

NATIONAL INSTITUTE ON DRUG ABUSE

# Monitoring the Future

National Results on Adolescent Drug Use

## Overview of Key Findings 2005

National Institutes of Health  
U.S. Department of Health and Human Services

**MONITORING THE FUTURE**

**NATIONAL RESULTS ON**  
**ADOLESCENT DRUG USE**

**Overview of Key Findings, 2005**

by

Lloyd D. Johnston, Ph.D.  
Patrick M. O'Malley, Ph.D.  
Jerald G. Bachman, Ph.D.  
John E. Schulenberg, Ph.D.

The University of Michigan  
Institute for Social Research

National Institute on Drug Abuse  
6001 Executive Boulevard  
Bethesda, Maryland 20892

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
National Institutes of Health

*This publication was written by the principal investigators and staff of The Monitoring the Future project, at the Institute for Social Research, the University of Michigan, under Research Grant No. R01 DA 01411 from the National Institute on Drug Abuse.*

*The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the NIH.*

*Public Domain Notice*

*All material appearing in this volume is in the public domain and may be reproduced or copied without permission from the National Institute on Drug Abuse or the authors. Citation of the source is appreciated.*

*Recommended Citation*

Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2006). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2005*. (NIH Publication No. 06-5882). Bethesda, MD: National Institute on Drug Abuse.

# Contents

Introduction.....	1
Study Design and Methods.....	3
Overview of Key Findings.....	5
Specific Results by Drug	
Any Illicit Drug Use.....	10
Marijuana.....	12
Inhalants.....	14
LSD.....	16
Cocaine.....	18
Crack Cocaine.....	20
Amphetamines.....	22
Methamphetamine and Ice.....	24
Heroin.....	26
Tranquilizers.....	28
Sedatives (Barbiturates).....	30
Ecstasy and Other “Club Drugs”.....	32
Alcohol.....	34
Cigarettes.....	36
Smokeless Tobacco.....	38
Steroids.....	40
Subgroup Differences.....	42
Tables Covering All Drugs	
1. Trends in <u>Lifetime</u> Prevalence of Use of Various Drugs.....	44
Footnotes for Tables 1-4.....	47
2. Trends in <u>Annual</u> Prevalence of Use of Various Drugs.....	48
3. Trends in <u>30-Day</u> Prevalence of Use of Various Drugs.....	52
4. Trends in 30-Day Prevalence of <u>Daily</u> Use of Various Drugs.....	55
5. Trends in <u>Harmfulness</u> of Drugs as Perceived by <u>Eighth</u> Graders.....	56
6. Trends in <u>Harmfulness</u> of Drugs as Perceived by <u>Tenth</u> Graders.....	57
7. Trends in <u>Harmfulness</u> of Drugs as Perceived by <u>Twelfth</u> Graders.....	58
8. Trends in <u>Disapproval</u> of Drug Use by <u>Eighth</u> Graders.....	60
9. Trends in <u>Disapproval</u> of Drug Use by <u>Tenth</u> Graders.....	61
10. Trends in <u>Disapproval</u> of Drug Use by <u>Twelfth</u> Graders.....	62
11. Trends in <u>Availability</u> of Drugs as Perceived by <u>Eighth</u> Graders.....	64
12. Trends in <u>Availability</u> of Drugs as Perceived by <u>Tenth</u> Graders.....	65
13. Trends in <u>Availability</u> of Drugs as Perceived by <u>Twelfth</u> Graders.....	66



# Introduction

---

Monitoring the Future (MTF), begun in 1975, is a long-term study of American adolescents, college students, and adults through age 45. It is conducted by the University of Michigan's Institute for Social Research and is supported under a series of investigator-initiated, competing research grants from the National Institute on Drug Abuse.

The need for a study such as Monitoring the Future is evident. Substance use by American young people has proven to be a rapidly-changing phenomenon, requiring frequent assessments and reassessments. Since the mid-1960s, when illicit drug use burgeoned in the normal youth population, it has remained a major concern for the nation. Smoking, drinking, and illicit drug use are leading causes of morbidity and mortality, both during adolescence as well as later in life. How vigorously the nation responds to teenage substance use, how accurately it identifies the substance abuse problems that are emerging, and how well it comes to understand the effectiveness of the many policy and intervention efforts largely depend on the ongoing collection of valid and reliable data. Monitoring the Future is designed to generate such data in order to provide an accurate picture of what is happening in this domain and why. It has served that function quite well for over 30 years.

The 2005 Monitoring the Future survey encompassed nearly 50,000 8th-, 10th-, and 12th-grade students in over 400 secondary schools nationwide. The first published results are presented in this report. Recent trends in the use of licit and illicit drugs are emphasized, as well as trends in the levels of perceived risk and personal disapproval associated with each drug. This study has shown these beliefs and attitudes to be particularly important in explaining trends in use. In addition, trends in the perceived availability of each drug are presented.

Following this introductory section are a synopsis of the methods used in the study and an overview of the key results from the 2005 survey. Next is a section for each individual drug class, providing figures that show trends in the overall proportions of students at each grade level (a) using it, (b) seeing a "great risk" associated with its use, (c)

disapproving its use, and (d) saying that they could get the drug "fairly easily" or "very easily." Trends for the interval 1991-2005 appear for all grades and for 1975-2005 for the 12th graders.

The tables at the end of this report provide the statistics underlying the figures; in addition, they present data on lifetime, annual, 30-day, and (for selected drugs) daily prevalence.<sup>1</sup> For the sake of brevity, we present these prevalence statistics here only for the 1991-2005 interval, but statistics on 12th graders are available for earlier years in other publications from the study. For each prevalence period the tables indicate which of the one-year changes between 2004 and 2005 are statistically significant.

A much more extensive analysis of the study's findings on secondary school students may be found in a volume that will be published later in 2006.<sup>2</sup> The volumes in that series also contain a more complete description of the study's methodology, as well as an appendix explaining how to test the significance of differences between groups or for trends over time. The most recent such volume is always posted on the study's Web site.

The study's findings on American college students and adults through age 45 are not covered in this early *Overview* report because the 2005 data are not available at the time of this writing. They are covered in a second series of volumes that will be updated later in 2006.<sup>3</sup> Volumes in these two annual series are available from the National

---

<sup>1</sup>Prevalence refers to the proportion or percentage of the sample reporting use of the given substance on one or more occasions in a given time interval—e.g., lifetime, past 12 months, or past 30 days. For most drugs, the prevalence of daily use refers to use on 20 or more occasions in the past 30 days.

<sup>2</sup>The most recent publication in this series is: Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2005). *Monitoring the Future national survey results on drug use, 1975-2004: Volume I, Secondary school students* (NIH Publication No. 05-5727). Bethesda, MD: National Institute on Drug Abuse.

<sup>3</sup>The most recent in this series is: Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2005). *Monitoring the Future national survey results on drug use, 1975-2004: Volume II, College students and adults ages 19-45* (NIH Publication No. 05-5728). Bethesda, MD: National Institute on Drug Abuse.

Clearinghouse for Alcohol and Drug Information at (800) 729-6686 or by e-mail at [info@health.org](mailto:info@health.org). They also may be found on the study's Web site. Further information on the study, including its

latest press releases, a listing of all publications, and the text of many of them may be found on the Web at [www.monitoringthefuture.org](http://www.monitoringthefuture.org).

## Study Design and Methods

---

At the core of Monitoring the Future is a series of large, annual surveys of nationally representative samples of public and private secondary school students throughout the coterminous United States. Every year since 1975, a national sample of 12th graders has been surveyed. Beginning in 1991, the study was expanded to include comparable, independent national samples of 8th graders and 10th graders each year. The year 2005 marked the thirty-first survey of 12th graders and the fifteenth of 8th and 10th graders.

### Sample Sizes

The 2005 sample sizes were 17,300, 16,700, and 15,400 in 8th, 10th, and 12th grades, respectively. In all, about 49,300 students in 402 secondary schools participated. Because multiple questionnaire forms are administered at each grade level, and because not all questions are contained in all forms, the number of cases upon which a particular statistic is based can be less than the total sample. The tables at the end of this report contain the sample sizes associated with each statistic.

### Field Procedures

University of Michigan staff members administer the questionnaires to students, usually in their classrooms during a regular class period. Participation is voluntary. Parents are notified well in advance of the survey administration and are provided the opportunity to decline their student's participation. Questionnaires are self-completed and formatted for optical scanning.

In 8th and 10th grades the questionnaires are completely anonymous, and in 12th grade they are confidential (to permit the longitudinal follow-up of a random subsample of participants for some years after high school in a panel study). Extensive, carefully designed procedures are followed to protect the confidentiality of subjects and their data.

### Measures

A standard set of three questions is used to determine *usage levels* for the various drugs (except for cigarettes and smokeless tobacco). For

example, we ask, "On how many occasions (if any) have you used LSD ('acid') . . . (a) . . . in your lifetime? (b) . . . during the past 12 months? (c) . . . during the last 30 days?" Each of the three questions is answered on the same answer scale: 0 occasions, 1–2, 3–5, 6–9, 10–19, 20–39, and 40 or more occasions.

For the psychotherapeutic drugs (amphetamines, sedatives [barbiturates], tranquilizers, and narcotics other than heroin), respondents are instructed to include only use ". . . on your own—that is, without a doctor telling you to take them." A similar qualification is used in the question on use of anabolic steroids.

For cigarettes, respondents are asked two questions about use. First they are asked, "Have you ever smoked cigarettes?" (the answer categories are "never," "once or twice," and so on). The second question asks, "How frequently have you smoked cigarettes during the past 30 days?" (the answer categories are "not at all," "less than one cigarette per day," "one to five cigarettes per day," "about one-half pack per day," etc.).

Smokeless tobacco questions are parallel to those for cigarettes.

Alcohol use is measured using the three questions just illustrated for LSD. A parallel set of three questions asks about the frequency of being drunk. A different question asks, for the prior two-week period, "How many times have you had five or more drinks in a row?"

*Perceived risk* is measured by a question asking, "How much do you think people risk harming themselves (physically or in other ways), if they . . ." ". . . try marijuana once or twice," for example. The answer categories are "no risk," "slight risk," "moderate risk," "great risk," and "can't say, drug unfamiliar."

*Disapproval* is measured by the question "Do YOU disapprove of people doing each of the following?" followed by "trying marijuana once or twice," for example. Answer categories are "don't disapprove," "disapprove," "strongly disapprove,"

and (in 8th and 10th grades only) “can’t say, drug unfamiliar.”

*Perceived availability* is measured by the question “How difficult do you think it would be for you to

get each of the following types of drugs, if you wanted some?” Answer categories are “probably impossible,” “very difficult,” “fairly difficult,” “fairly easy,” “very easy” and (in 8th and 10th grades only) “can’t say, drug unfamiliar.”

## Overview of Key Findings

---

In recent years, the trends in drug use have become more complex and, thus, more difficult to describe. We believe that a major reason for the increased complexity is that “cohort effects” have emerged, beginning with the increases in drug use that occurred during the early 1990s. “Cohort effects” refer to lasting differences between class cohorts that stay with them as they advance through school and beyond. These effects result in the various grades reaching peaks or troughs in different years, and thus the various age groups are sometimes moving in different directions at a given point in history. We have seen such cohort effects for cigarette smoking throughout most of the life of the study, but such effects were much less apparent for the illicit drugs until the past decade or so. The 8th graders have been the first to show turnarounds in illicit drug use: they were the first to show the upturn in use in the early 1990s and the first to show the decline in use after 1996; they now appear to be the first to show an end to the declines observed in recent years. This pattern will be obvious in the findings summarized here.

Several drugs showed declines in use this year, though in general their one-year declines were modest and not statistically significant; but in most cases they represented a continuation of earlier declines. A number of drugs held fairly steady in their use in 2005, while only three of the many classes of drugs under study showed any sign of increases in use this year—sedatives, OxyContin, and inhalants—and even in those cases, the increases tended to be confined to a single grade.

### Drugs Decreasing in Use

The use of **any illicit drug** in the 12 months preceding the survey (annual prevalence) is down by more than a third among 8th graders since the recent peak for that grade in 1996. It is down by just under a quarter among 10th graders but by only about 10% so far among 12th graders. Tenth and 12th graders reached their recent peaks in 1997, a year later than the 8th graders. While no grade level had a statistically significant decline in any prevalence period in this index this year, gradual declines did continue in the two upper grades, while declines halted in 8th grade. In 2005 the lifetime prevalence rates for this index were

21%, 38%, and 50% in grades 8, 10, and 12, respectively. In other words, exactly half of American secondary school students today have tried an illicit drug by the time they near high school graduation.

A number of specific drugs showed continuing declines this year in at least one grade. These include marijuana, LSD, ecstasy, amphetamines, methamphetamines, steroids, androstenedione, alcohol, and cigarettes. (Alcohol and cigarettes are discussed in a separate section below.)

**Marijuana**, which tends to drive the overall index because it is by far the most prevalent of the illicit drugs, showed a very similar pattern of change in 2005 as that for any illicit drug. The index of **any illicit drug other than marijuana** also had a parallel pattern. In all three cases there were no significant one-year declines observed at any grade, but gradual declines continued in the upper grades, while declines halted in 8th grade.

**LSD** use—which had shown very sharp declines in annual prevalence between 1999 and 2004, accompanied by a sharp decline in the perceived availability of the drug—showed only a small further decline in 2005 at 12th grade. Annual prevalence rates are now very low—at less than 2% in all three grades. During the period of sharp decline, attitudes and beliefs about LSD use did not change in ways that would have been expected if they were driving the decline in use, but perceived availability did change in the expected direction.

**Ecstasy**, another drug taken for its hallucinogenic properties, had also been in steep decline prior to 2005. After rapidly gaining in popularity from about 1998 through 2001, ecstasy showed a sharp turnaround in use. We had predicted this drop after observing rising beliefs about the dangers of using that drug. Annual prevalence of ecstasy use is now down by between one-half and two-thirds at all grades from the recent peak in 2001, though not much decline occurred this year. Again, only the 12th graders showed any further decline in 2005.

**Amphetamine** use showed some continuing decline in 2005 in the upper grades but not in 8th

grade. Among 8th graders there had been a fairly steady decline from the recent peak rate in 1996 through 2004—a decline of nearly half in annual prevalence—but the decline appeared to end in 2005. Among 10th and 12th graders, a sustained decline did not occur until after 2001. Their declines did continue into 2005, with the decline in 12th grade reaching statistical significance. Thus, there is evidence of a cohort effect operating here, as well as for a number of other drugs.

**Methamphetamine** use was not included in the study until 1999. Since then it has shown a rather steady decline in all three grades—a decline which continued in 2005 in 12th grade (significant) and may have leveled in the two lower grades.

**Tranquilizer** use increased steadily for nearly a decade, from 1992 to about 2000 among 10th and 12th graders, before declining. This year there was a further small, and not statistically significant, decline in those grades. Thus, the decade-long upward march in tranquilizer use in the upper grades has ended, and some modest downward trending has been occurring. Use among 8th graders, which has been much lower, started declining after 1996 and has changed very little since 1998. Annual prevalence rates now lie between 2.8% in grade 8 and 6.8% in grade 12.

Three so-called “club drugs”—**ketamine**, **Rohypnol**, and **GHB**—have each shown a pattern of declining use that for the most part continued into 2005. They have all shown considerable proportional declines since their recent peaks, with all three having an annual prevalence rate well under 2%.

Anabolic **steroid** use reached recent peak levels by 2000 in 8th and 10th grades and by 2002 in 12th grade. Since those peak levels, there has been a decline on the order of four-tenths at each grade level in annual prevalence; those declines began in 2001 among 8th graders, in 2003 among 10th graders, and not until 2005 among 12th graders. While the two upper grades showed evidence of further decline this year, the 8th grade did not.

**Androstenedione** and **creatine**, two other substances used to build strength and muscle mass, also have declined appreciably in use in recent

years at all three grade levels. Use of androstenedione—a precursor that the body converts to anabolic steroid—is down on the order of one-half from recent peaks in all three grades, and all three continued to show some decline in 2005. Since 2001, the annual prevalence of using creatine is down by more than a half among 8th graders, by about a third among 10th graders, and by three-tenths among 12th graders. Only the 8th graders showed any further decline in creatine use in 2005.

### **Drugs Holding Steady**

Among the drugs that showed practically no change at all in 2005 were cocaine, crack, and heroin. In each case, annual prevalence rates are below where they were at their recent peaks, but no further decline occurred at any grade level for these drugs.

**Cocaine** and **crack** use held generally steady in 2004 and 2005 at levels somewhat below recent peaks and far below the levels attained in the mid-1980s among 12th graders. The annual prevalence for powder cocaine is 1.7% in 8th grade, 3.0% in 10th grade, and 4.5% in 12th grade, while the annual prevalence for crack cocaine is between 1.4% and 1.9% in all three grades.

**Heroin** use finally fell below its recent peak levels in all three grades by 2001. Since then use has held quite steady, including use with and without a needle. Annual prevalence is now slightly below 1.0% in all three grades.

**Narcotics other than heroin**, taken as a class, are reported only for 12th graders. After increasing substantially in use since the early 1990s, this class of drugs has appeared to level in use over the past few years. Still, the annual prevalence rate stands at 9.0%. Vicodin, an important drug in this class, held steady in all three grades this year. The prevalence rates for Vicodin at each of the three grades range between 2.6% among 8th graders to 9.5% among 12th graders.

**Ice**, or **crystal methamphetamine**, use has held quite steady for the past two years among 12th graders, the only ones asked about such use. Annual prevalence is now 2.3%.

## Drugs Showing Signs of Increased Use

Only three drugs showed any sign of increased use this year: **sedatives**, **OxyContin**, and **inhalants**. In each case the increases are modest and confined to one grade.

**Sedatives**, including barbiturate sedatives, showed a decade-long rise in use among 12th graders—the only ones on whom use of this drug is reported—before leveling in 2003. Use resumed its rise after 2003 and continued into 2005 with nonstatistically significant increases in both 2004 and 2005. The annual prevalence rate of 7.2% in 2005 is the highest rate observed among 12th graders since 1980.

**OxyContin** use rose again this year among 12th graders, but not among 8th or 10th graders. Since 2002, annual prevalence has increased almost 40% among 12th graders, to 5.5% in 2005. Considering the addictive potential of this drug, this rate seems quite high for them to have attained. Annual prevalence for 8th graders is 1.8% and for 10th graders, 3.2%.

**Inhalant** use, which has consistently shown the highest annual prevalence among 8th graders and lowest among 12th graders—a reversal of the usual pattern of drug use—had been declining for some years at all three grades. Then in 2003 we reported a significant increase in inhalant use among the 8th graders, and in 2004 all grades showed some increase in annual prevalence, though none were statistically significant. In 2005 there was no further increase in the two lower grades, but some further increase (+0.9%, not significant) in grade 12. This latest increase may reflect a cohort effect working its way up the age spectrum, as we are seeing for many other drugs. Among the 8th and 10th graders, who are the only ones asked about the *risks* of inhalant use, perceived risk has been falling steadily for the past four years. We believe that this recent trend may reflect generational forgetting (discussed below) of the dangers of this drug, as newer cohorts replace the older ones who were exposed to the anti-inhalant ads in the middle 1990s.

## Implications for Prevention

The wide divergence in trajectories of the various drugs over time helps to illustrate the point that, to a considerable degree, the determinants of use are often specific to the drugs. These determinants include both the *perceived benefits* and the *perceived risks* that young people come to associate with each drug.

Unfortunately, word of the supposed benefits of using a drug usually spreads much faster than information about the adverse consequences. The former—supposed benefits—takes only rumor and a few testimonials, the spread of which has been hastened greatly by the electronic media and the Internet. It usually takes much longer for the evidence of adverse consequences (e.g., death, disease, overdose reactions, addictive potential) to cumulate and *then* to be disseminated. Thus, when a new drug comes onto the scene, it has a considerable “grace period” during which its benefits are alleged and its consequences are not yet known. We believe that ecstasy was the most recent beneficiary of such a grace period, which lasted until 2001, when perceived risk for this drug finally began to rise sharply.

To a considerable degree, prevention must occur drug by drug, because people will not necessarily generalize the adverse consequences of one drug to the use of other drugs. Many beliefs and attitudes held by young people are specific to the drug. This volume’s figures on perceived risk and disapproval for the various drugs—attitudes and beliefs that we have shown to be important in explaining many drug trends over the years—amply illustrate this assertion. These attitudes and beliefs are at quite different levels for the various drugs and, more importantly, often trend differently over time.

## “Generational Forgetting” Helps Keep the Epidemic Going

Another point worth keeping in mind is that there tends to be a continuous flow of new drugs onto the scene and of older ones being “rediscovered” by young people. Many drugs have made a comeback years after they first fell from popularity, often because young people’s knowledge of their adverse consequences faded as generational replacement took place. We call this process “generational forgetting.” Examples include LSD

and methamphetamine, two drugs used widely in the beginning of the broad epidemic of illicit drug use, which originated in the 1960s. Heroin, cocaine, PCP, and crack are some others that made a comeback in the 1990s after their initial popularity faded.

As for newer drugs emerging, examples include the nitrite inhalants and PCP in the 1970s, crack and crystal methamphetamine in the 1980s, and Rohypnol, GHB, and ecstasy in the 1990s. The perpetual introduction of new drugs (or of new forms of taking older ones, as illustrated by crack, crystal methamphetamine, and non-injected heroin) helps to keep the country's "drug problem" alive. Because of the lag times described previously, during which evidence of adverse consequences must cumulate and be disseminated before they begin to deter use, the forces of containment are always playing "catch up" with the forces of encouragement and exploitation. Organized efforts to reduce the "grace period" enjoyed by new drugs would seem among the most promising responses for minimizing the damage they will cause. Such efforts regarding ecstasy by the National Institute on Drug Abuse and others appear to have paid off.

The psychotherapeutic drugs now make up a considerable part of the overall drug picture, in part because many have grown in use over a considerable period, and in part because a number of the illicit drugs have declined substantially in use since the mid-1990s. It seems likely that young people are less concerned about the dangers of using these drugs outside of medical regimen than they are about the dangers of using the illegal drugs, quite likely because the former are widely used for legitimate medical purposes. Increasing, prescription drugs also are being advertised directly to the consumer, which may imply that they can be used with low risk.

