades this question has been asked, this "easy to get" figure has stayed within an extraordinarily narrow range, never dropping below 82.7%. In 2005, 85.6% of high school seniors said that marijuana was "easy to get." As the graph on the front cover of this report indicates, marijuana availability to young people appears impervious to fluctuations in marijuana arrests, including the near-tripling of marijuana arrests since 1991.<sup>18</sup>

## The Netherlands vs. the U.S.

U.S. officials often claim that marijuana use by teens in the Netherlands exploded after the adoption of a quasi-legal system of regulated marijuana sales in 1976. In fact, marijuana use rates have varied up and down in both the U.S. and the Netherlands, but after 30 years of pursuing sharply different marijuana policies, rates of marijuana use by Dutch teens remain no higher — and by most measures, markedly lower — than in the U.S.

In 2001, RAND Drug Policy Research Center researchers Robert MacCoun and Peter Reuter examined Dutch marijuana prevalence data from a variety of sources and found that "the 1976 change ... had little if any effect on levels of use during the first seven years of the new regime." They concluded, "The Dutch experience, together with those of a few other countries with more modest policy changes, provides a moderately good empirical case that removal of criminal prohibitions on cannabis possession (decriminalisation) will not increase the prevalence of marijuana or any other illicit drug."<sup>19</sup>

Marijuana use among Dutch teens did rise sharply from the mid-1980s to the early 1990s, but it is unclear what role, if any, the nation's marijuana laws played. During the 1990s — with no change in marijuana laws but during a period of rapid increase in the numbers of marijuana arrests — the U.S. witnessed a similar spike in adolescent marijuana use. For example, MTF reported that lifetime marijuana use among eighth-graders soared from 10.2% in 1991 to 22.2% in 1998, before beginning a gradual decline.<sup>20</sup> As in the U.S., marijuana use among Dutch teens has declined in recent years, with the rate of current (past four weeks) use among 12-to-17-year-olds declining from 10.8% in 1996 to 8.3% in 2003, the latest figures available.<sup>21</sup>

Three major U.S. government surveys that report on youth marijuana use rates — NSDUH, MTF, and YRBS — can be compared with the Netherlands' official survey of teen drug use, the Dutch National School Survey. The latest results from each (2003 for the Dutch survey, 2005 for the U.S. surveys) are presented below. NSDUH's use rates constitute a statistical tie with the Dutch rates, while the other two U.S. surveys report markedly higher use:

17. U.S. Centers for Disease Control and Prevention, "Youth Risk Behavior Surveillance — United States, 2005," *Morbidity and Mortality Weekly Report*, vol. 55, no. SS-5, June 9, 2006, table 30.

18. L.D. Johnston et al., "Monitoring the Future: National Results on Adolescent Drug Use: Overview of Key Findings, 2005," National Institute on Drug Abuse, 2006, Table 13.

19. Robert A. MacCoun and Peter Reuter, "Evaluating Alternative Cannabis Regimes," *British Journal of Psychiatry*, February 2001.

20. L.D. Johnston, et al., *ibid.* Table 1.

21. Karin Monshouwer, et al., "First Cannabis Use: Does Onset Shift to Younger Ages? Findings from the Dutch National School Survey on Substance Use," *Addiction*, July 2005.

LIFETIME MARIJUANA USE (PERCENTAGE)	
NETHERLANDS (age 12-17):	18.0
U.S. (MTF, grade 8):	16.5
U.S. (MTF, grade 10):	34.1
U.S. (MTF, grade 12):	44.8
U.S. (NSDUH, age 12-17):	17.4
U.S. (YRBS, grades 9-12):	38.4

CURRENT MARIJUANA USE (PERCENTAGE)	
NETHERLANDS (age 12-17, past 4 weeks):	8.3
U.S. (MTF, grade 8, past 30 days):	6.6
U.S. (MTF, grade 10, past 30 days):	15.2
U.S. (MTF, grade 12, past 30 days):	19.8
U.S. (NSDUH, age 12-17, past 30 days):	6.8
U.S. (YRBS, grades 9-12, past 30 days):	20.2

SOURCES: Karin Monshouwer et al., "First Cannabis Use: Does Onset Shift to Younger Ages? Findings from the Dutch National School Survey on Substance Use," *Addiction*, July 2005; U.S. Centers for Disease Control and Prevention, "Youth Risk Behavior Surveillance — United States, 2005," *Morbidity and Mortality Weekly Report*, June 9, 2006, table 30; Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, National Survey on Drug Use and Health, 2005, table 1.2B.; L.D. Johnston, et al., "Monitoring the Future: National Results on Adolescent Drug Use: Overview of Key Findings, 2005," National Institute on Drug Abuse, 2006, tables 1 and 3.