### **Cigarettes and Alcohol**

The statistics for use of the licit drugs—cigarettes and alcohol—are also a basis for considerable concern. Half (50%) of American young people have tried **cigarettes** by 12th grade, and nearly a quarter (23%) of 12th graders are current smokers. Even as early as 8th grade, more than a quarter (26%) have tried cigarettes, and 1 in 11 (9%) already has become a current smoker. Fortunately,

there has been some real improvement in these smoking statistics over the last seven to nine years, following a dramatic increase in these rates earlier in the 1990s. It must be remembered, however, that much of that recent improvement was simply regaining the ground lost in the early 1990s. By 2005 we had more than regained that lost ground.

**Cigarette** use reached its recent peak in 1996 at grades 8 and 10, capping a rapid climb of approximately 50% from the 1991 levels (when data first were gathered on these grades). Between 1996 and 2005, current smoking in these grades has fallen considerably (by 56% and 51%, respectively). For 12th graders, peak use occurred in 1997, a year later than for 8th and 10th graders, and has had a more modest decline of 37% by 2005. Overall increases in perceived risk and disapproval of smoking appear to have contributed to this downturn. Perceived risk had changed little for three years but increased significantly in 2004 for 8th and 10th grades and modestly for 12th grade. Perceived risk among 12th graders also increased in 2005 although the change was not significant. Disapproval continued to increase for all three grades and significantly increased for 12th graders. (See the section on cigarettes for more detail.)

It seems likely that some of the attitudinal change that has occurred for cigarettes is attributable to the adverse publicity suffered by the tobacco industry in the 1990s, as well as to a reduction in cigarette advertising reaching children and an increase in anti-smoking advertising reaching them. But price is also likely to have been an important factor because cigarette prices rose appreciably in the late 1990s and early 2000s as cigarette companies tried to cover the costs of the tobacco settlement and as states increased excise taxes on cigarettes.

Unfortunately, the declines in smoking in all grades have decelerated considerably, and by 2005 the decline in 8th grade appears to have ended altogether. This is particularly important because, due to the strong cohort effects that exist with cigarette smoking, it is predictable that the declines in the upper grades will also end within a few years. Very likely a slowdown in price rises, as well as declines in the funding of anti-smoking campaigns at both the national and state levels, have contributed to these developments.

**Smokeless tobacco** use also had been in decline in recent years, continuing into the early 2000s, but the decline appears to have ended; and there is now some evidence of an increase in the upper grades. The 30-day prevalence rates for smokeless tobacco are now down by between four-tenths and six-tenths from their peak levels in 1994 for the lower grades, and in 1995 for grade 12.

**Alcohol** use remains extremely widespread among today's teenagers. Three out of every four students (75%) have consumed alcohol (more than just a few sips) by the end of high school; about two-fifths (41%) have done so by 8th grade. In fact, more than half (58%) of the 12th graders and a fifth (20%) of the 8th graders in 2005 report having been drunk at least once in their life.

To a considerable degree, alcohol trends have tended to parallel the trends in illicit drug use. These trends include some modest increase in binge drinking (defined as having five or more drinks in a row at least once in the past two weeks) in the early part of the 1990s, which was a proportionally smaller increase than was seen for most of the illicit drugs. Fortunately, binge drinking rates leveled off five or six years ago, just about when the illicit drug rates began to turn around, and in 2002 a drop in drinking and drunkenness began to appear in all grades. The decline continued into 2005 for drinking at all grades (as well as for prior month drunkenness among 10th and 12th graders).

The longer-term trend data available for 12th graders show that alcohol usage rates, and binge drinking in particular, are substantially below where they were at the beginning of the 1980s. Most of the improvement occurred during the 1980s, before being partly offset by increases in the first half of the 1990s; but now in the 2000s we are seeing a resumption of a downward trend.

### **Where Are We Now?**

Clearly, the problems of substance abuse among American young people continue to remain suf-

ficiently widespread to merit concern. Today, half (50%) have tried an illicit drug by the time they finish high school. Indeed, if inhalant use is included in the definition of an illicit drug, nearly a third (30%) have done so as early as 8th grade—when most students are only 13 or 14 years old. More than 1 in 4 (27%) have used some illicit drug *other* than marijuana by the end of 12th grade, and 1 in 5 (20%) of all 12th graders have done so in just the 12 months prior to the survey.

Of course, if we look at the situation from the perspective of helping to deter future use, we may want to emphasize the considerable fractions of youth who do *not* use each of these drugs and who disapprove of their use. For example, 73% of seniors today made it through the end of high school without ever using an illicit drug other than marijuana, and more than half (55%) did so without ever trying marijuana. Further, the great majority personally disapprove of using most of the illicit drugs, as has been true for many years.

Of special concern today are the high numbers of young people using *prescription-type drugs*. Due to a long-term gradual increase in their use of sedatives (including barbiturates), tranquilizers, and narcotics other than heroin, we now see significant proportions reporting psychotherapeutic drug use without medical supervision. If amphetamines are included, about 1 in 4 seniors (23.5%) report such use at some time in their life; while 1 in 6 (16.7%) report such use in just the past year. Excluding amphetamines, the proportions using any of the three classes of prescription drugs that are central nervous system depressants (sedatives/barbiturates, tranquilizers, or narcotics other than heroin) are 1 in 5 (19.5%) seniors using in their lifetime, and 1 in 7 (13.9%) using in the prior 12 months. These prescription-type drugs have become more important in the nation's larger drug abuse problem, largely as a result of their gradual increase in popularity over an extended period of time.

## Any Illicit Drug Use

---

Monitoring the Future routinely reports three different indexes of illicit drug use—an index of “any illicit drug use,” an index of the use of “any illicit drug other than marijuana,” and an index of the use of “any illicit drug including inhalants.”<sup>4</sup> In this section we discuss only the first two; the statistics for all three may be found in Tables 1-3.

In order to make comparisons over time, we have kept the definitions of these indexes constant, even though some new substances appear as time passes. The index levels would be little affected by the inclusion of these newer substances, however, primarily because almost all users of them are also using the more prevalent drugs included in the indexes. The major exception has been inhalants, the use of which is quite prevalent in the lower grades. Thus, after the lower grades were added to the study in 1991, a special index was added that includes inhalants.

### Trends in Use

In the last third of the twentieth century, young Americans reached extraordinarily high levels of illicit drug use either by historical comparisons in this country or by international comparisons. The trends in lifetime use of any illicit drug are given in the first panel on the facing page.<sup>5</sup> By 1975, when the study began, the majority of young people (55%) had used an illicit drug by the time they left high school. This figure rose to two-thirds (66%) by 1981 before a long and gradual decline to 41% by 1992—the low point. After 1992 the proportion rose considerably, reaching a recent high of 55% in 1999; it stands at 50% in 2005.

The comparable trends for annual, as opposed to lifetime, prevalence appear in the second (upper right) panel. They show a gradual and continuing falloff after 1996 among 8th graders. Peak rates were reached in 1997 in the two upper grades and declined little for several years. However, since

2001 both upper grades have shown declines, which continued in 2005. The 8th graders are no longer showing continuing decline.

Because marijuana is much more prevalent than any other illicit drug, trends in its use tend to drive the index of “any illicit drug use.” Thus we have an index excluding marijuana use that shows the proportion of high school students willing to use the other, so-called “harder,” illicit drugs. The proportions who have used any illicit drug other than marijuana in their lifetime are shown in the third panel (lower left). In 1975 over one-third (36%) of 12th graders had tried some illicit drug other than marijuana. This figure rose to 43% by 1981, then declined for a long period to a low of 25% in 1992. Some increase followed in the 1990s as the use of a number of drugs rose steadily, and it reached 30% by 1997. (In 2001 it was 31%, but this reflected a slight artifactual upward shift in the estimate due to a change in the question wording for “other hallucinogens” and for tranquilizers.<sup>6</sup>) Since then, the rate has fallen to 27% in 2005. The fourth panel presents the *annual* prevalence data for the same index, which shows a pattern of change over the past few years similar to the index of any illicit drug use.

Overall, these data reveal that, while use of individual drugs (other than marijuana) may fluctuate widely, the proportion using *any* of them is much less labile. In other words, the proportion of students prone to using such drugs and willing to cross the normative barriers to such use changes more gradually. The usage rate for each individual drug, on the other hand, reflects many, more rapidly-changing determinants specific to that drug: how widely its psychoactive potential is recognized, how favorable the reports of its supposed benefits are, how risky the use of it is seen to be, how acceptable it is in the peer group, how accessible it is, and so on.

---

<sup>4</sup>Footnote “a” to Tables 1 through 4 provides the exact definition of “any illicit drug.”

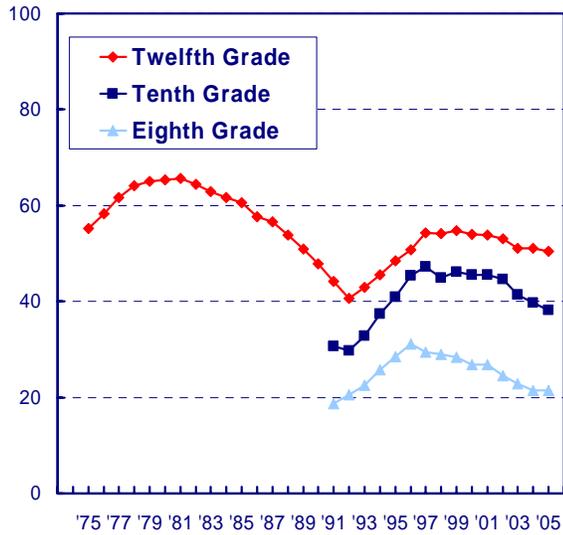
<sup>5</sup>This is the only set of figures in this volume presenting lifetime use statistics. For other drugs, lifetime statistics may be found in the tables at the end of this volume.

---

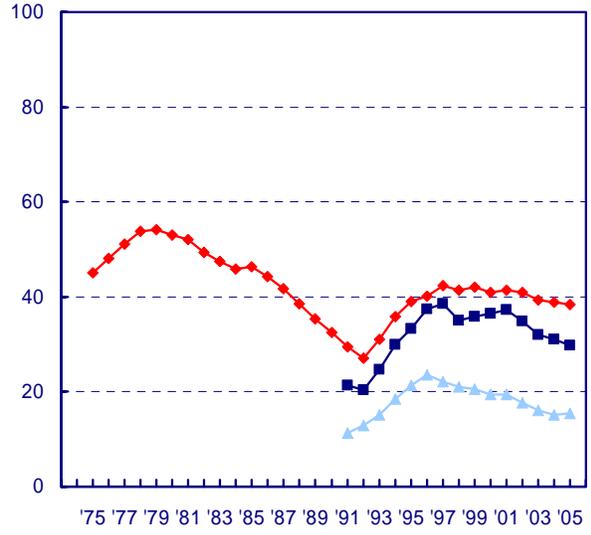
<sup>6</sup>The term “psychedelics” was replaced with “hallucinogens,” and “shrooms” were added to the list of examples, resulting in somewhat more respondents indicating use of this class of drugs. For tranquilizers, Xanax was added to the list of examples given, slightly raising the reported prevalence of use.

## Trends in Illicit Drug Use Eighth, Tenth, and Twelfth Graders

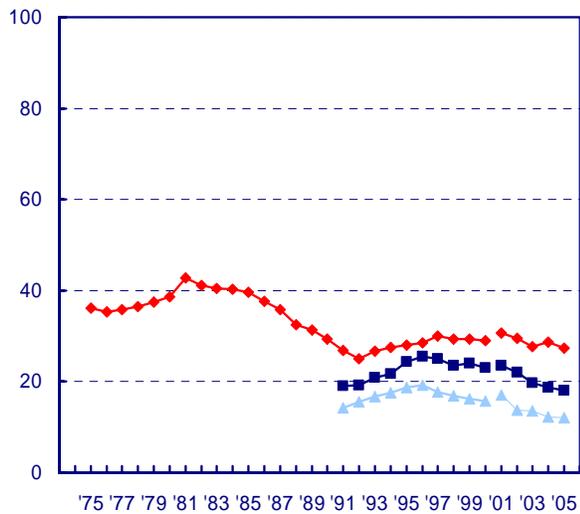
**% who used any illicit drug in lifetime**



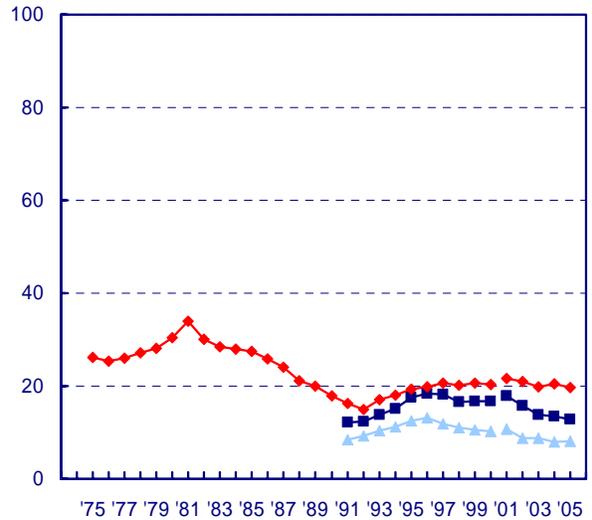
**% who used any illicit drug in last 12 months**



**% who used any illicit drug other than marijuana in lifetime\***



**% who used any illicit drug other than marijuana in last 12 months\***



\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for "any illicit drug other than marijuana" were affected by these changes.

# Marijuana

---

Marijuana has been the most widely used illicit drug throughout the 31 years of this study. Marijuana can be taken orally, mixed with food, and smoked in a concentrated form as hashish—the use of which is much more common in Europe. However, nearly all the consumption in this country involves smoking it in rolled cigarettes (“joints”), in pipes or, more recently, in hollowed-out cigars (“blunts”).

## Trends in Use

Annual marijuana prevalence peaked at 51% among 12th graders in 1979, following a rise that began during the 1960s. Then use declined fairly steadily for 13 years, bottoming at 22% in 1992—a decline of more than half. The 1990s, however, saw a resurgence of use. After a considerable increase in the 1990s (one that actually began among 8th graders a year earlier than among 10th and 12th graders), annual prevalence rates peaked in 1996 at 8th grade and in 1997 at 10th and 12th grades. After 1996 there was a continuing gradual decline among 8th graders, but the decline ended in 2005 after a drop of about one-third. In the upper grades, only a very modest decline occurred between 1997 and 2002, followed by a continuing decline since.

## Perceived Risk

The amount of risk perceived to be associated with using marijuana fell during the rise in use in the 1970s, and again during the subsequent rise in use in the 1990s. Indeed, at 10th and 12th grades, perceived risk began to decline a year *before* use began to rise in the upturn of the 1990s, making perceived risk a leading indicator of change in use. (The same may have happened at 8th grade, as well, but we do not have data starting early enough to check that possibility.) The decline in perceived risk halted in 1996 in 8th and 10th grades, and use began to decline a year or two later. Thus, again perceived risk was a leading indicator. From 1996 to 2000, risk held fairly steady, and the decline in use in the upper grades stalled. However, from 2000 to 2002, risk *declined* some in all grades.

After 2002, perceived risk increased in all grades through 2004 as use declined. This year, for the upper grades, the increase in perceived risk and drop in use continued. For 8th graders, perceived risk decreased some as use held steady.

## Disapproval

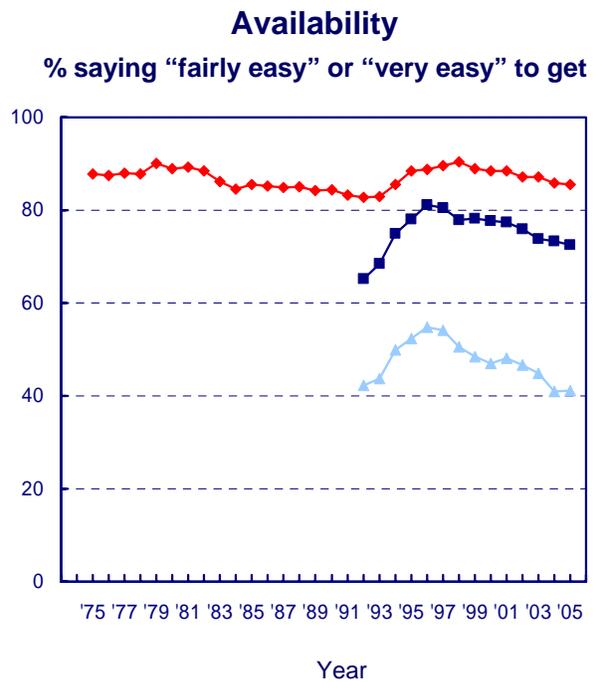
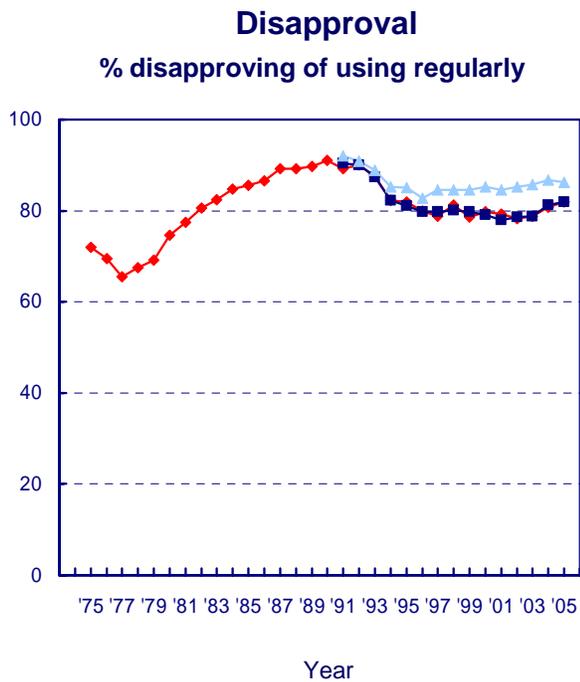
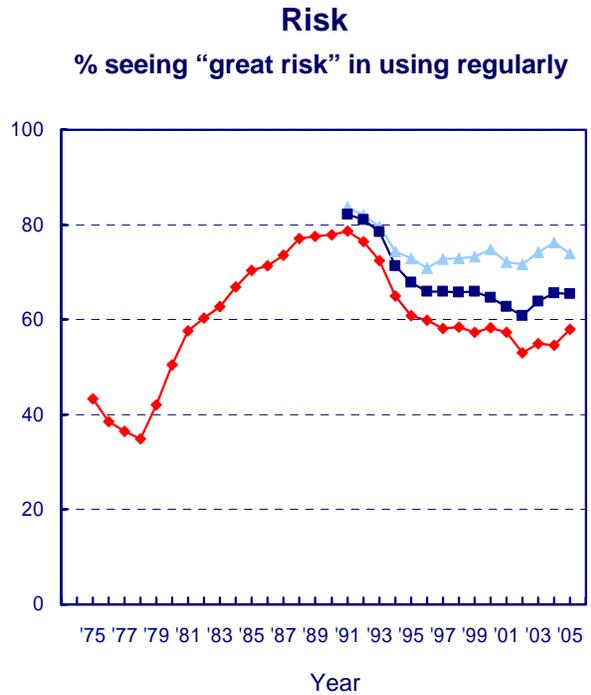
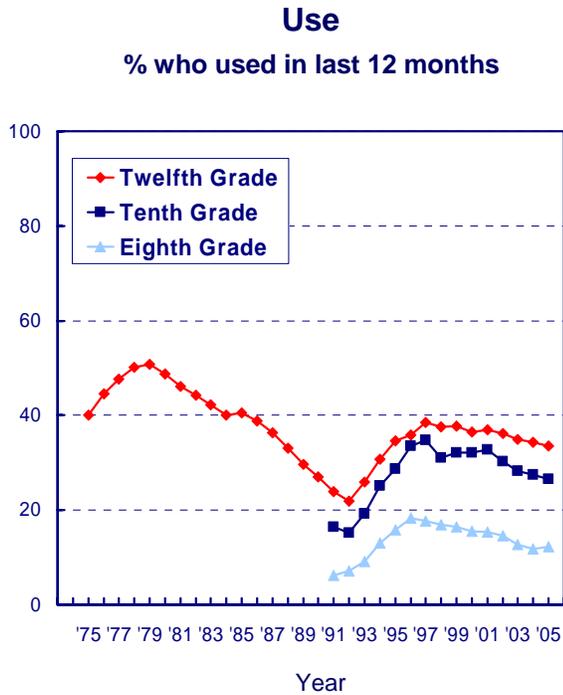
Personal disapproval of marijuana use slipped considerably among 8th graders between 1991 and 1996 and among 10th and 12th graders between 1992 and 1997. For example, the proportions of 8th, 10th, and 12th graders who said that they disapproved of trying marijuana once or twice fell by 17, 21, and 19 percentage points, respectively, over those intervals of increasing use. Since then there has been some modest increase in disapproval among 8th graders, but not much among 10th and 12th graders until 2004, when all grades showed increases. In 2005 the increases continued among the 10th and 12th graders but halted among the 8th graders.

## Availability

Since the study began in 1975, between 83% and 90% of every senior class have said that they could get marijuana fairly easily or very easily if they wanted some; therefore, it seems clear that this has remained a highly accessible drug. Since 1991, when data were also available for 8th and 10th graders, we have seen that marijuana is considerably less accessible to younger adolescents. Still, in 2005 two-fifths of 8th graders (41%) and almost three-quarters of all 10th graders (73%) reported it as being accessible. This compares to 86% for seniors.

As marijuana use rose sharply in the early and mid-1990s, reported availability increased as well, perhaps reflecting the fact that more young people had friends who were users. Availability peaked for 8th and 10th graders in 1996 and has fallen off since then, particularly in 8th grade. Availability peaked a bit later for 12th graders and has declined only slightly.

## Marijuana: Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



# Inhalants

---

Inhalants are any gases or fumes that can be inhaled for the purpose of getting high. These include many household products—the sale and possession of which is perfectly legal—including glue, nail polish remover, gasoline, solvents, butane, and propellants used in certain commercial products, such as whipped cream dispensers. Unlike nearly all other classes of drugs, their use is most common among younger adolescents and tends to decline as youth grow older. The early use of inhalants may reflect the fact that many inhalants are cheap, readily available, and legal to buy and to possess. The decline in use with age likely reflects their coming to be seen as “kids’ drugs,” in addition to the fact that a number of other drugs become available to older adolescents, who also are more able to afford them.

## Trends in Use

According to the long-term data from 12th graders, inhalant use (excluding the use of nitrite inhalants) rose gradually for some years, from 1976 to 1987. This rise in use was somewhat unusual in that most other forms of illicit drug use were in decline during the 1980s. Use rose among 8th and 10th graders from 1991, when data were first gathered on them, through 1995; it rose among 12th graders from 1992 to 1995. All grades then exhibited a fairly steady and substantial decline in use through 2002. In 2003 the decline continued for 10th and 12th graders (not significantly), but a statistically significant 1-percentage-point increase in use occurred among 8th graders, suggesting a possible end to their long and steady decline. In 2004 all grades showed some evidence of an increase in use. The increase in use in the two younger grades halted in 2005, while use continued to increase for 12th graders.

## Perceived Risk

Only 8th and 10th graders have been asked questions about the degree of risk they associate with inhalant use. Relatively low proportions of them think that there is a “great risk” in using an inhalant once or twice. However, there was an upward shift in this belief between 1995 and 1996, when significant increases in perceived risk were seen in both 8th and 10th grades. The Partnership for a Drug-Free America launched an anti-inhalant advertising initiative in 1995, which may help to explain the increase in perceived risk in 1996 and the important turnaround in the long-term upward trend in use after that point. That increase in perceived risk marked the beginning of a long and important decline in inhalant use. However, the degree of risk associated with inhalant use began to decline four years ago among 8th and 10th graders, perhaps explaining the turnaround in 2003 in use among 8th graders and in 2004 in the upper grades. The hazards of inhalant use were communicated during the mid-1990s; but there may currently be a “generational forgetting” of these hazards, as replacement cohorts who were too young to get that earlier message are entering adolescence.

## Disapproval

Over 80% of students say that they would disapprove of even trying an inhalant. There was a very gradual upward drift in this attitude among 8th and 10th graders through about 2002, with some falloff since then among 8th graders.

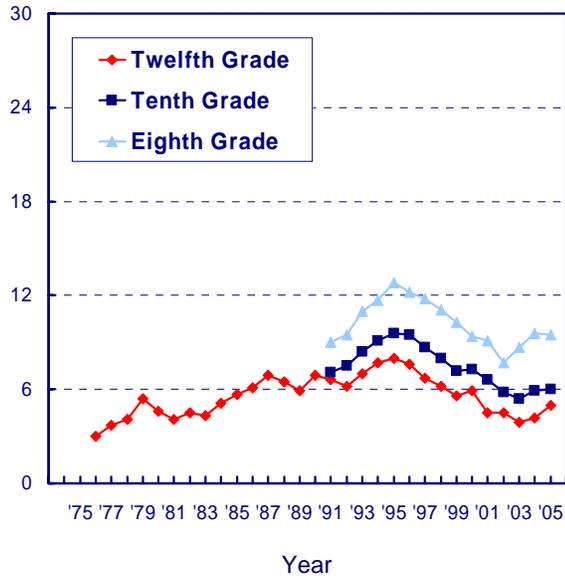
## Availability

Respondents have not been asked about the availability of inhalants. We have assumed that these substances are universally available to young people in these age ranges.

## Inhalants: Trends in Annual Use, Risk, and Disapproval Eighth, Tenth, and Twelfth Graders

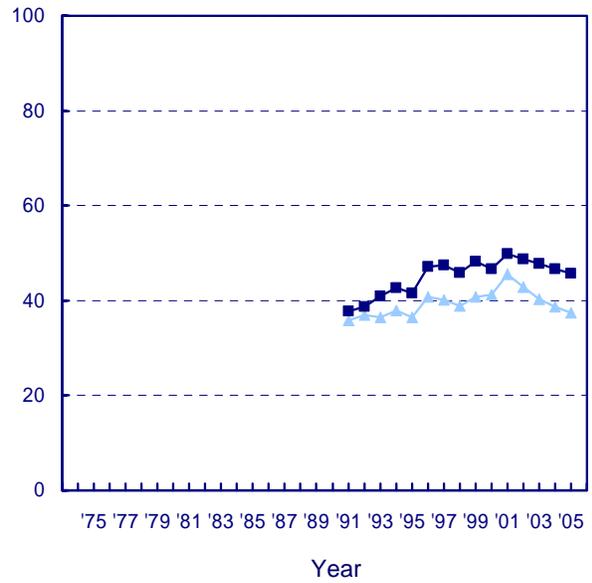
### Use

% who used in last 12 months



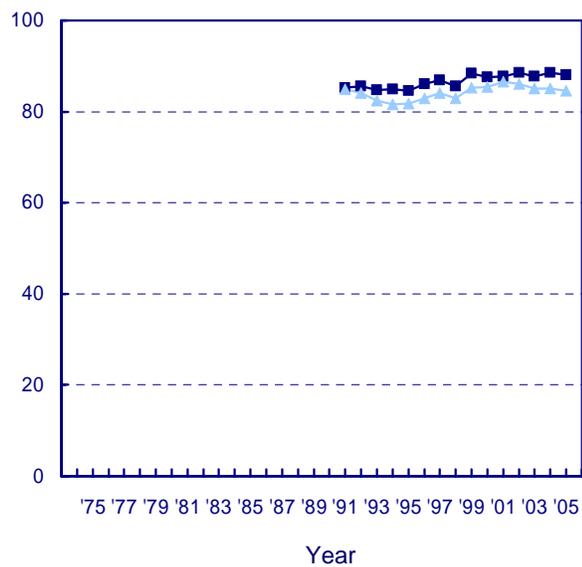
### Risk

% seeing "great risk" in using once or twice



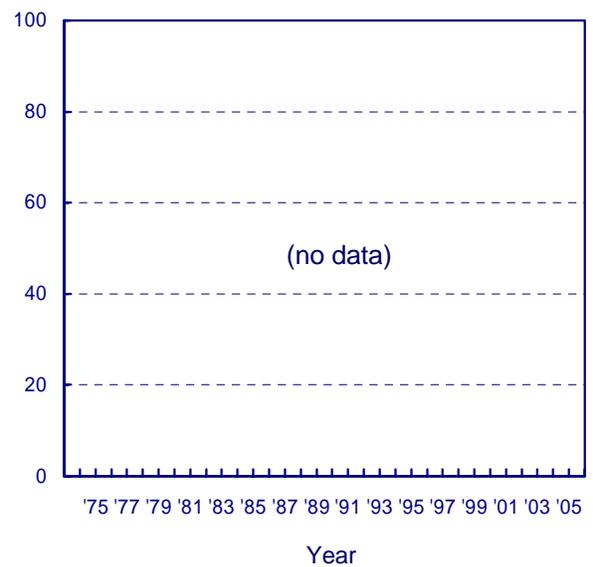
### Disapproval

% disapproving of using once or twice



### Availability

% saying "fairly easy" or "very easy" to get



# LSD

---

For some years, LSD was the most widely used drug within the larger class of drugs known as hallucinogens. This is no longer true, due to sharp decreases in its use. Statistics on overall hallucinogen use and on use of hallucinogens other than LSD are shown in the tables at the end of this report.

## Trends in Use

Annual prevalence of LSD use among 12th graders has been below 10% since the study began in 1975. Use declined some in the first 10 years of the study, likely continuing a decline that had begun before 1975. Use had been fairly level in the latter half of the 1980s but, as was true for several other drugs, rose in all three grades between 1991 and 1996. After significant declines in all three grades, particularly between 2001 and 2003, annual prevalence in 2003 reached the lowest point since data collection began (in 1991 for 8th and 10th graders and in 1975 for 12th graders). Little further change has occurred since 2003.

## Perceived Risk

We think it likely that perceived risk for LSD use had grown in the early 1970s, before this study began, as concerns about possible neurological and genetic effects spread (most of which were never scientifically confirmed) and as concern about “bad trips” grew. However, there was some decline in perceived risk in the late 1970s. The degree of risk associated with LSD experimentation remained fairly level among 12th graders through most of the 1980s, but a substantial decline occurred in all grades in the first half of the 1990s, when use rose. Since about 1999, perceived risk has declined a bit further among 8th and 10th graders and increased among 12th graders.

The decline of LSD use in recent years despite a *fall* in perceived risk suggests that some mechanism is involved other than a change in underlying attitudes and beliefs. Another drug might have been displacing LSD, and the most likely candidate would be ecstasy. However, ecstasy itself declined after 2001 and could not account for any displacement since then. The drop in perceived risk in recent years among 8th graders may well reflect

generational forgetting of LSD’s risks, leaving them vulnerable to future upturns.

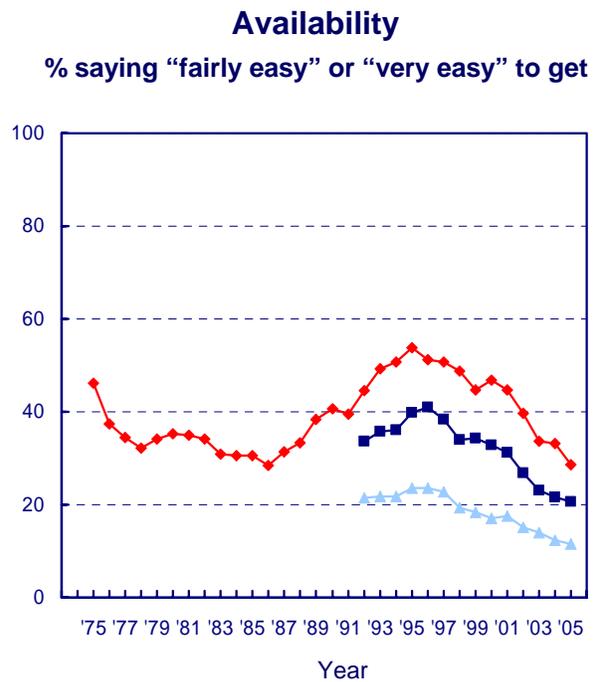
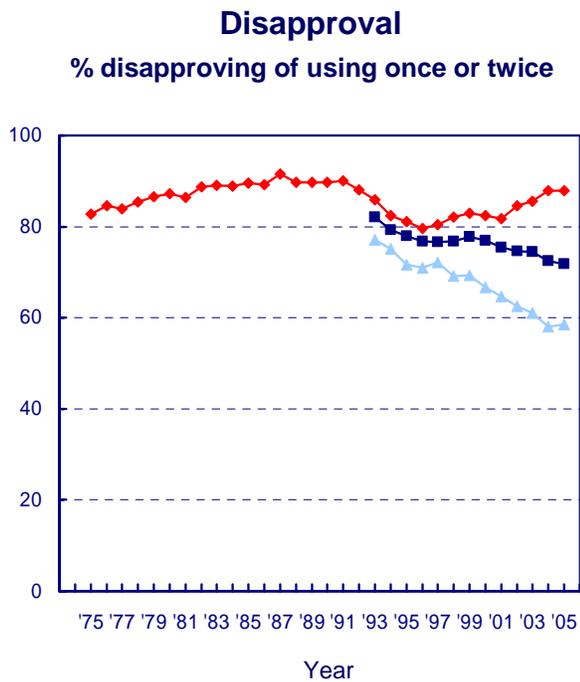
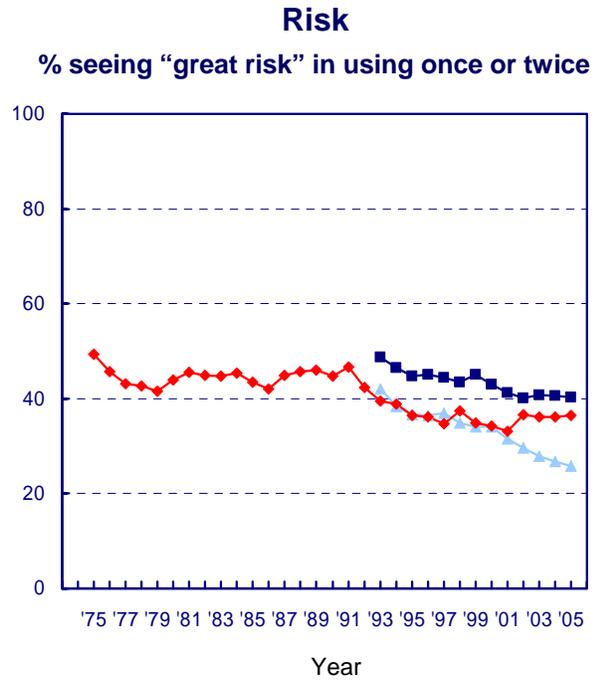
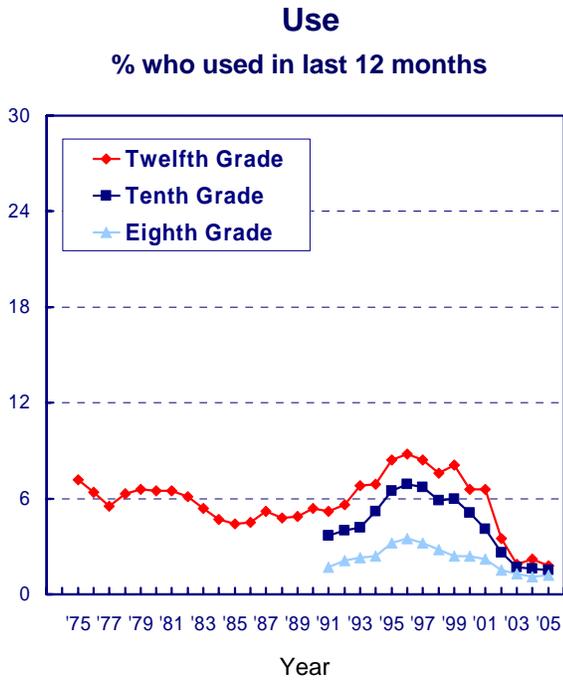
## Disapproval

Disapproval of LSD use was quite high among 12th graders through most of the 1980s but began to decline after 1991 along with perceived risk. All three grades exhibited a decline in disapproval through 1996, with disapproval of experimentation dropping 11 percentage points between 1991 and 1996 among 12th graders. After 1996 a slight increase in disapproval emerged among 12th graders, accompanied by a leveling among 10th graders and some further decline among 8th graders. Since 2001, disapproval of LSD use has diverged among the three grades, declining considerably among 8th graders, declining only a little among 10th graders, and increasing significantly among 12th graders. Note, however, that the percentages of 8th and 10th graders who respond with “can’t say, drug unfamiliar” increased over the years; thus the base for disapproval has shrunk, suggesting that the real decline of disapproval among the younger students is less than it appears here. (This fact is also consistent with the notion that generational forgetting has been occurring.) Regardless of these diverging trends, use fell sharply in all grades before leveling in 2004, with little change in 2005.

## Availability

Reported availability of LSD by 12th graders fell considerably from 1975 to 1983, remained level for a few years, and began a substantial rise after 1986, reaching a peak in 1995. LSD availability also rose among 8th and 10th graders in the early 1990s, reaching a peak in 1995 or 1996. Since those peak years, there has been considerable falloff in all three grades, particularly 12th grade—quite possibly in part because fewer students have LSD-using friends through whom they could gain access. But there may well have been a decrease in the supply of LSD, due to closing of major LSD-producing labs by the Drug Enforcement Administration; one particularly important seizure that occurred in late 2000 may help explain the sharp decline since then in reported availability and in use. It is clear that attitudinal changes cannot explain the recent declines in use.

## LSD: Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



# Cocaine

---

Cocaine was used almost exclusively in powder form for some years, though “freebasing” emerged for a while. Then in the early 1980s came the advent of crack cocaine. Our original questions did not distinguish among different forms of cocaine or different modes of administration but simply asked about using cocaine. The findings contained in this section report on the results of those more inclusive questions asked of 12th graders over the years. In 1987 we also began to ask separate questions about the use of crack cocaine and “cocaine other than crack,” which was composed almost entirely of powder cocaine use. Data on these two components of overall cocaine use are combined in the figures in this section, and results for crack alone are presented graphically in the next section.

## Trends in Use

There have been some important changes in the levels of overall cocaine use (which includes crack) over the life of the study. Use among 12th graders originally burgeoned in the late 1970s and remained fairly stable through the first half of the 1980s before starting a precipitous decline after 1986. Annual prevalence among 12th graders dropped by about three-quarters between 1986, when it was 12.7%, and 1992, when it reached 3.1%. Between 1992 and 1999, use reversed course again and doubled to 6.2% before declining to 5.0% by 2000, which is about where it has remained since. Use also rose in 8th and 10th grades after 1992 before reaching recent peak levels in 1998 and 1999, respectively. In the early 2000s, use dropped some in both grades, but the declines may have halted after 2001 in 10th grade and after 2004 in 8th grade.

## Perceived Risk

General questions about the dangers of cocaine and disapproval of cocaine have been asked only of 12th graders. The results tell a fascinating story. They show that perceived risk for experimental use fell in the late 1970s (when use was rising), stayed level in the first half of the 1980s (when use was level), and then jumped very sharply in a single year (by 14 percentage points between 1986 and 1987), just when the substantial decline in use be-

gan. The year 1986 was marked by a national media frenzy over crack cocaine and also by the widely publicized cocaine-related death of Len Bias, a National Basketball Association first-round draft pick. Bias’ death originally was reported as resulting from his first experience with cocaine. Though that later was proven not to be the case, the message had already “taken.” We believe that this event helped to persuade many young people that use of cocaine at any level was dangerous, no matter how healthy the individual. Perceived risk continued to rise through 1991 as the fall in use continued. After 1991, perceived risk began what became a longer-term decline, and a year later use began a long rise. Perceived risk has leveled in recent years, as has use.

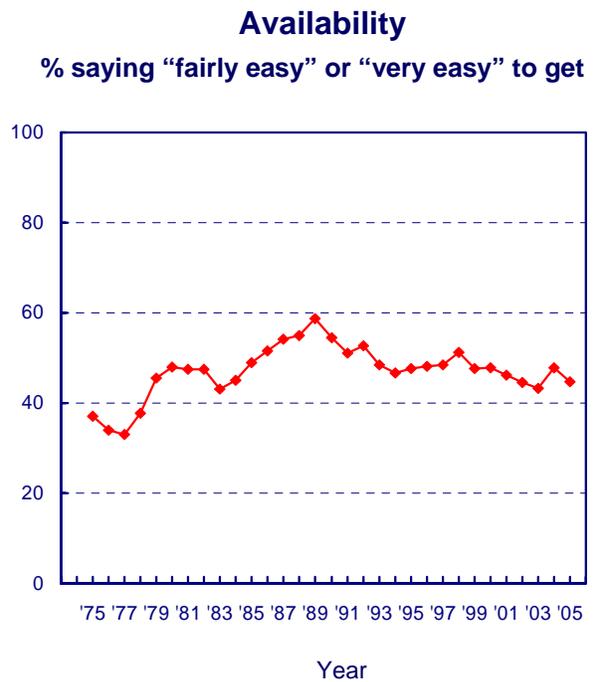
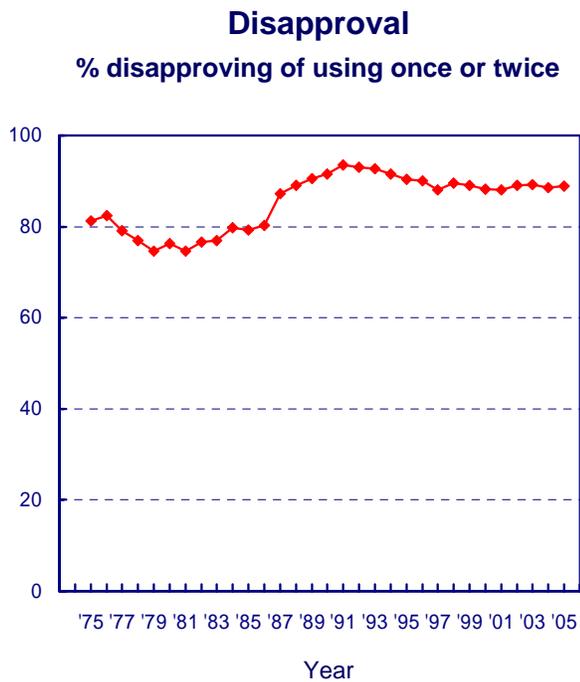
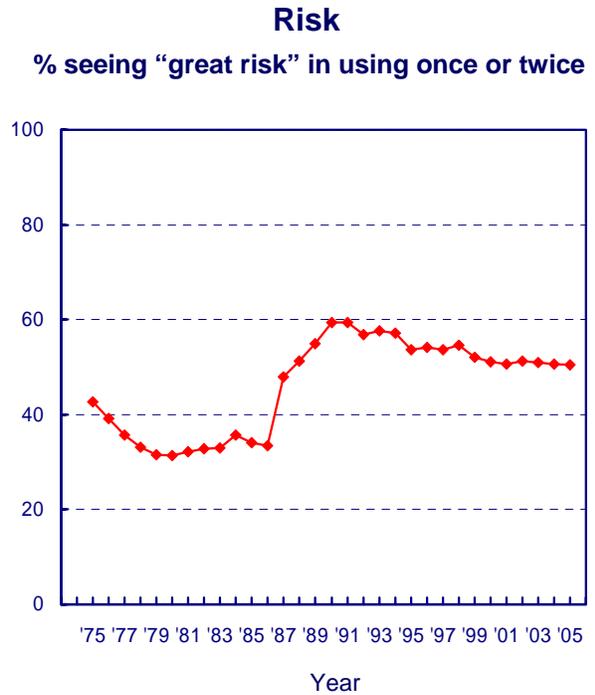
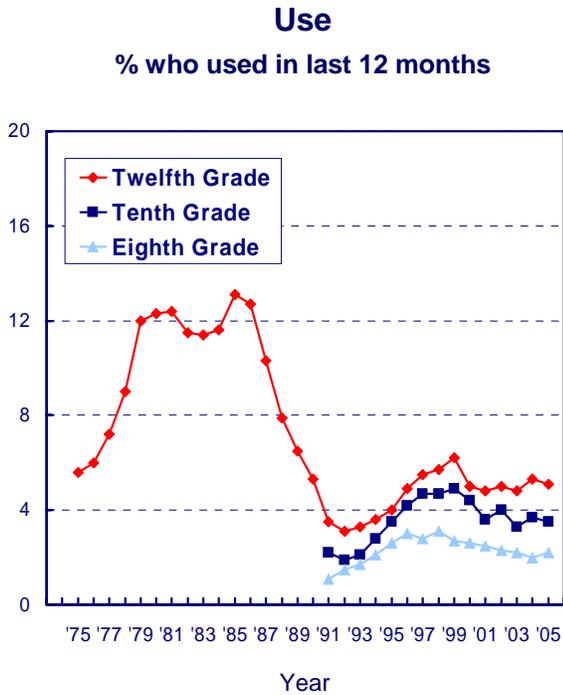
## Disapproval

Disapproval of cocaine use by 12th graders followed a cross-time pattern similar to that for perceived risk, although its 7-percentage-point jump in 1987 was not quite so pronounced. There was some decline from 1991 to 1997 but fair stability since then, despite the earlier modest decline in perceived risk.