## "Downgrading" Marijuana in the U.K.

In early 2004, the United Kingdom "downgraded" marijuana to Class C, the least-restrictive category of illicit drugs. While the government carefully avoided using the term "decriminalization," the change had the practical effect of making most adult marijuana possession cases "non-arrestable," except in the case of aggravating circumstances. As when such proposals are considered in the U.S., there was vocal public debate about the effect on youth and whether teen marijuana use might be encouraged by "sending the wrong message" to young people.

In fact, the opposite has occurred, with drug use in general — and marijuana use by young people in particular — dropping since the end of most marijuana arrests, according to the British government's official drug use survey. The rate of past-year marijuana use by Britons aged 16 to 59 rose during the 1990s, stabilizing at between 10.5% and 11% in the U.K.'s 1998 through 2003-4 surveys. In 2004-5, the first survey completed after the change in policy, the past-year marijuana use rate dropped to 9.7%, and in 2005-6 it dropped again to 8.7% — a statistically significant decline and the lowest rate recorded in Britain in over a decade.<sup>22</sup>

The general decline in British marijuana use since the end of most marijuana possession arrests has included a sharp drop in use by young people. Among 16- to-19-year-olds, the youngest age group surveyed, past-year marijuana use dropped from 24.7% in 2003-4<sup>23</sup> to 21.8% in 2005-6.<sup>24</sup> Based on the 2004-5 data, covering the first year after the change in policy, the British government's official scientific advisors on drug policy, the Advisory Council on the Misuse of Drugs, concluded, "Reclassification to Class C has not, to date, been associated with

22. Stephen Roe and Louise Man, "Drug Misuse Declared: Findings From the 2005/06 British Crime Survey," U.K. Home Office, October 2006, table A4.1.

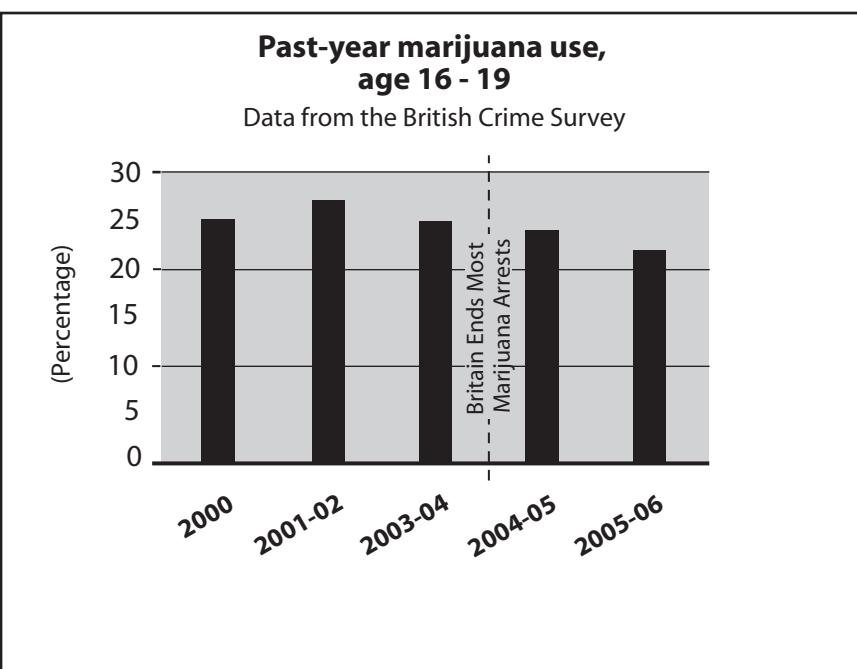
23. Natalia Chivite-Matthews, et al., "Drug Misuse Declared: Findings From the 2003/04 British Crime Survey," U.K. Home Office, May 2005, table A5.1.