## Availability

The proportion of 12th graders saying that it would be “fairly easy” or “very easy” for them to get cocaine if they wanted some was 33% in 1977, rose to 48% by 1980, held fairly level through 1985, and increased further to 59% by 1989 (in a period of rapidly *declining* use). It then fell back to about 49% by 1993 and rose to 51% in 1998 before dropping back again to 43% by 2003. It then increased significantly to 48% in 2004 before dropping back to 45% in 2005. Note that the pattern of change does not map all that well onto the pattern of change in actual use, suggesting that changes in overall availability may not have been a major determinant of use—particularly during the sharp decline in use in the late 1980s. The advent of crack cocaine in the early 1980s, however, provided a lower cost form of cocaine, thus reducing the prior social class differences in use (as is documented in our other publications).

## Cocaine (Including Crack): Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



## Crack Cocaine

---

Several indirect indicators in the study suggested that crack use grew rapidly in the period 1983-1986, beginning before we had direct measures of crack use. In 1986 a single usage question was included in one of the five questionnaire forms given to 12th graders; the question asked those who indicated any cocaine use in the prior 12 months if they had used crack. The results from that question represent the first data point in the first panel on the facing page. After that, our usual set of three questions about use was asked about crack and was inserted into several questionnaire forms.

### Trends in Use

After 1986 there was a precipitous drop in crack use among 12th graders—a drop that continued through 1991. After 1991 for 8th and 10th graders (when data were first available) and after 1993 for 12th graders, all three grades showed a slow, steady increase in use through 1998. Crack use finally started to drop after 1998 in 8th and 10th grades and after 1999 in 12th grade. Since those recent peak years, annual prevalence has dropped by roughly a third in all three grades.

### Perceived Risk

By the time we added questions about the perceived risk of using crack in 1987, it was already seen as one of the most dangerous of all the illicit drugs by 12th graders: 57% saw a great risk in even trying it. This compared to 54% for heroin, for example. (See the previous section on cocaine for a discussion of changes in perceived risk in 1986.) Perceived risk for crack rose still higher through 1990, reaching 64% of 12th graders who said they thought there was a great risk in taking crack once or twice. (Use was dropping during that interval.) After 1990 some falloff in perceived risk began, well before crack use began to increase in 1994. Thus, here again, perceived risk was a leading indicator. Between 1991 and 1998 there was a considerable falloff in this belief in grades 8 and 10, as use rose quite steadily. Perceived risk leveled in 2000 in grades 8 and 12 and a year later in grade 10. We think that the declines in perceived risk for crack and cocaine during the 1990s may

well reflect an example of “generational forgetting,” wherein the class cohorts that were in adolescence when the adverse consequences were most obvious (i.e., in the mid-1980s) are replaced by newer cohorts who heard less about the dangers of the drug as they were growing up.

### Disapproval

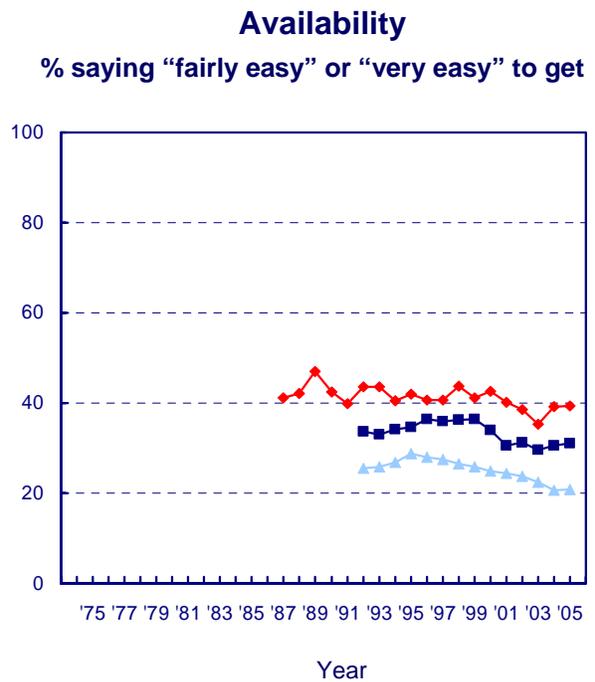
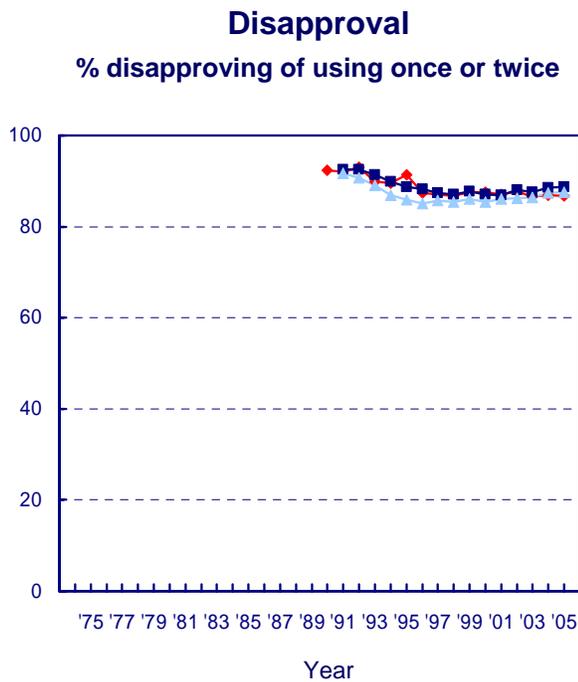
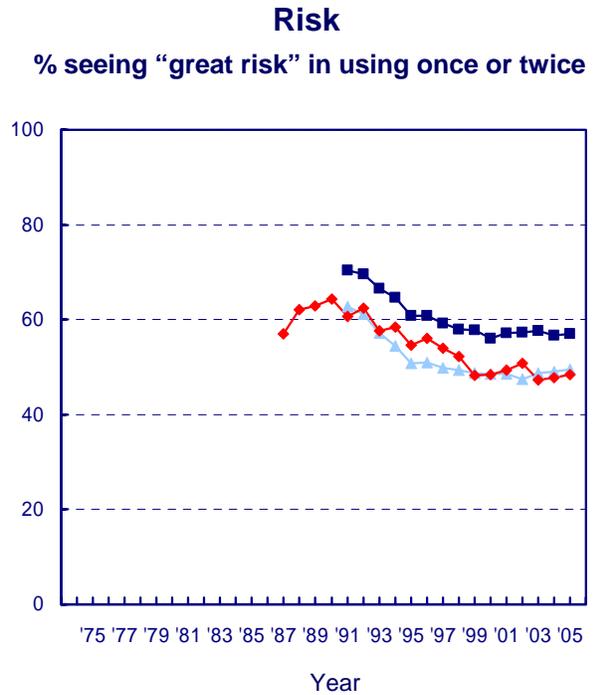
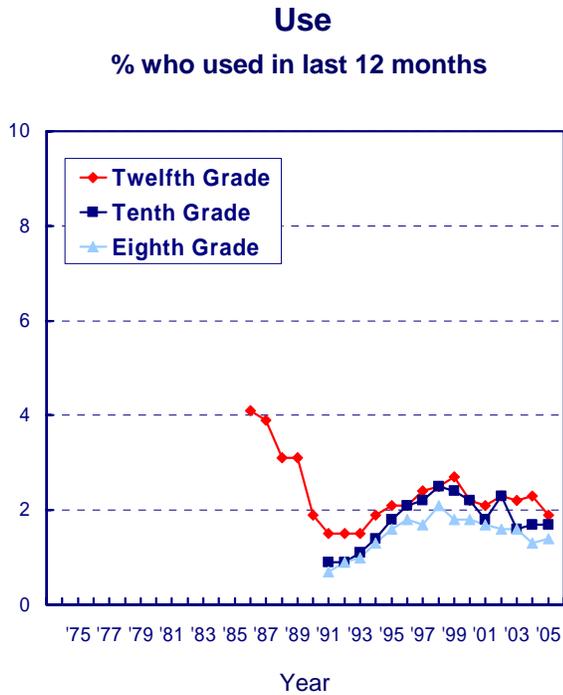
Disapproval of crack use was not included in the study until 1990, by which time it was at a very high level, with 92% of 12th graders saying that they disapproved of even trying it. Disapproval of crack use eased steadily in all three grades from 1991 through about 1997, before stabilizing.

### Availability

Crack availability has not changed dramatically across the interval for which data are available, as the fourth panel on the facing page illustrates. Eighth and 10th graders reported some modest increase in availability in the early 1990s. This was followed by a slow, steady decrease after 1995 in 8th grade and sharper drops in 10th and 12th grades in 1999 and 2000, respectively. The downward trend reversed in 2004, when there was an increase in the upper grades.

NOTE: The distinction between crack cocaine and other forms of cocaine (mostly powder) was not made until the middle of the life of the study. The figures on the facing page begin their trend lines when these distinctions were introduced for the different types of measures. Figures are not presented here for the “other forms of cocaine” measures, simply because the trend curves look extremely similar to those for crack. (All the statistics are contained in the tables presented later.) Although the trends are very similar, the absolute levels of use, risk, etc., are somewhat different. Usage levels tend to be higher for cocaine powder compared to crack, and the levels of perceived risk a bit lower, while disapproval and availability are quite close for the two different forms of cocaine.

## Crack: Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



# Amphetamines

---

Amphetamines, a class of psychotherapeutic stimulants, have had a relatively high prevalence of use in the youth population for many years. The behavior reported here is supposed to exclude any use under medical supervision. Amphetamines are controlled substances—they are not supposed to be bought or sold without a doctor’s prescription—but some are diverted from legitimate channels, and some are manufactured and/or imported illegally.

## Trends in Use

The use of amphetamines rose in the last half of the 1970s, reaching a peak in 1981—two years after marijuana use peaked. We believe that the usage rate reached in 1981 (annual prevalence of 26%) may have been an exaggeration of true amphetamine use because “look-alikes” were in common use at that time. After 1981 a long and steady decline in use of amphetamines by 12th graders began, which did not end until 1992.

As with many other illicit drugs, amphetamines made a comeback in the 1990s, with annual prevalence starting to rise by 1992 among 8th graders and by 1993 among 10th and 12th graders. Use peaked in the lower two grades by 1996 and in 12th grade by about 1997. Since those peak years, use declined steadily in 8th grade, sporadically in 10th grade, and not until 2003 in 12th grade. In 2005 the decline continued in the upper grades but halted in grade 8. Since the recent peaks in use, annual prevalence has declined by nearly half in 8th grade, by about four-tenths in 10th grade, but by less than one-quarter so far in 12th grade.

## Perceived Risk

Only 12th graders are asked questions about the amount of risk they associate with amphetamine use. Overall, changes in perceived risk have been less strongly correlated with changes in usage levels (at the aggregate level) for this drug than for a number of others, although the expected inverse association pertained during much of the period 1975-2001. There was decrease in risk during the

period 1975-1981 (when use was rising), some increase in risk in 1986-1991 (when use was falling), and some decline in perceived risk from 1991 to 1995 (in advance of use rising again). But in the interval 1981-1986, risk was quite stable even though use fell considerably. Because those are the years of peak cocaine use, it seems likely that some of the decline in amphetamine use in the 1980s was not due to a change in attitudes specific to that drug but rather due to some displacement by another stimulant—cocaine. Perceived risk has been rising in the past several years, possibly accounting for the decline in use that has been occurring among 12th graders since 2001. In 2005, perceived risk continued to increase and use dropped significantly.

## Disapproval

Disapproval of amphetamine use is asked only of 12th graders. Relatively high proportions of 12th graders have disapproved of even trying amphetamines throughout the life of the study (between 70% and 87%). Disapproval did not change in the late 1970s despite the increase in use, although there seemed to be a one-year drop in 1981. From 1981 to 1992, disapproval rose gradually from 71% to 87% as use steadily declined. Disapproval then fell back about 6 or 7 percentage points in the next couple of years (as use rose), before stabilizing. It has increased since 2001.

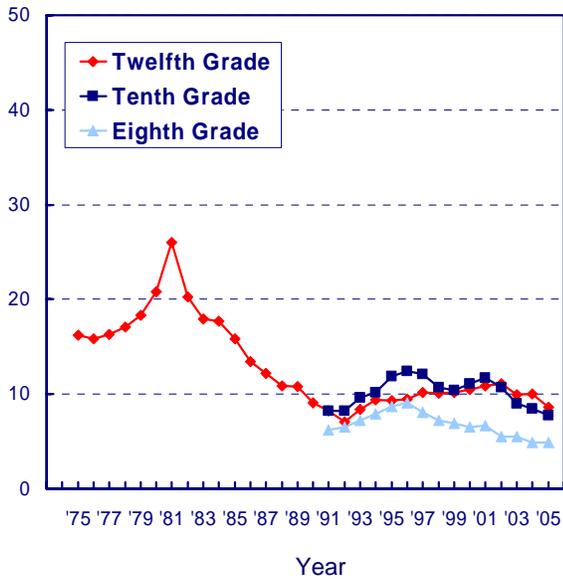
## Availability

When the study started in 1975, amphetamines had a high level of reported availability. The level fell by about 10 percentage points by 1977, drifted up a bit through 1980, jumped sharply in 1981, and then began a long, gradual decline through 1991. There was a modest increase in availability at all three grade levels in the early 1990s, as use rose, followed by some decline in the mid-1990s and stability after 1997. In the early 2000s some further decline has been observed in all three grades, including a significant decline among 12th graders in 2005.

## Amphetamines: Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders

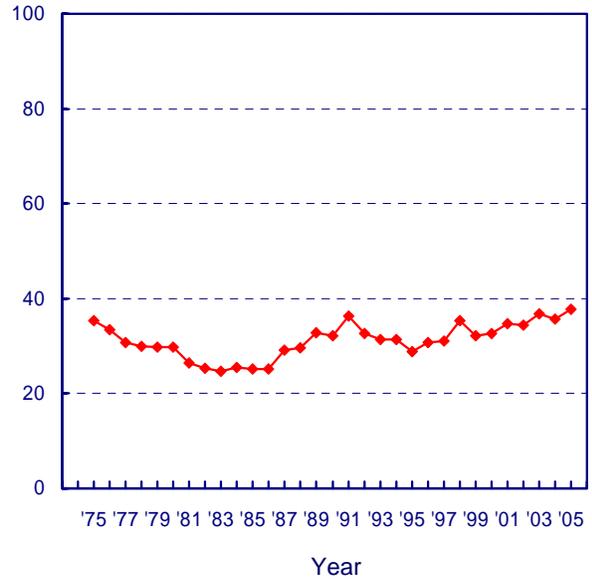
### Use

% who used in last 12 months



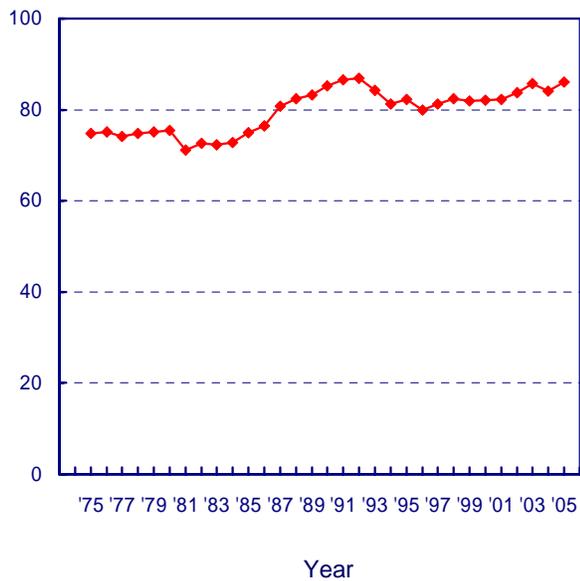
### Risk

% seeing "great risk" in using once or twice



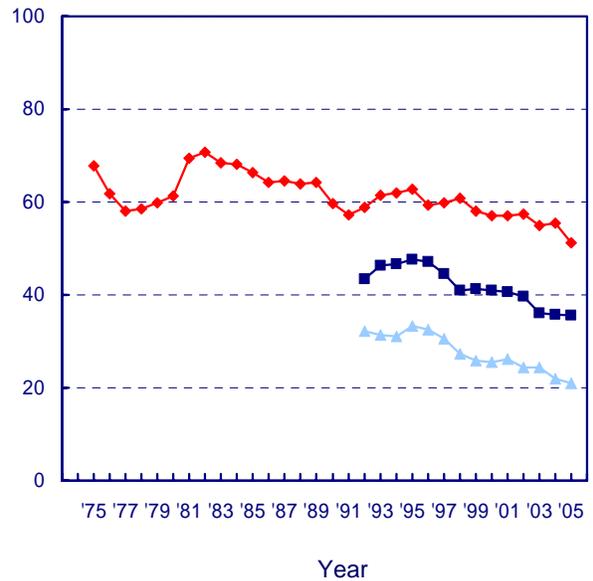
### Disapproval

% disapproving of using once or twice



### Availability

% saying "fairly easy" or "very easy" to get



## Methamphetamine and Ice

---

One subclass of amphetamines is called methamphetamine. This subclass (at one time called “speed”) has been around for a long time and gave rise to the phrase “speed kills” in the 1960s. Probably because of the reputation it got at that time as a particularly dangerous drug, it was not very popular for a long time. As a result, we did not even include a full set of questions about its use in the study’s questionnaires. One form of methamphetamine, crystal methamphetamine or “ice,” grew in popularity in the 1980s. It comes in crystallized form, as the name implies, and the chunks can be heated and the fumes inhaled, much like crack cocaine.

### Trends in Use

For most of the life of the study the only question about methamphetamine use has been contained in a single 12th-grade questionnaire form. Respondents who indicated using *any* type of amphetamines in the prior 12 months were asked in a sequel question to check on a prespecified list the types they had used during that period. “Methamphetamine” was one type on the list, and data exist on its use since 1976. In 1976, annual prevalence was 1.9%; it then roughly doubled to 3.7% by 1981 (the peak year), before declining for over a decade all the way down to 0.4% by 1992. Use then rose again in the 1990s, reaching 1.3% by 1998 before declining to 0.9% in 1999 and then rising again to 1.9% by 2003. In other words, it followed a cross-time trajectory fairly similar to that for amphetamines as a whole.

In 1990, in the 12th-grade questionnaires only, we introduced our usual set of three questions for crystal methamphetamine (“ice”), measuring lifetime, annual, and 30-day use. Among 12th graders in 1990, 1.3% indicated any use in the prior year; the figure then climbed to 3.0% by 1998, dropped to 1.9% in 1999, and gradually rose to reach 3.0% again in 2002. Use then dropped to 2.3% by 2005.

This variable is charted on the first facing panel. It shows a fairly stable trend line in annual prevalence (between 2% and 3%) since about 1997.

Responding to the growing concern about methamphetamine use in general—not just crystal methamphetamine use—we added a full set of three questions about the use of *any methamphetamine* to the 1999 questionnaires for all three grade levels. These questions yield a somewhat higher annual prevalence for 12th graders: 4.3% in 2000, compared to the sum of the methamphetamine and ice answers in the other question format, which totaled 2.8%. It would appear, then, that the long-term method we had been using for tracking methamphetamine use probably yielded an understatement of the *absolute prevalence* level, perhaps because some proportion of methamphetamine users did not correctly categorize themselves initially as amphetamine users (even though methamphetamine was given as one of the examples of the amphetamines). We think it unlikely that the *shape* of the trend curve was distorted, however.

The newer questions (not graphed here) show annual prevalence rates in 2005 of 1.8%, 2.9%, and 2.5% for 8th, 10th, and 12th graders, respectively. All of these levels are down considerably from the first measurement taken in 1999, when they were 3.2%, 4.6%, and 4.7%, respectively (see Table 2). So, despite growing publicity about the methamphetamine problem in the country, this population at least has shown a fairly steady decline in its use over the past six years.

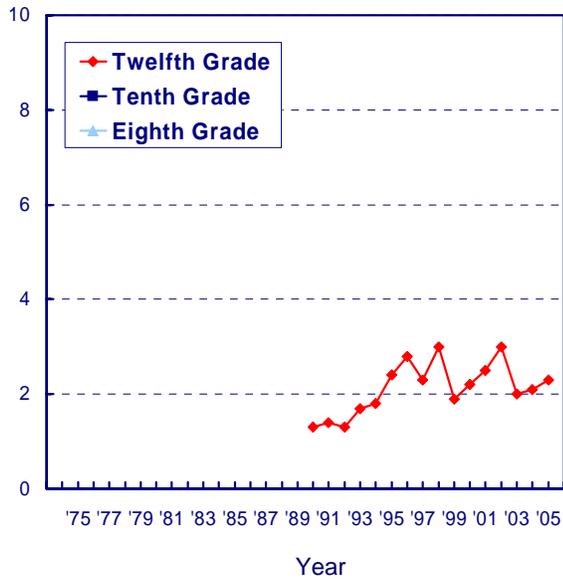
### Other Measures

No questions have yet been added to the study on perceived risk, disapproval, or availability with regard to overall methamphetamine use. Data on perceived risk and availability for *crystal* methamphetamine, specifically, may be found on the facing page.

## Ice: Trends in Annual Use, Risk, and Availability Eighth, Tenth, and Twelfth Graders

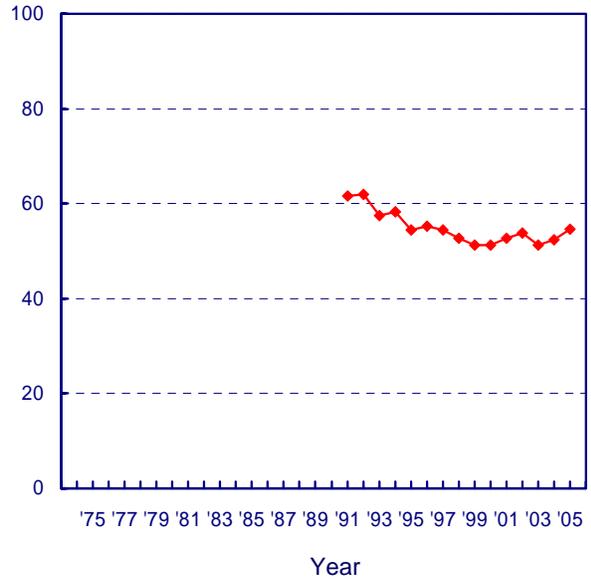
### Use

% who used in last 12 months



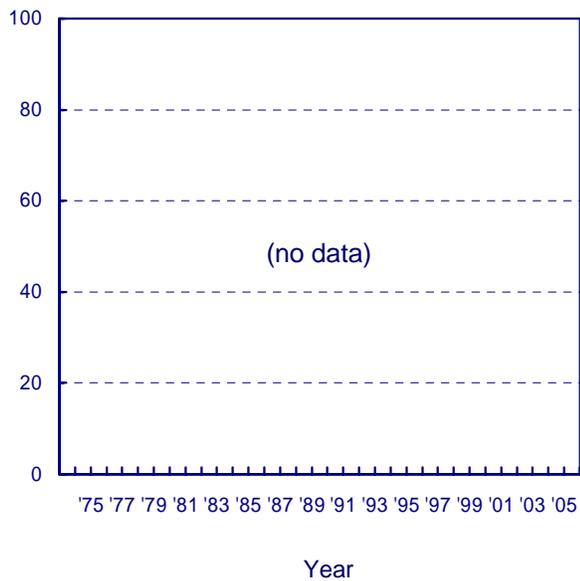
### Risk

% seeing "great risk" in using once or twice



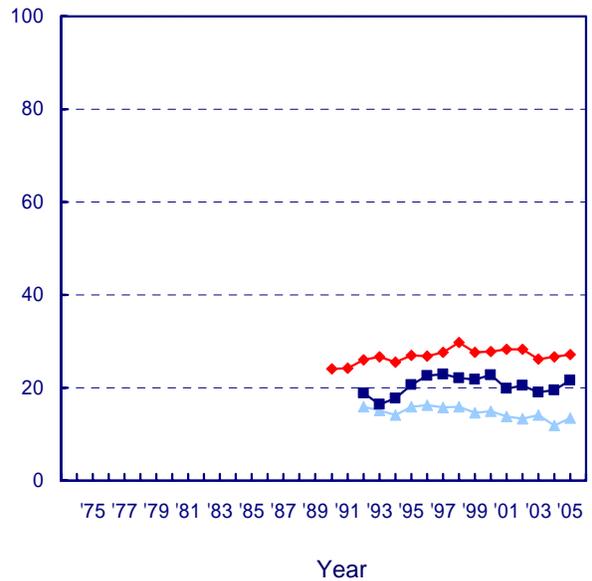
### Disapproval

% disapproving of using once or twice



### Availability

% saying "fairly easy" or "very easy" to get



# Heroin

---

For many decades heroin, a derivative of opium, was administered primarily by means of injection into a vein. However, in the 1990s the purity of available heroin reached very high levels, making other modes of administration (such as snorting and smoking) practical alternatives to injection. Thus, in 1995 we introduced questions that asked separately about using heroin with and without a needle so that we might see to what extent noninjection use helped to explain the upsurge in use then occurring. The usage statistics presented on the facing page are based on heroin use by any method, but data on the two specific types of administration are contained in the tables at the end of this report.

## Trends in Use

The annual prevalence of heroin use among 12th graders fell by half between 1975 and 1979, from 1.0% to 0.5%. The rate then held amazingly steady for about 14 years. After about 1993, though, heroin use began to rise, and it rose substantially until 1996 (among 8th graders) or 1997 (among 10th and 12th graders). The prevalence rates roughly doubled at each grade level. Use then stabilized through 1999. In 2000 it declined significantly at 8th grade while rising significantly at 12th grade; but in 2001 annual prevalence declined significantly to 0.9% in both 10th and 12th grades. No systematic change has been observed since 2001.

The questions about use with and without a needle were not introduced until the 1995 survey, so they did not encompass much of the period of increasing use. Responses to these questions showed that by then about equal proportions of all users at 8th grade were using heroin by each of the two methods of ingestion, and some—nearly a third of the users—were using by both means. At 10th grade a somewhat higher proportion of all users took heroin by injection, and at 12th grade a higher proportion still. Much of the remaining increase in overall heroin use beyond 1995 occurred in the proportions using it *without* injecting, which we strongly suspect was true in the immediately preceding period of increase, as well. Likewise,

most of the decrease in use since the recent peak levels has been due to decreasing use of heroin without a needle.

## Perceived Risk

Students have long seen heroin to be one of the most dangerous drugs, which no doubt helps to account both for the consistently high level of personal disapproval of use (see next section) and the quite low prevalence of use. There have been some changes in perceived risk levels over the years, nevertheless. Between 1975 and 1986, perceived risk gradually declined, even though use dropped and then stabilized in that interval. There was then an upward shift in 1987 (the same year that perceived risk for cocaine jumped dramatically) to a new level, where it held for four years. In 1992, risk dropped to a lower plateau again, a year or two before use started to rise. Perceived risk then rose again in the latter half of the 1990s, and use leveled off and subsequently declined. Based on the short interval for which we have such data from 8th and 10th graders, it may be seen that perceived risk of use without a needle rose among them between 1995 and 1997, foretelling an end to the increase in use. Note that perceived risk has served as a leading indicator of use for this drug, as well as for a number of others.

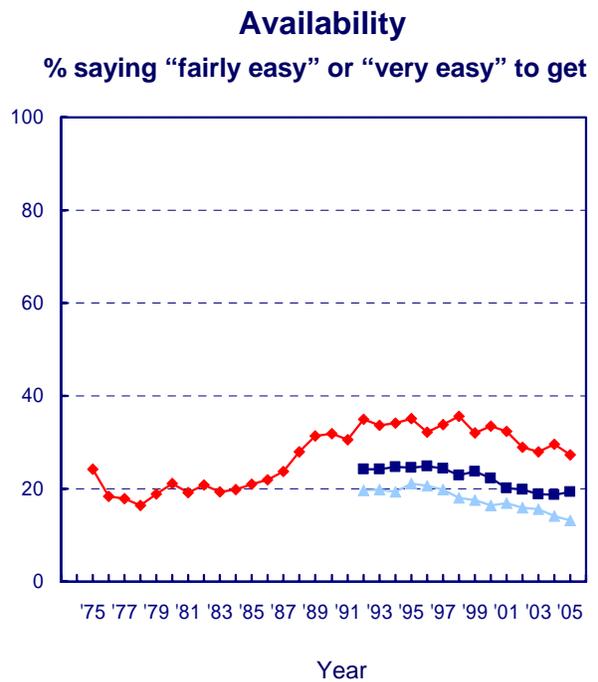
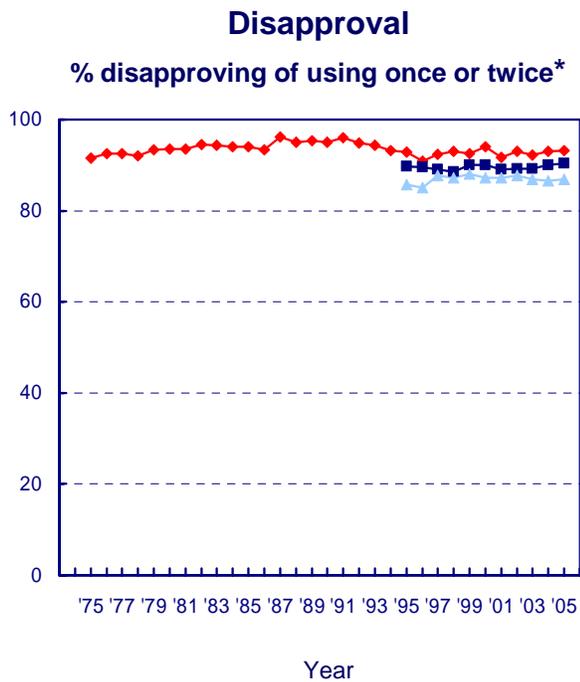
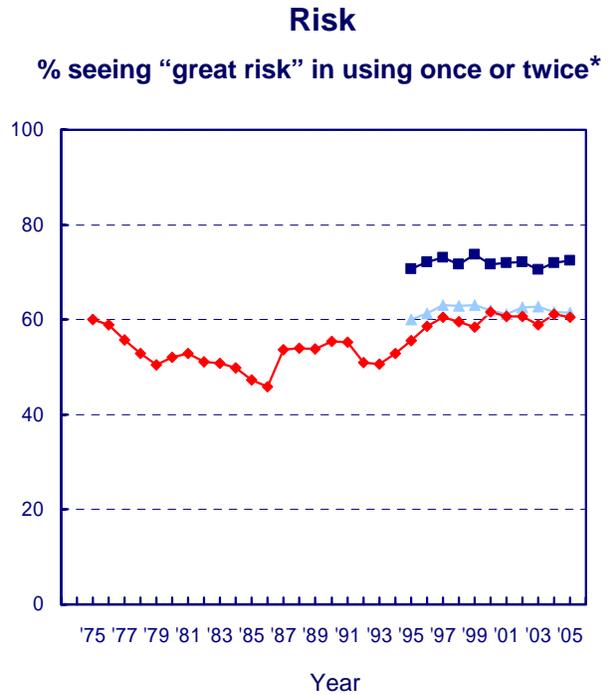
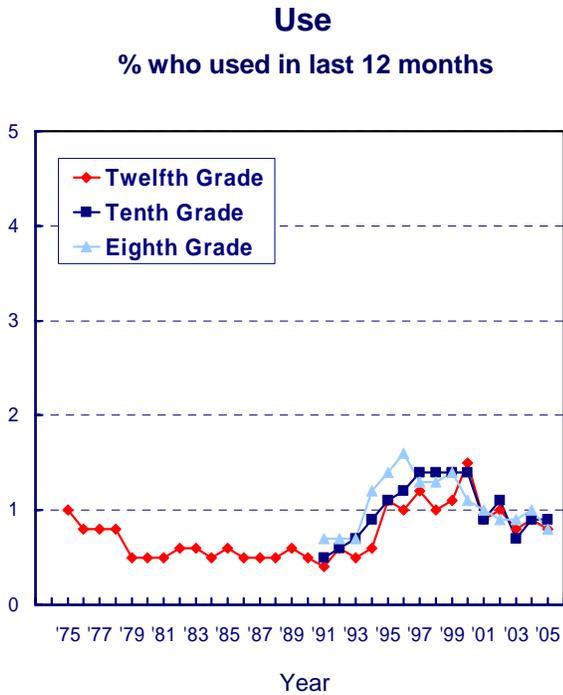
## Disapproval

There has been very little fluctuation in the very high disapproval levels for heroin use over the years, although what change there was in the last half of the 1990s was consistent with the concurrent changes in perceived risk and use.

## Availability

The proportion of 12th-grade students saying they could get heroin fairly easily if they wanted some remained around 20% through the mid-1980s; it then increased considerably from 1986 to 1992 before stabilizing at about 30% since 2000. At the lower grade levels, reported availability has been lower and has declined some since the mid-1990s.

## Heroin: Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



\*Prior to 1995, the question asked about heroin use in general. Since 1995, the question has asked about heroin use without a needle.

# Tranquilizers

---

Tranquilizers constitute another class of psychotherapeutic drugs that are legally sold only by prescription, like amphetamines. They are central nervous depressants and, for the most part, are comprised of benzodiazepines (minor tranquilizers). Respondents are instructed to exclude any medically prescribed use from their answers. At present Valium and Xanax are the two tranquilizers most commonly used by students.

## Trends in Use

During the late 1970s and all of the 1980s, tranquilizers fell steadily from popularity, with use declining by three-quarters among 12th graders over the 15-year interval between 1977 and 1992. Their use then increased during the 1990s, along with many other drugs. Annual prevalence more than doubled among 12th graders, rising steadily through 2002, before leveling. Use also has been rising steadily among 10th graders but began to decline some in 2002. Use peaked much earlier among 8th graders, in 1996, and then declined slightly for two years. Tranquilizer use has remained stable since then among the 8th graders, at considerably lower levels than the upper two grades.

## Perceived Risk

Data have not been collected on perceived risk, primarily due to questionnaire space limitations.

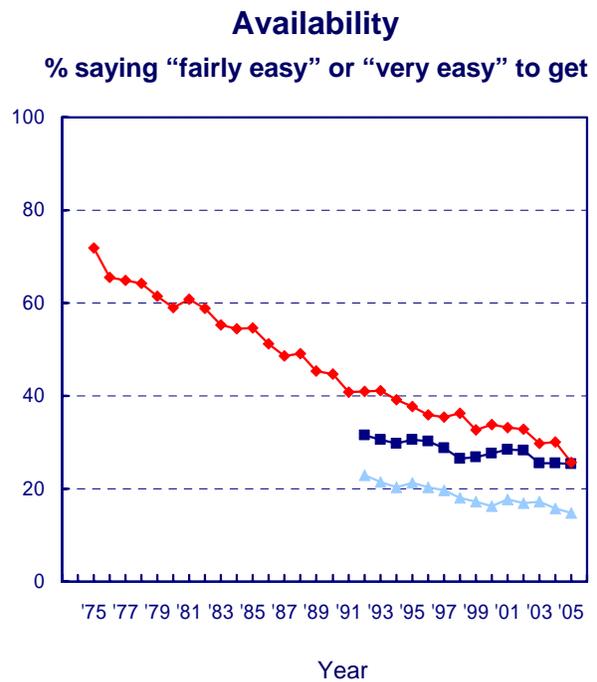
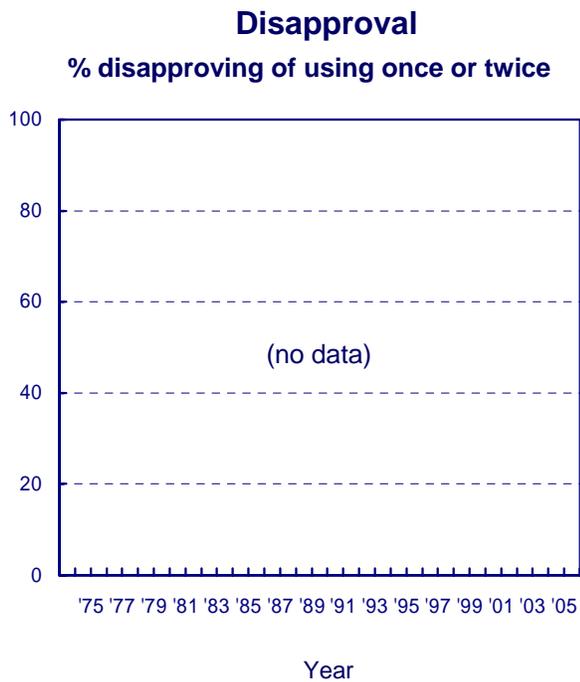
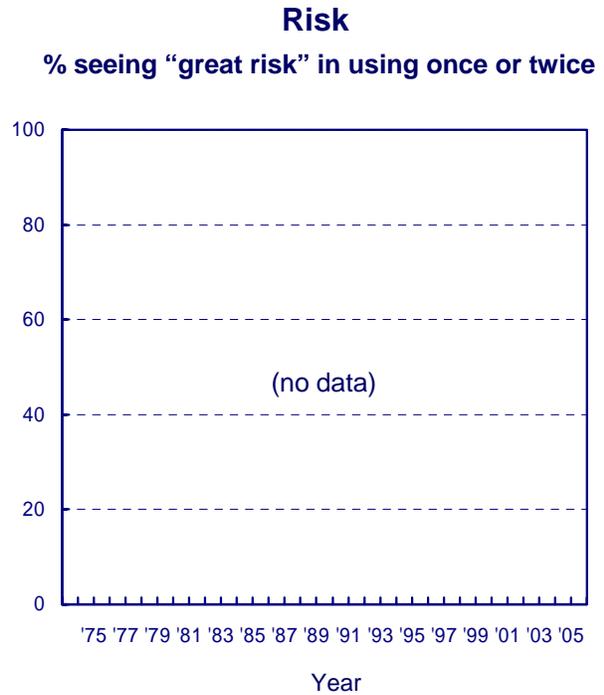
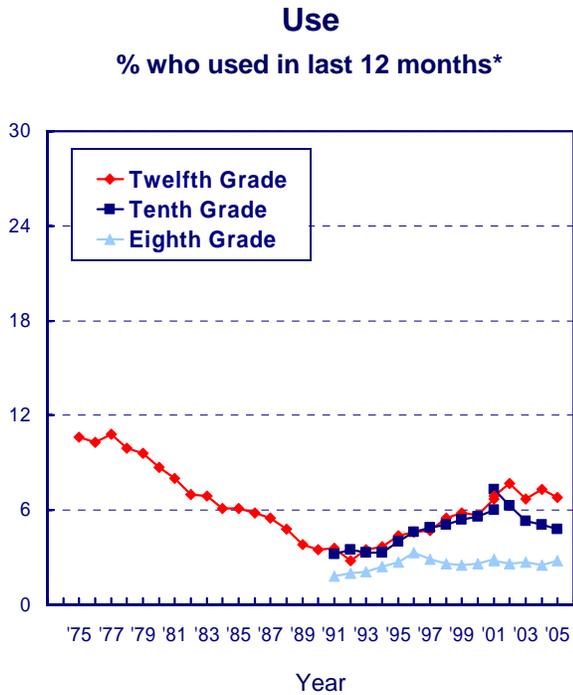
## Disapproval

Data have not been collected on disapproval, for the same reason.

## Availability

As the number of 12th graders reporting non-medically prescribed tranquilizer use fell dramatically during the 1970s and 1980s, so did the proportion saying that tranquilizers would be fairly easy to get. Whether declining use caused the decline in availability, or vice versa, is unclear. Perceived availability, as measured by the proportion of respondents saying that it would be fairly easy or very easy for them to get tranquilizers if they wanted some, fell by nearly two-thirds—from 72% in 1975 to 26% by 2005. Most of that decline occurred before the 1990s. There was a further drop in availability during the 1990s at all three grade levels, despite the fact that use rose a bit. Availability is down some in the first half decade of the 2000s in all three grades.

## Tranquilizers: Trends in Annual Use and Availability Eighth, Tenth, and Twelfth Graders



\*Beginning in 2001 a revised set of questions on tranquilizer use was introduced, in which "Xanax" replaced "Miltown" in the list of examples.

## Sedatives (Barbiturates)

---

Like tranquilizers, sedatives are prescription-controlled psychotherapeutic drugs that are central nervous system depressants. They are used to assist sleep and to relieve anxiety.

Though for many years respondents have been asked specifically about their use of barbiturate sedatives, they likely have been including other classes of sedatives in their answers. In 2004 the question on use was revised to say “sedatives (barbiturates)”—a change that appeared to have practically no impact on the reported levels of use. Respondents are routinely instructed to exclude from their answers any use that occurred under medical supervision. Usage data are reported only for 12th graders because we believe that students in the lower grades tend to overreport use, perhaps including their use of nonprescription sleep aids or other over-the-counter drugs.

### Trends in Use

Like tranquilizers, the use of sedatives (barbiturates) fell in popularity rather steadily among 12th graders from the mid-1970s through the early 1990s. From 1975 to 1992, use fell by three-fourths, from 10.7% annual prevalence to 2.8%. Usage rates then had a gradual, long-term resurgence after 1992, rising quite steadily through 2005.

A specific sedative, methaqualone, has been included in the study from the beginning. In 1975, methaqualone use was about half the level of barbiturate use. Its use also declined steadily from 1981, when annual prevalence was 7.6%, through 1993, when annual prevalence reached the negligible level of 0.2%. Use increased some for a couple of years, reaching 1.1% in 1996, where it remained through 1999 before dropping to 0.3% in

2000. Use then increased to 0.8% in 2001 before leveling.

### Perceived Risk

Trying sedatives (barbiturates) was never seen by most students as very dangerous, and it is clear from the second facing panel that perceived risk cannot do much to explain the trends in use that occurred through 1986, at least. Perceived risk actually declined a bit between 1975 and 1986—an interval in which use also was declining. But then perceived risk shifted up some through 1991, consistent with the fact that use was still falling. It dropped back some through 1995, as use was increasing, and then remained relatively stable for a few years. Risk increased gradually in the early 2000s, but leveled between 2004 and 2005.