24. Stephen Roe and Louise Man, ibid.

any increase in reported cannabis consumption among adolescents and young adults.”<sup>25</sup>

## State to State Variations in the U.S.

As noted in Section I, marijuana decriminalization laws in 11 U.S. states appear to have had little or no impact on marijuana use overall, with use rates essentially equal in decriminalized and nondecriminalized states. The same holds true for use by young people. For the U.S. as a whole, 14.74% of 12-to-17-year-olds reported using marijuana in the past year in the latest NSDUH state-level report. In decriminalized states, the average was 15.51%, a difference that is well within the margin of error for these state estimates. As with adult use, examining the figures state by state shows no link between rates of teen use and marijuana decriminalization. Mississippi, a decriminalized state, had the lowest past-year marijuana use rate in the country, 10.28%, while in next-door Alabama, which still jails marijuana users, the rate was 13.4%. In New England, teens in the decriminalized state of Maine had a past-year use rate of 18.32%, marginally higher than nondecriminalized New Hampshire (18.18%) but lower than nondecriminalized Vermont (19.80%), with all of these between-state differences falling within the survey’s margin of error.<sup>26</sup>



## The Latest Decriminalization Experience: Nevada

Nevada is the most recent U.S. state to decriminalize marijuana, enacting legislation in 2001 that replaced stiff jail sentences with fines for adult marijuana possession. This sharp reduction in marijuana penalties coincided with a large drop in marijuana use by Nevada high school students, according to the CDC’s Youth Risk Behavior Survey.

The 2001 Nevada YRBS reported a slight increase in teen marijuana use from the previous survey in 1999. The lifetime use rate edged up from 49.5% in 1999 to 50.8% in 2001, while current (past 30 days) use rose from 25.9% to 26.6%. In 2003, the first survey completed after decriminalization, the trend reversed, with lifetime use dropping to 46.6% and current use slipping to 22.3%. In 2005, the latest survey available, use dropped even more sharply: Lifetime marijuana use among Nevada high school students fell to only 39.3%, and current use dropped to 17.3%.<sup>27</sup>

25. Advisory Council on the Misuse of Drugs, “Further Consideration of the Classification of Cannabis Under the Misuse of Drugs Act 1971,” U.K. Home Office, December 2005, p. 16.

26. Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, “State Estimates of Substance Use From the 2003-2004 National Surveys on Drug Use and Health,” *ibid*.

27. U.S. Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, “Youth Online: Comprehensive Results,” [www.apps.nccd.cdc.gov/yrbss/index.asp](http://www.apps.nccd.cdc.gov/yrbss/index.asp), accessed 11-16-06.

### **III. COULD MARIJUANA PROHIBITION ACTUALLY WORSEN MARIJUANA AND HARD DRUG USE?**

While the data overwhelmingly indicate that marijuana prohibition and stiffened criminal penalties do not prevent or curb teen marijuana use, many people find this hard to believe. It seems logical that banning something — whatever that “something” is — would reduce its use and thus help keep it out of the hands of kids. This final section explores some of the reasons why this commonly held belief appears to be incorrect in the case of marijuana.

#### **Forbidden Fruit and Boomerangs**

One possibility is that marijuana’s very illegality may contribute to its popularity among young people — sometimes called the “forbidden fruit” effect. Anyone who has ever known (or been) a teenager knows that adolescents commonly assert their independence by defying adult authority. As a National Council on Crime and Delinquency report noted, young people “are sometimes attracted to drugs because they are illegal.”<sup>28</sup>

Laws that treat marijuana as essentially equivalent to drugs like cocaine, LSD, and methamphetamine encourage anti-drug education programs to do so as well, meaning they must exaggerate marijuana’s dangers. Government television ads have implicated marijuana in everything from gun violence to date rape, contradicting the real-world experiences of teens who typically know many friends who use marijuana without experiencing any of these terrible outcomes. Anti-drug messages that are not believable can boomerang, suggests Rodney Skager, Ph.D., co-director of the California Student Survey, the state of California’s official study of teen substance use: “Ironically, rather than serving as an effective deterrent, drug education that lacks credibility and is backed by punitive measures often fosters resentment and oppositional behavior.”<sup>29</sup>

A recent study in which college students viewed actual anti-cigarette and anti-marijuana television commercials found evidence of just such a boomerang effect from the anti-marijuana ads. “More ambivalent attitudes to marijuana [than toward tobacco] and better ability to process relevant information are possible reasons that college students react to some messages perceived as weak and/or inconsistent by generating counter arguments and unfavorable thoughts, promoting a paradoxical effect of explicit attitude change in the direction opposite to one advocated by the message,” the researchers wrote.<sup>30</sup>

#### **The Illicit Drug Market Lacks Controls**

A major consequence of prohibition is that it consigns marijuana to the illicit market, which lacks the controls that exist for legally regulated drugs such as tobacco and alcohol. Tobacco and alcohol producers and sellers are licensed and, in order to maintain their licenses, must obey a lengthy set of requirements, including laws forbidding sales to minors. By forcing marijuana into the criminal market, prohibition assures that marijuana sellers are not subject to such controls.