### Disapproval

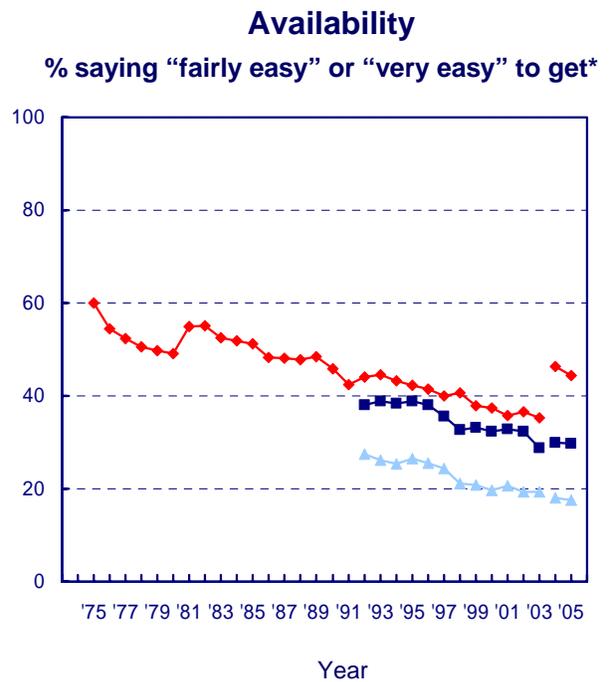
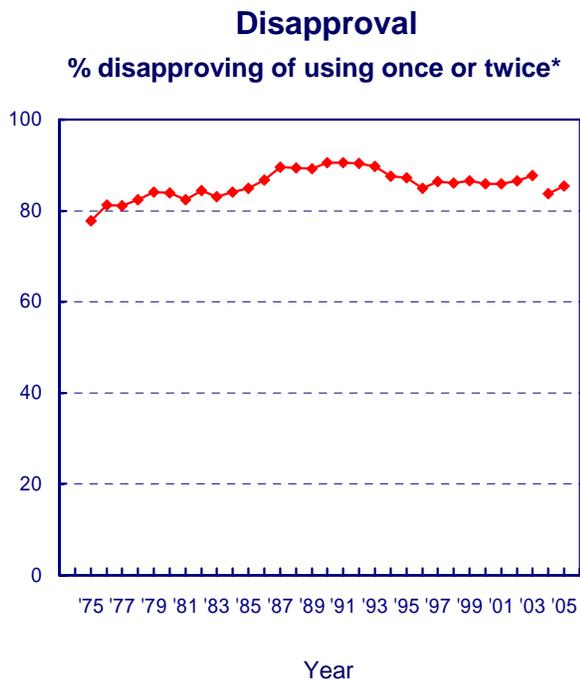
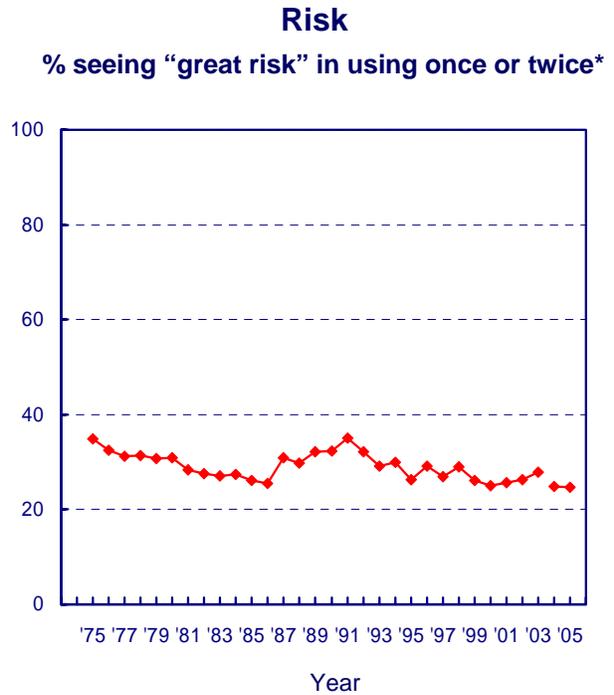
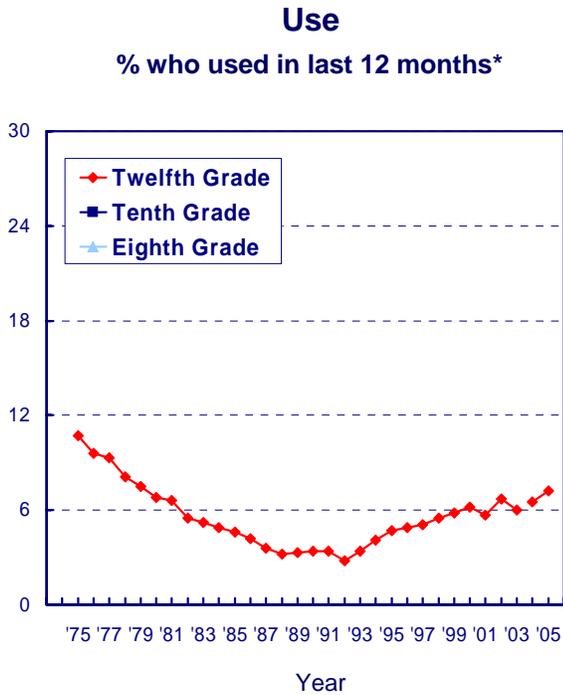
Like many of the illicit drugs other than marijuana, sedative (barbiturate) use has received the disapproval of the great majority of high school graduating classes since 1975, although there have been some changes in level. Those changes have been consistent with the changes in actual use observed. Disapproval of using these drugs once or twice rose from 78% in 1975 to a high of 91% in 1990, where it held for two years. Then disapproval eroded a bit to 86% by 2000 during a period of increasing use. It remained at this level in 2001, before rising slightly in recent years.

### Availability

As the fourth facing panel shows, the availability of sedatives (barbiturates) has generally been declining during most of the life of the study, except for one shift up that occurred in 1981—a year in which we believe that so-called “look-alike” drugs (probably including sedative look-alikes) became more widespread.

## Sedatives (Barbiturates): Trends in Annual Use, Risk, Disapproval, and Availability

### Eighth, Tenth, and Twelfth Graders



\*In 2004 the question text was changed from "barbiturates" to "sedatives/barbiturates" and the list of examples was changed.

## Ecstasy and Other “Club Drugs”

---

There are a number of “club drugs,” so labeled because they have been popular at night clubs and “raves.” They include LSD, MDMA (“ecstasy”), methamphetamine, GHB (gammahydroxybutyrate), ketamine (“special K”), and Rohypnol. We deal here primarily with ecstasy, Rohypnol, ketamine, and GHB, because LSD and methamphetamine have already been discussed.

Rohypnol and GHB, both of which can induce amnesia of events while under the influence, also have been labeled “date rape drugs.” The annual prevalence of **GHB** use in 2005 was 0.5%, 0.8%, and 1.1% in grades 8, 10, and 12, and the annual prevalence of **ketamine** use was 0.6%, 1.0%, and 1.6%. Both have shown considerable drops since their recent peak levels of use—on the order of four-tenths to six-tenths (see Table 2). **Rohypnol** was added to the survey in 1996, and low levels of use were reported—annual prevalence around 1% in all three grade levels. Use at 8th grade declined to 0.5% by 1999 before leveling. In the upper two grades, use first rose for a year or two before beginning to fall back. Use at 10th grade has fallen by two-thirds since the peak rate in 1997 but has fallen by only about a quarter from the recent peak in 12th grade. There are no questions on risk, disapproval, or availability for GHB, ketamine, or Rohypnol.

### Trends in Ecstasy Use

**Ecstasy** is actually a form of methamphetamine but is used more for its mildly hallucinogenic properties. Questions about the use of MDMA, or ecstasy, were added to the surveys of secondary school students in 1996. (We have had questions on this drug since 1989 in the questionnaires answered by college students and adults. Their results showed ecstasy use beginning to rise above trace levels in 1995 and continuing to rise through 2001 for young adults.)

Annual prevalence of ecstasy use in 10th and 12th grades in 1996 was 4.6%—actually considerably higher than among college students and young adults at that time—but it fell in both grades over the next two years. Use then rose sharply in both grades in 1999 through 2001, bringing annual

prevalence up to 6.2% among 10th graders and 9.2% among 12th graders. In 2000 and 2001, use also began to rise among 8th graders, to 3.5%. In 2002, use decreased sharply—by about 20%—in all three grades, followed by an even sharper decline in all grades in 2003. Although the drops continued in all three grades in 2004, they decelerated considerably. In 2005 the decline halted among 8th and 10th graders and continued among 12th graders. Annual prevalence rates are down by between one-half and two-thirds in all three grades compared with recent peaks in 2001.

### Perceived Risk

The figures on the facing page show little change in 12th graders’ perceived risk of ecstasy until 2001, when it jumped by 8 percentage points. In 2002, perceived risk rose again, by another 7 percentage points. Significant increases in perceived risk occurred again in 2003 for all three grades. This very sharp rise likely explains both the deceleration and the turnaround in use, as we predicted it would. In 2004 and 2005, perceived risk continued to increase among 12th graders, though at a much decelerated rate. The 10th grade has shown a leveling in perceived risk, while 8th grade has shown a slight decline—perhaps an early sign of generational forgetting.

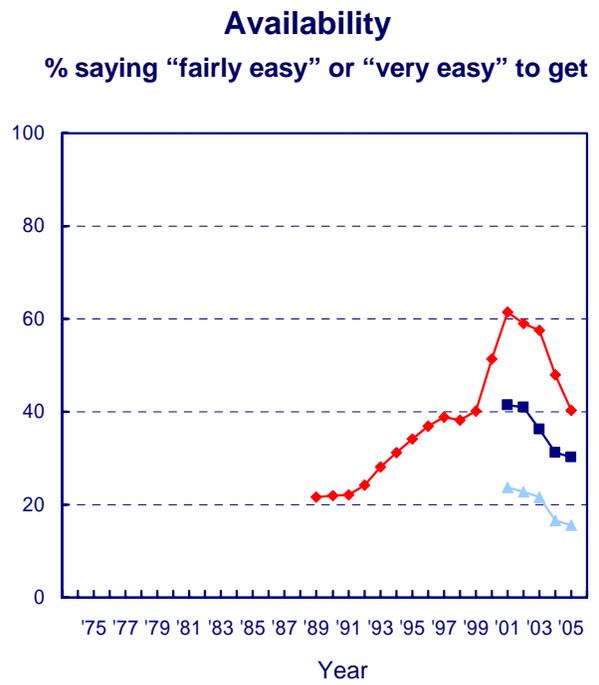
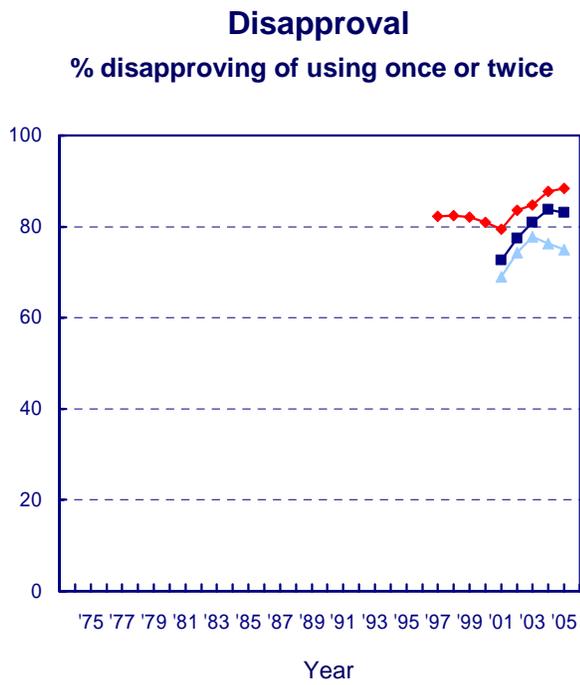
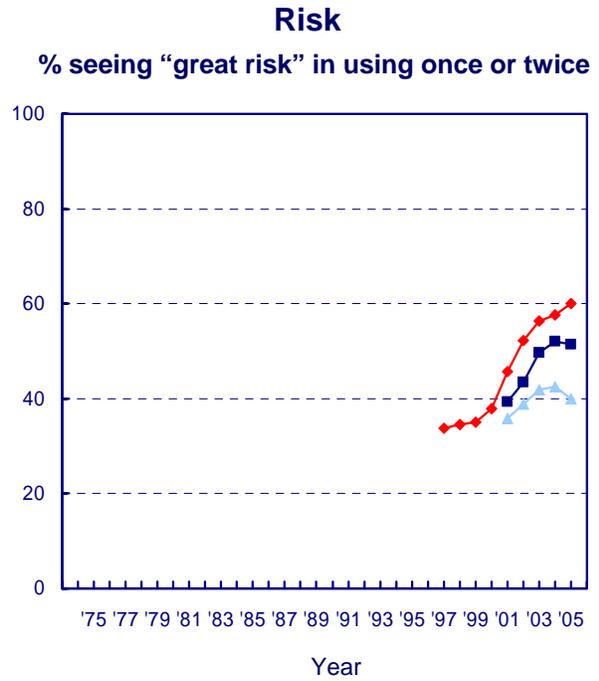
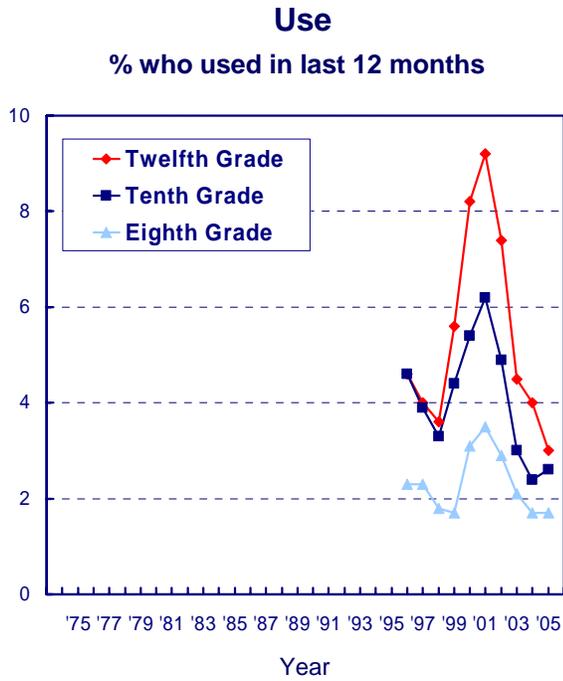
### Disapproval

Disapproval of ecstasy use had been declining slightly since 1998 but increased significantly in all three grades in 2002, along with the rise in perceived risk. The significant increases in disapproval continued in 2003 for 8th and 10th graders and in 2004 for 10th and 12th graders. The year 2005 showed an increase in disapproval among 12th graders but a decrease in disapproval among students in the two lower grades.

### Availability

The figure also shows a dramatic rise in 12th graders’ perceived availability of ecstasy after 1991, particularly in the years 2000 and 2001. In 2002, availability reversed course and declined considerably. In 2005 there was a further significant decline in perceived availability for 12th graders but not much change in grades 8 and 10.

## MDMA (Ecstasy): Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



## Alcohol

---

Alcoholic beverages—which include beer, wine, flavored alcoholic beverages, and hard liquor—have been among the most widely used substances by American young people for a very long time. In 2005 the proportions of 8th, 10th, and 12th graders who admitted drinking an alcoholic beverage in the 30-day period prior to the survey were 17%, 33%, and 47%, respectively. A number of measures of alcohol use are presented in the tables at the end of this report. Here we focus on the pattern of alcohol consumption that probably is of the greatest public health concern—episodic heavy drinking, or what we have called “binge drinking” for short. It is measured in this study by the reported number of occasions on which the respondent had five or more drinks in a row during the prior two-week interval. The first panel shows the percentage of respondents doing so at least once in the prior two weeks.

### Trends in Use

Among 12th graders, binge drinking reached its peak at about the time that overall illicit drug use did, in 1979. It held steady for a few years and then declined substantially from 41% in 1983 to a low of 28% in 1992 (also the low point of *any illicit drug* use). This was an important improvement—a drop of almost one-third in binge drinking. Although illicit drug use rose considerably in the 1990s in proportional terms, binge drinking rose by only a small fraction—about 4 percentage points among the 12th graders—between 1992 and 1998. There was some upward drift between 1991 (13%) and 1996 (16%) among 8th graders, between 1992 (21%) and 1999 (26%) among 10th graders, and between 1993 (28%) and 1998 (32%) among 12th graders. In the years since those recent peaks, there has been some decline in all three grades—of about one-third at 8th grade, one-fifth at 10th grade, and about one-tenth at 12th grade. In 2005, there was a one-percentage-point drop (significant) in the lower grades and a two-percentage-point drop (significant) among 12th graders.

One point to note in these findings is that there is no evidence of any “displacement effect” in the

aggregate between alcohol and marijuana—a hypothesis frequently heard. The two drugs have moved much more in parallel over the years than in opposite directions.

### Perceived Risk

For most of the study, the majority of 12th graders have not viewed binge drinking on weekends as carrying a great risk (see panel two). However, a fair-sized increase in this measure occurred between 1982, when it was 36%, and 1992, when it reached 49%. There then followed a modest decline to 43% by 1997, before it stabilized. It now stands at 45%. With the exception of 2002 and 2004, these changes track fairly well with the changes in actual binge drinking. We believe that the public service advertising campaigns in the 1980s against drunk driving, as well as those that urged use of designated drivers when drinking, may have contributed to the increase in perceived risk of binge drinking in general. As we have published elsewhere, drunk driving by 12th graders declined during that period by an even larger proportion than binge drinking.

### Disapproval

Disapproval of weekend binge drinking moved fairly parallel with perceived risk, suggesting that such drinking (and very likely the drunk-driving behavior often associated with it) became increasingly unacceptable in the peer group. Note that the rates of disapproval and perceived risk for binge drinking are higher in the lower grades than in 12th grade. There have been slight increases in disapproval in all three grades in the early 2000s.

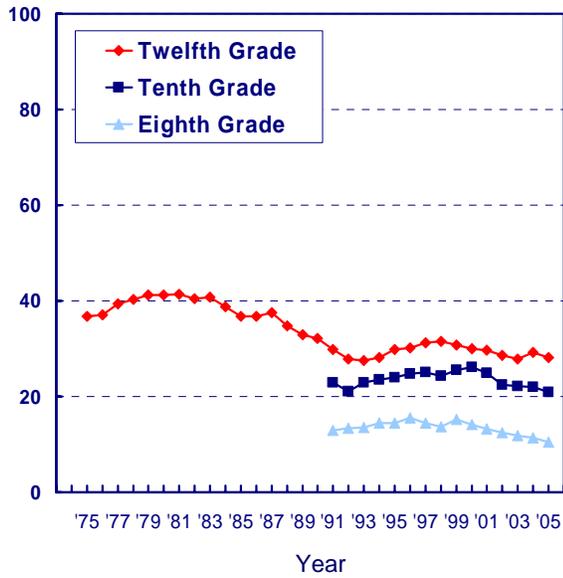
### Availability

Perceived availability of alcohol, which until 1999 was asked only of 8th and 10th graders, was very high and mostly steady in the 1990s. Since 1996, however, there has been significant decline in 8th grade (particularly) and 10th grade. For 12th grade, availability has declined very slightly but is still at a very high level, with 93% saying that it is, or would be, fairly easy or very easy for them to get alcohol.

## Alcohol: Trends in Binge Drinking, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders

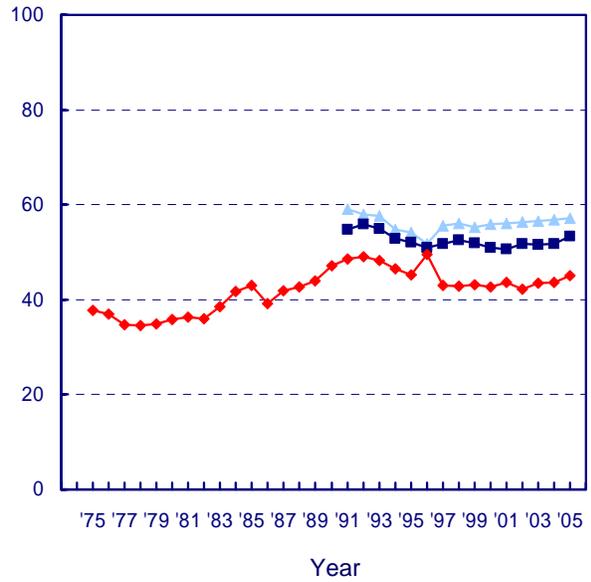
### Use

% who had 5+ drinks in a row  
in previous two weeks



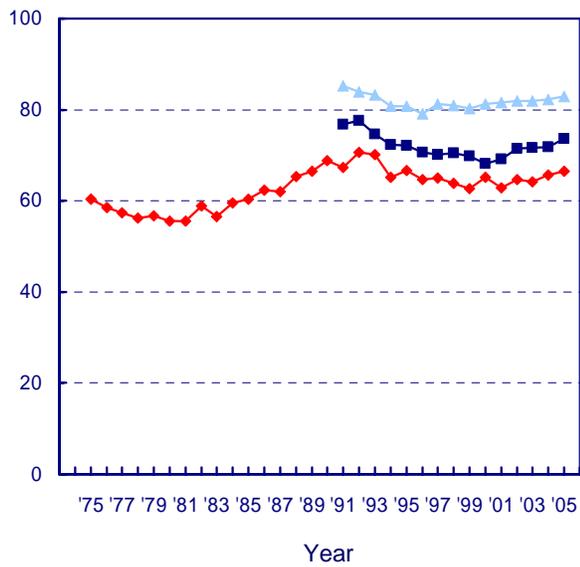
### Risk

% seeing "great risk" in having 5+ drinks in a row  
once or twice each weekend



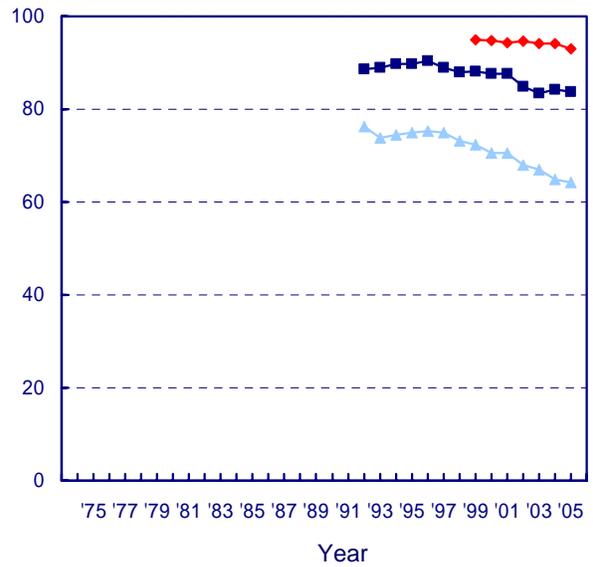
### Disapproval

% disapproving of having 5+ drinks in a row  
once or twice each weekend



### Availability

% saying "fairly easy" or "very easy"  
to get alcohol



# Cigarettes

---

The greatest preventable cause of disease and mortality in the United States is cigarette smoking. At current rates of smoking, unfortunately, this statement surely remains true for these newer cohorts of young people.

## Trends in Use

Differences in smoking rates between various birth cohorts (or, in this case, school class cohorts) tend to stay with those cohorts throughout the life cycle. This means that it is critical to prevent smoking very early. It also means that the trends in a given historical period may differ across various grade levels as changes occurring earlier in adolescence work their way up the age spectrum.

Among 12th graders, 30-day prevalence of smoking reached a peak in 1976, at 39%. (The peak likely occurred considerably earlier for lower grade levels as these same class cohorts passed through them in previous years.) There was about a one-quarter drop in the 12th-grade 30-day prevalence between 1976 and 1981, when the rate reached 29%, a level at which it remained for more than a decade, until 1992 (28%). In the 1990s, smoking began to rise sharply, starting in 1992 among 8th and 10th graders and in 1993 among 12th graders. Over the next four to five years, smoking rates increased by about one-half in the lower two grades and by almost one-third in grade 12—very substantial increases. Smoking peaked in 1996 for 8th and 10th graders and in 1997 for 12th graders before beginning a decline that continued through 2004 for 8th and 10th graders (12th graders increased a bit in 2004 from 2003). Since those peak levels in the mid-1990s, by 2004, 30-day prevalence of smoking had declined by 56% in 8th grade, 47% in 10th, and 32% in 12th. It is noteworthy, however, that this important decline in adolescent smoking has decelerated sharply. In 2005 the decline halted among 8th graders, continued among 10th graders, and resumed among 12th graders.

## Perceived Risk

Among 12th graders, the proportion seeing great risk in pack-a-day smoking rose before and during

some of the time during which use first declined. It leveled in 1980 (before use leveled), declined a bit in 1982, but then started to rise again gradually for five years. (It is possible that cigarette advertising effectively offset the influence of rising perceptions of risk during that five-year period.) Perceived risk fell some in the early 1990s at all three grade levels as use increased sharply. After 1995, perceived risk began to climb in all three grades (coincident with use starting to decline in grades 8 and 10 but a year before it started to decline in grade 12). Between 2000 and 2003, perceived risk leveled in all grades. In 2004, it increased in all three grades, but then leveled in the two lower grades in 2005. (Note the considerable disparity of the degrees of perceived risk among grade levels. For some years, only around 50% of 8th graders saw great risk in pack-a-day smoking.)

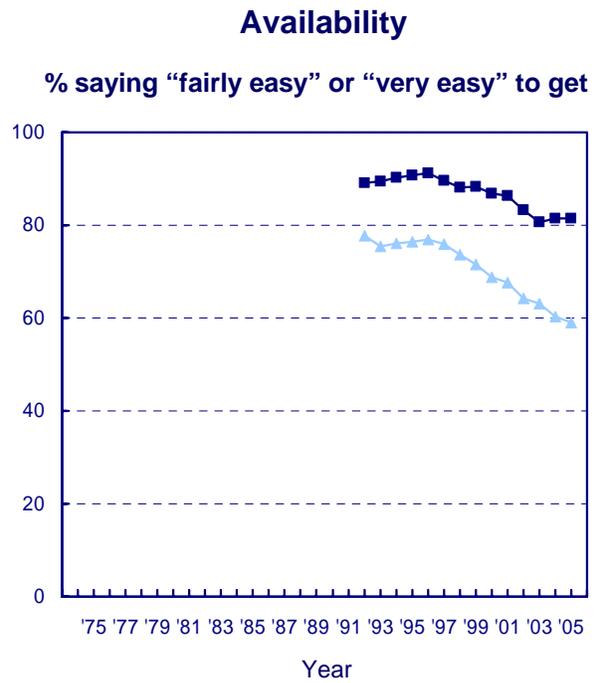
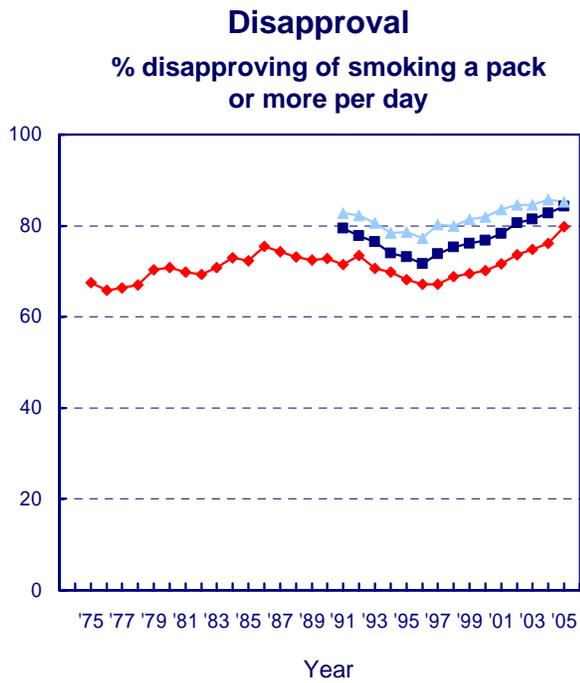
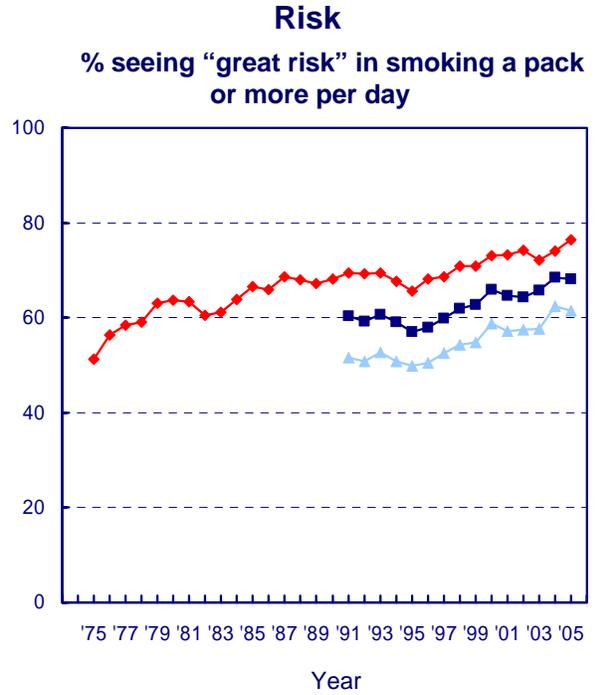
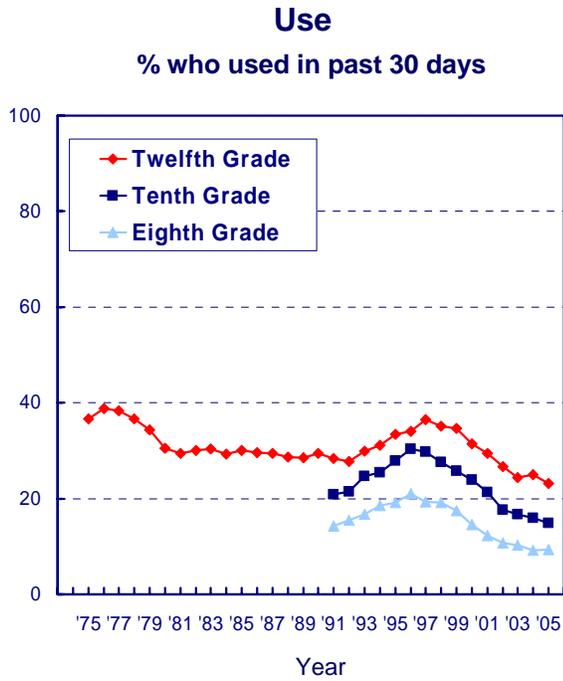
## Disapproval

Disapproval rates for smoking have been fairly high throughout the study and, unlike perceived risk, are higher in the lower grade levels. Among 12th graders there was a gradual increase in disapproval of smoking from 1976 to 1986, some erosion over the following five years, then a steeper erosion from the early 1990s through 1997. Since 1997, disapproval has been increasing among 12th graders, including a significant increase in disapproval in 2005. In the two lower grades a decline in disapproval occurred between 1991 and 1996, corresponding to the period of sharply increasing use. Since those low points, there was a quite steady increase in disapproval in all grades through 2004. (We measure a number of other smoking-related attitudes, and these also became increasingly negative.) In 2005, disapproval decreased among 8th graders.

## Availability

Availability of cigarettes is reported as very high by 8th and 10th graders. (We do not ask the question of 12th graders, for whom we assume accessibility to be nearly universal.) Since 1996, availability has been steadily declining, especially among 8th graders. For 10th graders availability declined, then leveled after 2003.

## Cigarettes: Trends in 30-Day Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



# Smokeless Tobacco

---

Smokeless tobacco comes in two forms: “snuff” and “chew.” Snuff is finely ground tobacco usually sold in tins, either loose or in packets. It is held in the mouth between the lip or cheek and the gums. Chew is a leafy form of tobacco, usually sold in pouches. It too is held in the mouth and may, as the name implies, be chewed. In both cases, nicotine is absorbed by the mucous membranes of the mouth. Smokeless tobacco is sometimes called “spit” tobacco because users spit out the tobacco juices and saliva (which is stimulated by the tobacco) that accumulates in the mouth.

## Trends in Use

The use of smokeless tobacco by teens has been decreasing gradually from peak levels in the mid-1990s, and the overall declines have been substantial. Among 8th graders, 30-day prevalence dropped from a 1994 peak of 7.7% to a low of 3.3% in 2002, where it remained in 2005; 10th graders’ use was down from a 1994 peak of 10.5% to 4.9% in 2004, but then went up to 5.6% in 2005; and 12th graders’ use decreased from a 1995 peak of 12.2% to 6.5% in 2002, before rising some to 7.6% in 2005. These reflect relative declines from peak levels of 47% to 57%. However, these important declines have clearly halted in all three grades and are showing indications of reversal. Thirty-day prevalence of *daily* use of smokeless tobacco also has fallen gradually, but appreciably, in recent years. The daily usage rates in 2005 are 0.7%, 1.9%, and 2.5% in grades 8, 10, and 12. These rates also are down substantially from the peak levels recorded in the 1990s; but, again, the declines have halted.

It should be noted that smokeless tobacco use among American young people is almost exclu-

sively a male behavior. For example, among males the 30-day prevalence rates in 2005 are 5.3%, 9.7%, and 12.7% in grades 8, 10, and 12, respectively, *versus* 1.5%, 1.6%, and 1.9% among females. The respective current *daily* use rates for males are 1.2%, 3.4%, and 4.7% compared to 0.2%, 0.3%, and 0.2% for females.

## Perceived Risk

The most recent low point in the level of perceived risk for smokeless tobacco was 1995 in all three grades. Since 1995 there has been a gradual but substantial increase in proportions saying that there is a great risk in using it regularly—among 8th graders, from 34% to 41% in 2005; and among 10th graders, from 38% to 46%. Among 12th graders, perceived risk increased from 33% in 1995 to 44% in 2005. It thus appears that one important reason for the appreciable declines in smokeless tobacco use during the latter half of the 1990s was the fact that an increasing proportion of young people were persuaded of the dangers of using it. Perceived risk leveled or declined in all three grades in 2005, however.

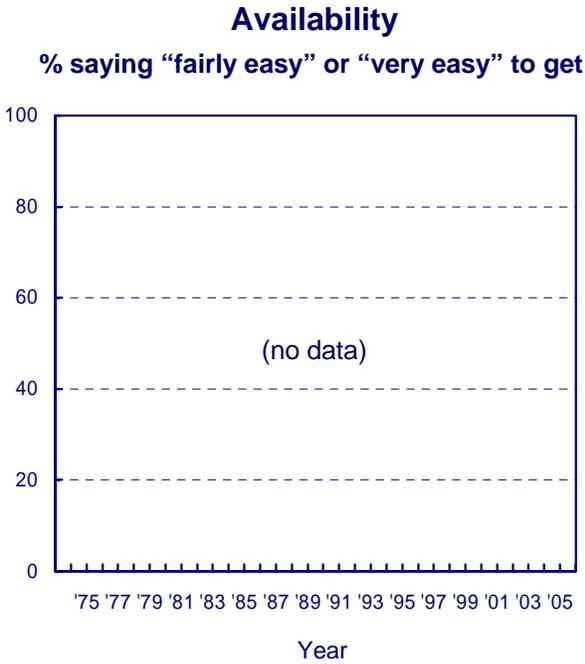
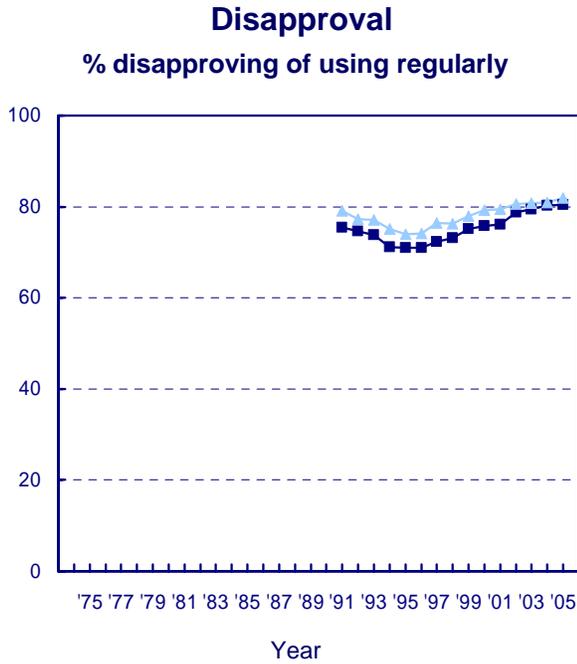
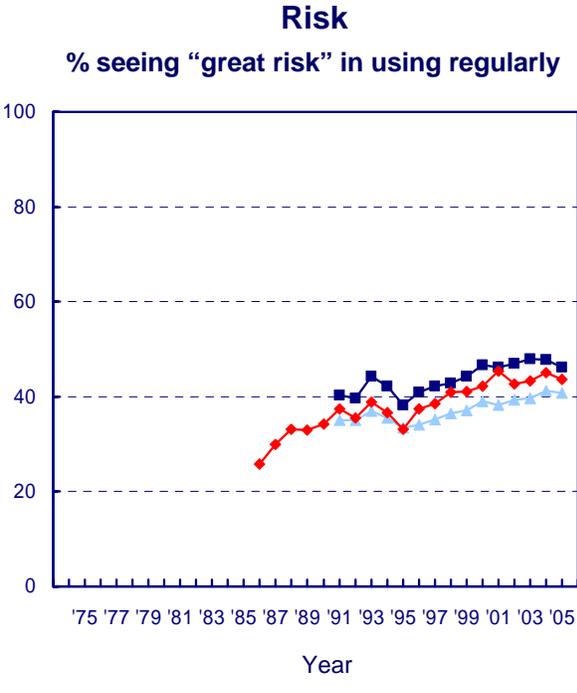
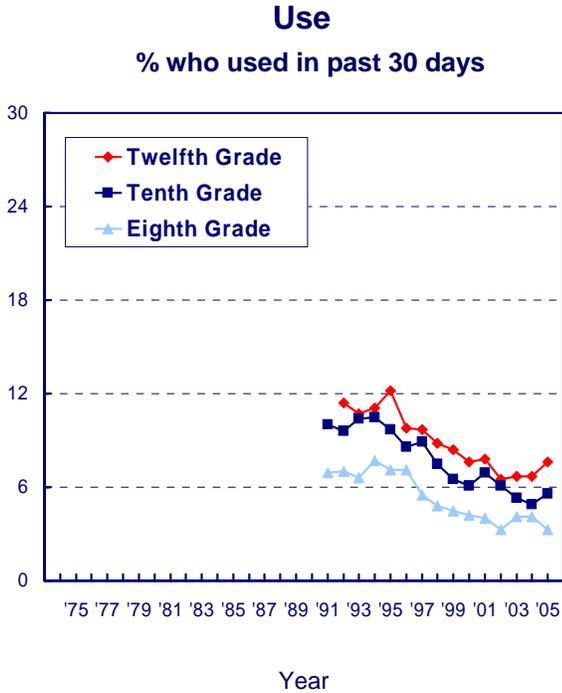
## Disapproval

Only 8th and 10th graders are asked about their personal disapproval of using smokeless tobacco regularly. The most recent low points for disapproval in both grades were 1995 and 1996. Since 1996, disapproval has risen from 74% to 82% among 8th graders and from 71% to 81% among 10th graders, but there was little further change in 2005.

## Availability

There are no questions in the study concerning the perceived availability of smokeless tobacco.

# Smokeless Tobacco: Trends in 30-Day Use, Risk, and Disapproval Eighth, Tenth, and Twelfth Graders



## Steroids

---

Unlike all other drugs discussed in this volume, anabolic steroids are not usually taken for their psychoactive effects but rather for their physical effects on the body, in particular for their effects on muscle and strength development. They are similar to most other drugs studied here, though, in two respects: they can have adverse consequences for the user, and they are controlled substances for which there is an illicit market. Questions about their use were added to the study beginning in 1989. Respondents are asked: “Steroids, or anabolic steroids, are sometimes prescribed by doctors to promote healing from certain types of injuries. Some athletes, and others, have used them to try to increase muscle development. On how many occasions (if any) have you taken steroids on your own—that is, without a doctor telling you to take them . . . ?”

### Trends in Use

Anabolic steroids are used predominately by males; therefore, data based on all respondents can mask the higher rates and larger fluctuations that occur among males. For example, in 2005, annual prevalence rates were 1.2%, 1.8%, and 2.6% for boys in grades 8, 10, and 12, compared with 0.9%, 0.7%, and 0.4% for girls. Between 1991 and 1998 the *overall* annual prevalence rate was fairly stable among 8th and 10th graders, ranging between 0.9% and 1.2%. (See the first panel on the facing page.) In 1999, however, use jumped from 1.2% to 1.7% in both 8th and 10th grades. Almost all of that increase occurred among boys (increasing from 1.6% in 1998 to 2.5% in 1999 in 8th grade and from 1.9% to 2.8% in 10th grade). Thus, the rates among boys increased by about 50% in a single year. Among 8th graders, steroid use has declined since then and is down overall to 1.1% in 2005. Among 10th graders, use continued to increase, reaching 2.2% in 2002, but then declined to 1.3% by 2005. In 12th grade there was a different trend story. With data going back to 1989, we can see that steroid use first fell from 1.9% overall in 1989 to 1.1% in 1992—the low point. From 1992 to 1999 there was a more gradual increase in use, reaching 1.7% in 2000. In 2001, use rose significantly among 12th graders to 2.4% (possibly reflecting the effect of the younger, heavier-using

cohorts getting older). Use was at 2.5% in 2004 and decreased significantly to 1.5% in 2005. Use at all grades is now down by about four-tenths from their peak levels (see Table 2). The use of *androstenedione* has declined sharply since 2001.

### Perceived Risk

Perceived risk and disapproval were asked of 8th and 10th graders for only a few years, before the questionnaire space was allocated to other items. All grades seemed to have a peak in perceived risk around 1993. The longer-term data from 12th graders, however, show a 6-percentage-point drop between 1998 and 1999, another 4-percentage-point drop in 2000, and an additional 3-percentage-point drop by 2003 (to 55%, the lowest point ever). A change this sharp is quite unusual and highly significant, suggesting that some particular event (or events) in 1998 changed beliefs about the dangers of steroids, making them seem less risky. (It seems likely that there was at least as large a drop in the lower grades, as well, where the sharp upturn in use occurred that year.) In 2005, perceived risk rose slightly to 57%.