For example, most grocery and convenience stores that sell cigarettes belong to the “We Card” program, a voluntary program created by merchants under pressure from federal and state governments, which began to crack down on tobacco sales to minors in the mid-1990s. Participating merchants pledge to check ID, and post bright red and yellow signs proclaiming, “Under 18, No Tobacco: We Card.”

This and similar efforts seem to have had some success, as underage tobacco use has dropped sharply in recent years — much more sharply than teen use of marijuana. In 1995, according to the CDC’s Youth Risk Behavior Survey, cigarette use was far more common than marijuana use among U.S. high school students, with 34.8% having smoked cigarettes in the past 30 days, compared to 25.3% who had used marijuana. By 2005, cigarette use in the past 30 days had plunged to just 23%. Marijuana use dropped as well, but at less than half the

28. Marsha Rosenbaum, “Kids, Drugs and Drug Education: A Harm Reduction Approach,” The National Council on Crime and Delinquency, 1996.

29. Rodney Skager, “Beyond Zero Tolerance: A Reality-Based Approach to Drug Education and Student Assistance,” Drug Policy Alliance, 2006.

30. Mariea Czyzewska and Harvey Ginsburg, “Explicit and Implicit Effects of Anti-Marijuana and Anti-Tobacco TV Advertisements,” *Addictive Behaviors*, January 2007.

rate of cigarette use, with marijuana use in the past 30 days reported at 20.2% — a statistical tie with cigarette use. Even more striking, while the percentage of students who had smoked at least one whole cigarette before age 13 dropped by one-third from 1995 to 2005, the percentage who had tried marijuana by age 13 actually increased.<sup>31</sup>

Another way that prohibition — and in particular marijuana's consignment to the unregulated illicit market — can harm young people is by contributing to the so-called "gateway effect" — progression from marijuana to more addictive and dangerous substances such as cocaine and methamphetamine. There are a number of ways this happens that are unique to prohibition, as noted by researcher Mitch Earleywine, Ph.D., in his book, *Understanding Marijuana*: "For example, smoking marijuana may lead people to think of themselves as illicit drug users, making hard drug consumption more likely. Another pathway may arise when purchasing marijuana exposes people to the market for other drugs."<sup>32</sup>

Elimination of the phenomenon Earleywine describes — mixed drug markets that expose marijuana purchasers to hard drugs — was an explicit motivation for the decision by the Netherlands to allow regulated marijuana sales by merchants who are strictly barred from selling hard drugs. It appears to have worked, as hard drug use in the Netherlands — particularly among young people — is far less prevalent than in the U.S.

For example, in 2003 (the latest Dutch figures available), among 15- and 16-year-olds, the rate of lifetime cocaine use was two-thirds greater in the U.S. than in the Netherlands, while past-month cocaine use among U.S. 15- and 16-year-olds was triple that of their Dutch counterparts.<sup>33</sup> Among the same age group, the rate of current amphetamine use in the U.S. was nine times the rate in the Netherlands.<sup>34</sup>

## **IV. CONCLUSIONS**

Marijuana prohibition has not curbed marijuana use by young people — and marijuana use rates continue to rise despite increasing arrests. Even worse, several lines of evidence suggest that marijuana prohibition may actually encourage marijuana use by young people and may increase the likelihood that young people who do try marijuana will pass through the "gateway" of the illicit drug market and move on to more addictive and dangerous substances.

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31. U.S. Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, *ibid*.

32. Mitch Earleywine, *Understanding Marijuana*, Oxford University Press, 2002, p. 59.

33. The Netherlands National Drug Monitor Annual Report 2005, Trimbos Institute, 2006, table 3.5.

34. The Netherlands National Drug Monitor Annual Report 2005, Trimbos Institute, 2006, table 5.4.