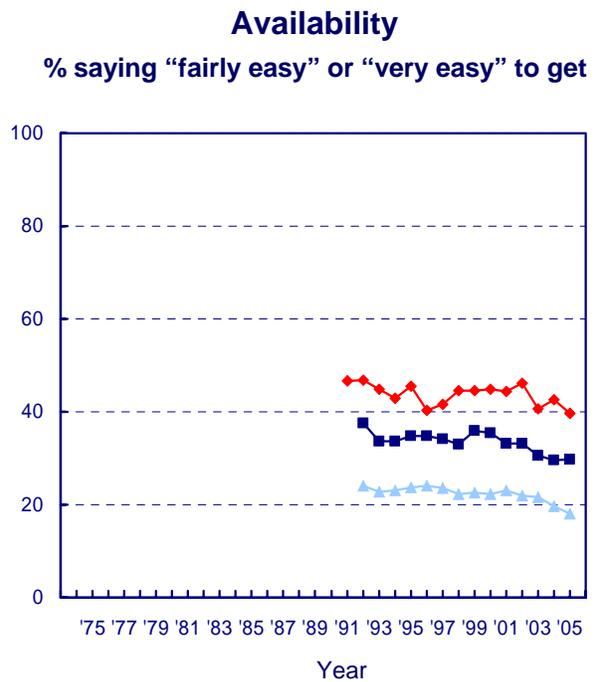
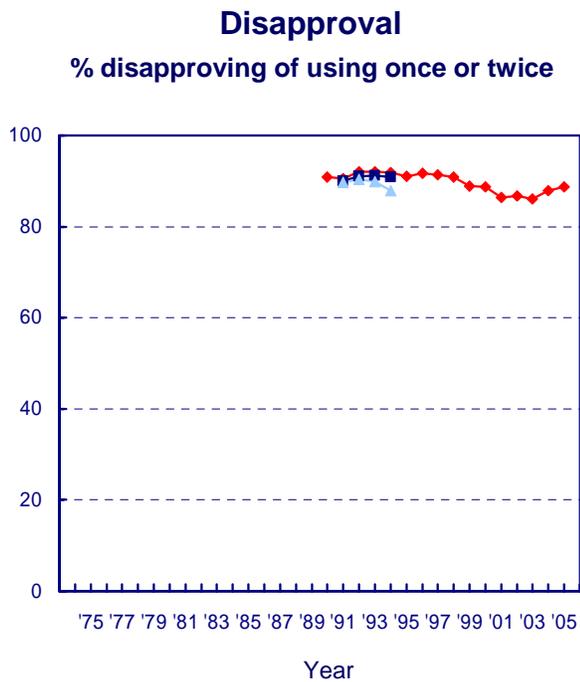
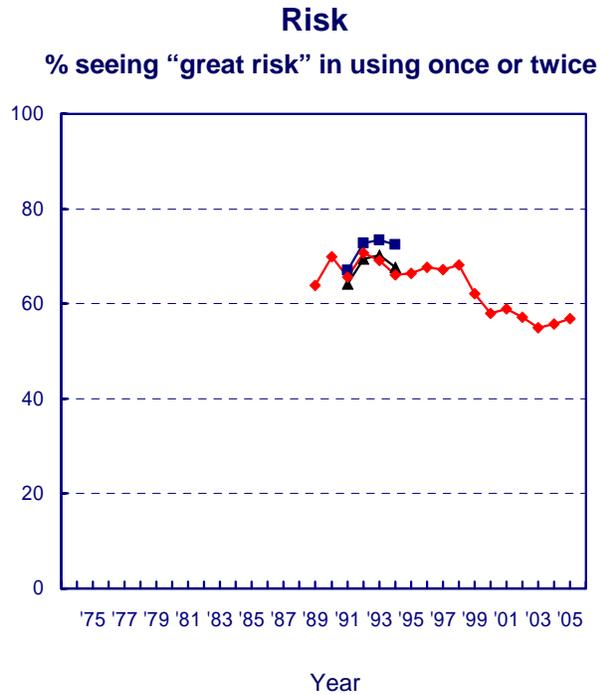
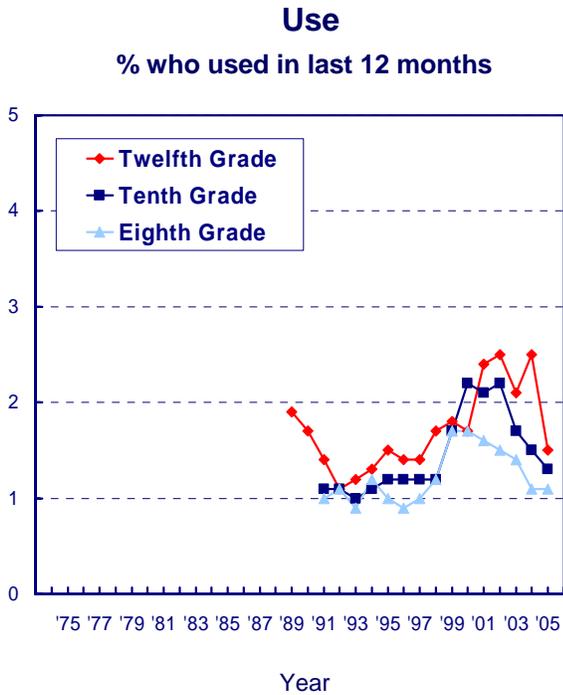
### Disapproval

Disapproval of steroid use has been quite high for some years. (Along with the high levels of perceived risk, disapproval rates no doubt help to explain the low *absolute* prevalence rates.) By 2000 there was only slight falloff in disapproval, despite the decline in perceived risk, but between 1998 and 2003 there was a significant decrease in disapproval as well. Since then, disapproval has been trending up and use has declined.

### Availability

Perceived availability of steroids is relatively high and increases with grade level. Some over-the-counter substances used for similar purposes, like creatine, are legally available to all age groups and are sold in health food stores, drugstores, and even supermarkets. (Androstenedione was legally available until January 2005, when it was classified as a Schedule III controlled substance.) Steroid availability appears to have declined some in recent years in all grades.

## Steroids: Trends in Annual Use, Risk, Disapproval, and Availability Eighth, Tenth, and Twelfth Graders



## Subgroup Differences

---

Understanding the important subgroup variations in substance use among the nation's youth allows for more informed considerations of substance use etiology and prevention. In this section we present a brief overview of some of the major demographic subgroup differences.

Space does not permit a full discussion or documentation of the many subgroup differences on the host of drugs covered in this report. However, the much longer publication of Volume I in this series—including the one published in 2005 and the one forthcoming in 2006—contains an extensive appendix with tables giving the subgroup prevalence levels and trends for all of the classes of drugs discussed here. Chapters 4 and 5 in Volume I also present a more in-depth discussion and interpretation of those subgroup differences. Comparisons are made by gender, college plans, region of the country, community size, socioeconomic level (as measured by the educational level of the parents), and race/ethnicity. Monitoring the Future Occasional Paper 61—to be succeeded by Occasional Paper 63 (forthcoming)—is available on the study's Web site ([www.monitoringthefuture.org](http://www.monitoringthefuture.org)), and provides in graphic form the many subgroup trends for all drugs.

### Gender

Generally, we have found males to have somewhat higher rates of illicit drug use than females (particularly, higher rates of frequent use) and much higher rates of smokeless tobacco and steroid use. Males generally have had higher rates of heavy drinking; however, this has not been true at 8th grade in the the last several years, and at 10th grade, girls overtook boys in 2005. The genders have had roughly equivalent rates of cigarette smoking (although among 12th graders the two genders have reversed order twice during the life of the study). But for the last three years, 8th-grade girls have had a higher 30-day prevalence of smoking than boys. The gender differences, in which boys end up with higher rates of use, appear to emerge as students grow older. In 8th grade, females actually have higher rates for some drugs. Usage rates for the various substances tend to move much in parallel across time for both genders, although the absolute differences tend to

be largest in the historical periods in which overall prevalence rates are highest.

### College Plans

Those students who are *not* college-bound (a decreasing proportion of the total youth population) are considerably more likely than are the college-bound to be at risk for using illicit drugs, for drinking heavily, and particularly for smoking cigarettes while in high school. Again, these differences are largest in periods of highest prevalence. In the lower grades, the college-bound showed a greater increase in cigarette smoking in the early to mid-1990s than did their noncollege-bound peers.

### Region of the Country

The differences associated with region of the country are sufficiently varied and complex that we cannot do justice to them here. In the past, though, the Northeast and the West have tended to have the highest proportions of students using any illicit drug, and the South the lowest (although these rankings do not apply to many of the specific drugs and do not apply to all grades today). In particular, the cocaine epidemic of the early 1980s was much more pronounced in the West and the Northeast than in the other two regions, although the differences decreased as the overall epidemic subsided. While the South and the West have generally had lower rates of drinking among students than the Northeast and the North Central (Midwest), those differences have narrowed somewhat in recent years. Cigarette smoking rates have consistently been lowest in the West (except in 2004 among 8th graders, when the Northeast was just as low). The upsurge of ecstasy use in 1999 occurred primarily in the Northeast, but that drug's newfound popularity spread to the three other regions of the country in 2000.

### Population Density

There have not been very large or consistent differences in overall illicit drug use associated with population density over the life of the study, helping to demonstrate just how ubiquitous the illicit drug phenomenon has been in this country. In recent years, the use of a number of drugs declined more in the urban areas than in the non-

urban ones, leaving the non-urban areas with higher rates of use, at least for a while. Crack and heroin use generally have not been concentrated in urban areas, as is commonly believed, meaning that no parents should assume that their children are immune to these threats simply because they do not live in a city.

### **Socioeconomic Level**

The average level of education of the student's parents, as reported by the student, is used as a proxy for socioeconomic status of the family. For many drugs the differences in use by socioeconomic class are very small, and the trends have been highly parallel. One very interesting difference occurred for cocaine, which was *positively* associated with socioeconomic level in the early 1980s. That association had nearly disappeared by 1986, however, with the advent of crack, which offered cocaine at a lower price. Cigarette smoking showed a similar narrowing of class differences, but this time it was a large *negative* association with socioeconomic level that diminished considerably between roughly 1985 and 1993. In more recent years, that negative association is reemerging in the lower grades as use declines faster among students from more educated families. Rates of binge drinking are roughly equivalent across the classes in the upper grades (but not in 8th grade), and this rough equivalence has existed for some time among 12th graders.

### **Race/Ethnicity**

Among the most dramatic and interesting subgroup differences are those found among the three largest racial/ethnic groups—Whites, African Americans, and Hispanics. Contrary to popular assumption, at

all three grade levels African American youth have substantially lower rates of use of most licit and illicit drugs than do Whites. These include any illicit drug use, most of the specific illicit drugs, alcohol, and cigarettes. In fact, African Americans' use of cigarettes is dramatically lower than Whites' use; and this is a difference that emerged largely during the life of the study (i.e., since 1975).

Hispanics have rates of use that tend to fall between the other two groups in 12th grade—usually closer to the rates for Whites than for Blacks. (Hispanics do have the highest reported rates of use for some drugs in 12th grade—crack, heroin, heroin with and without a needle, ice, and Rohypnol—and their usage levels of methamphetamine and steroids are roughly equivalent to that of Whites.) But in 8th grade they tend to come out highest of the three racial/ethnic groups on nearly all classes of drugs (amphetamines being the major exception). One possible explanation for this change in ranking between 8th and 12th grade may lie in considerably higher school dropout rates of Hispanic youth. Thus, more of the “drug-prone” segment of that ethnic group may leave school before 12th grade than of the other two racial/ethnic groups. Another explanation could be that Hispanics are more precocious in their initiation of these types of behaviors.

Again, we refer the reader to Occasional Paper 63 (forthcoming) at [www.monitoringthefuture.org](http://www.monitoringthefuture.org) for a much more complete picture of these complex subgroup differences and how they have changed over the years.

**TABLE 1**  
**Trends in Lifetime Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Lifetime</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
Any Illicit Drug <sup>a</sup>																
8th Grade	18.7	20.6	22.5	25.7	28.5	31.2	29.4	29.0	28.3	26.8	26.8	24.5	22.8	21.5	21.4	-0.1
10th Grade	30.6	29.8	32.8	37.4	40.9	45.4	47.3	44.9	46.2	45.6	45.6	44.6	41.4	39.8	38.2	-1.6
12th Grade	44.1	40.7	42.9	45.6	48.4	50.8	54.3	54.1	54.7	54.0	53.9	53.0	51.1	51.1	50.4	-0.7
Any Illicit Drug Other Than Marijuana <sup>a,b</sup>																
8th Grade	14.3	15.6	16.8	17.5	18.8	19.2	17.7	16.9	16.3	15.8†	17.0	13.7	13.6	12.2	12.1	-0.1
10th Grade	19.1	19.2	20.9	21.7	24.3	25.5	25.0	23.6	24.0	23.1†	23.6	22.1	19.7	18.8	18.0	-0.8
12th Grade	26.9	25.1	26.7	27.6	28.1	28.5	30.0	29.4	29.4	29.0†	30.7	29.5	27.7	28.7	27.4	-1.3
Any Illicit Drug Including Inhalants <sup>a,c</sup>																
8th Grade	28.5	29.6	32.3	35.1	38.1	39.4	38.1	37.8	37.2	35.1	34.5	31.6	30.3	30.2	30.0	-0.3
10th Grade	36.1	36.2	38.7	42.7	45.9	49.8	50.9	49.3	49.9	49.3	48.8	47.7	44.9	43.1	42.1	-1.0
12th Grade	47.6	44.4	46.6	49.1	51.5	53.5	56.3	56.1	56.3	57.0	56.0	54.6	52.8	53.0	53.5	+0.5
Marijuana/Hashish																
8th Grade	10.2	11.2	12.6	16.7	19.9	23.1	22.6	22.2	22.0	20.3	20.4	19.2	17.5	16.3	16.5	+0.2
10th Grade	23.4	21.4	24.4	30.4	34.1	39.8	42.3	39.6	40.9	40.3	40.1	38.7	36.4	35.1	34.1	-1.0
12th Grade	36.7	32.6	35.3	38.2	41.7	44.9	49.6	49.1	49.7	48.8	49.0	47.8	46.1	45.7	44.8	-0.9
Inhalants <sup>c,d</sup>																
8th Grade	17.6	17.4	19.4	19.9	21.6	21.2	21.0	20.5	19.7	17.9	17.1	15.2	15.8	17.3	17.1	-0.2
10th Grade	15.7	16.6	17.5	18.0	19.0	19.3	18.3	18.3	17.0	16.6	15.2	13.5	12.7	12.4	13.1	+0.6
12th Grade	17.6	16.6	17.4	17.7	17.4	16.6	16.1	15.2	15.4	14.2	13.0	11.7	11.2	10.9	11.4	+0.5
Nitrites <sup>e</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.6	1.5	1.4	1.7	1.5	1.8	2.0	2.7	1.7	0.8	1.9	1.5	1.6	1.3	1.1	-0.1
Hallucinogens <sup>b,f</sup>																
8th Grade	3.2	3.8	3.9	4.3	5.2	5.9	5.4	4.9	4.8	4.6†	5.2	4.1	4.0	3.5	3.8	+0.3
10th Grade	6.1	6.4	6.8	8.1	9.3	10.5	10.5	9.8	9.7	8.9†	8.9	7.8	6.9	6.4	5.8	-0.7
12th Grade	9.6	9.2	10.9	11.4	12.7	14.0	15.1	14.1	13.7	13.0†	14.7	12.0	10.6	9.7	8.8	-0.9
LSD																
8th Grade	2.7	3.2	3.5	3.7	4.4	5.1	4.7	4.1	4.1	3.9	3.4	2.5	2.1	1.8	1.9	+0.1
10th Grade	5.6	5.8	6.2	7.2	8.4	9.4	9.5	8.5	8.5	7.6	6.3	5.0	3.5	2.8	2.5	-0.4
12th Grade	8.8	8.6	10.3	10.5	11.7	12.6	13.6	12.6	12.2	11.1	10.9	8.4	5.9	4.6	3.5	-1.1 s
Hallucinogens Other Than LSD <sup>b</sup>																
8th Grade	1.4	1.7	1.7	2.2	2.5	3.0	2.6	2.5	2.4	2.3†	3.9	3.3	3.2	3.0	3.3	+0.3
10th Grade	2.2	2.5	2.8	3.8	3.9	4.7	4.8	5.0	4.7	4.8†	6.6	6.3	5.9	5.8	5.2	-0.6
12th Grade	3.7	3.3	3.9	4.9	5.4	6.8	7.5	7.1	6.7	6.9†	10.4	9.2	9.0	8.7	8.1	-0.6
PCP <sup>e</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	2.9	2.4	2.9	2.8	2.7	4.0	3.9	3.9	3.4	3.4	3.5	3.1	2.5	1.6	2.4	+0.8

(Table continued on next page)

**TABLE 1 (cont'd)**  
**Trends in Lifetime Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Lifetime</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
MDMA (Ecstasy) <sup>g</sup>																
8th Grade	—	—	—	—	—	3.4	3.2	2.7	2.7	4.3	5.2	4.3	3.2	2.8	2.8	-0.1
10th Grade	—	—	—	—	—	5.6	5.7	5.1	6.0	7.3	8.0	6.6	5.4	4.3	4.0	-0.3
12th Grade	—	—	—	—	—	6.1	6.9	5.8	8.0	11.0	11.7	10.5	8.3	7.5	5.4	-2.1 ss
Cocaine																
8th Grade	2.3	2.9	2.9	3.6	4.2	4.5	4.4	4.6	4.7	4.5	4.3	3.6	3.6	3.4	3.7	+0.3
10th Grade	4.1	3.3	3.6	4.3	5.0	6.5	7.1	7.2	7.7	6.9	5.7	6.1	5.1	5.4	5.2	-0.2
12th Grade	7.8	6.1	6.1	5.9	6.0	7.1	8.7	9.3	9.8	8.6	8.2	7.8	7.7	8.1	8.0	-0.1
Crack																
8th Grade	1.3	1.6	1.7	2.4	2.7	2.9	2.7	3.2	3.1	3.1	3.0	2.5	2.5	2.4	2.4	+0.1
10th Grade	1.7	1.5	1.8	2.1	2.8	3.3	3.6	3.9	4.0	3.7	3.1	3.6	2.7	2.6	2.5	-0.1
12th Grade	3.1	2.6	2.6	3.0	3.0	3.3	3.9	4.4	4.6	3.9	3.7	3.8	3.6	3.9	3.5	-0.4
Other Cocaine <sup>h</sup>																
8th Grade	2.0	2.4	2.4	3.0	3.4	3.8	3.5	3.7	3.8	3.5	3.3	2.8	2.7	2.6	2.9	+0.4
10th Grade	3.8	3.0	3.3	3.8	4.4	5.5	6.1	6.4	6.8	6.0	5.0	5.2	4.5	4.8	4.6	-0.2
12th Grade	7.0	5.3	5.4	5.2	5.1	6.4	8.2	8.4	8.8	7.7	7.4	7.0	6.7	7.3	7.1	-0.2
Heroin <sup>i</sup>																
8th Grade	1.2	1.4	1.4	2.0	2.3	2.4	2.1	2.3	2.3	1.9	1.7	1.6	1.6	1.6	1.5	-0.2
10th Grade	1.2	1.2	1.3	1.5	1.7	2.1	2.1	2.3	2.3	2.2	1.7	1.8	1.5	1.5	1.5	0.0
12th Grade	0.9	1.2	1.1	1.2	1.6	1.8	2.1	2.0	2.0	2.4	1.8	1.7	1.5	1.5	1.5	0.0
With a Needle <sup>j</sup>																
8th Grade	—	—	—	—	1.5	1.6	1.3	1.4	1.6	1.1	1.2	1.0	1.0	1.1	1.0	-0.1
10th Grade	—	—	—	—	1.0	1.1	1.1	1.2	1.3	1.0	0.8	1.0	0.9	0.8	0.8	0.0
12th Grade	—	—	—	—	0.7	0.8	0.9	0.8	0.9	0.8	0.7	0.8	0.7	0.7	0.9	+0.2
Without a Needle <sup>j</sup>																
8th Grade	—	—	—	—	1.5	1.6	1.4	1.5	1.4	1.3	1.1	1.0	1.1	1.0	0.9	-0.2
10th Grade	—	—	—	—	1.1	1.7	1.7	1.7	1.6	1.7	1.3	1.3	1.0	1.1	1.1	0.0
12th Grade	—	—	—	—	1.4	1.7	2.1	1.6	1.8	2.4	1.5	1.6	1.8	1.4	1.3	-0.1
Other Narcotics <sup>k,l</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	6.6	6.1	6.4	6.6	7.2	8.2	9.7	9.8	10.2	10.6	9.9†	13.5	13.2	13.5	12.8	-0.7
Amphetamines <sup>k</sup>																
8th Grade	10.5	10.8	11.8	12.3	13.1	13.5	12.3	11.3	10.7	9.9	10.2	8.7	8.4	7.5	7.4	-0.1
10th Grade	13.2	13.1	14.9	15.1	17.4	17.7	17.0	16.0	15.7	15.7	16.0	14.9	13.1	11.9	11.1	-0.8
12th Grade	15.4	13.9	15.1	15.7	15.3	15.3	16.5	16.4	16.3	15.6	16.2	16.8	14.4	15.0	13.1	-1.9 s
Methamphetamine <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	4.5	4.2	4.4	3.5	3.9	2.5	3.1	+0.6
10th Grade	—	—	—	—	—	—	—	—	7.3	6.9	6.4	6.1	5.2	5.3	4.1	-1.2 s
12th Grade	—	—	—	—	—	—	—	—	8.2	7.9	6.9	6.7	6.2	6.2	4.5	-1.7 ss
Ice <sup>n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	3.3	2.9	3.1	3.4	3.9	4.4	4.4	5.3	4.8	4.0	4.1	4.7	3.9	4.0	4.0	0.0

(Table continued on next page)

**TABLE 1 (cont'd)**  
**Trends in Lifetime Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Lifetime</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
Sedatives (Barbiturates) <sup>k</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	6.2	5.5	6.3	7.0	7.4	7.6	8.1	8.7	8.9	9.2	8.7	9.5	8.8	9.9	10.5	+0.7
Methaqualone <sup>e,k</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.3	1.6	0.8	1.4	1.2	2.0	1.7	1.6	1.8	0.8	1.1	1.5	1.0	1.3	1.3	+0.1
Tranquilizers <sup>b,k</sup>																
8th Grade	3.8	4.1	4.4	4.6	4.5	5.3	4.8	4.6	4.4	4.4†	5.0	4.3	4.4	4.0	4.1	+0.1
10th Grade	5.8	5.9	5.7	5.4	6.0	7.1	7.3	7.8	7.9	8.0†	9.2	8.8	7.8	7.3	7.1	-0.2
12th Grade	7.2	6.0	6.4	6.6	7.1	7.2	7.8	8.5	9.3	8.9†	10.3	11.4	10.2	10.6	9.9	-0.7
Rohypnol <sup>o</sup>																
8th Grade	—	—	—	—	—	1.5	1.1	1.4	1.3	1.0	1.1	0.8	1.0	1.0	1.1	+0.1
10th Grade	—	—	—	—	—	1.5	1.7	2.0	1.8	1.3	1.5	1.3	1.0	1.2	1.0	-0.2
12th Grade	—	—	—	—	—	1.2	1.8	3.0	2.0	1.5	1.7	—	—	—	—	—
Alcohol <sup>p</sup>																
Any Use																
8th Grade	70.1	69.3‡	55.7	55.8	54.5	55.3	53.8	52.5	52.1	51.7	50.5	47.0	45.6	43.9	41.0	-2.9 ss
10th Grade	83.8	82.3‡	71.6	71.1	70.5	71.8	72.0	69.8	70.6	71.4	70.1	66.9	66.0	64.2	63.2	-1.0
12th Grade	88.0	87.5‡	80.0	80.4	80.7	79.2	81.7	81.4	80.0	80.3	79.7	78.4	76.6	76.8	75.1	-1.7
Been Drunk <sup>n</sup>																
8th Grade	26.7	26.8	26.4	25.9	25.3	26.8	25.2	24.8	24.8	25.1	23.4	21.3	20.3	19.9	19.5	-0.5
10th Grade	50.0	47.7	47.9	47.2	46.9	48.5	49.4	46.7	48.9	49.3	48.2	44.0	42.4	42.3	42.1	-0.1
12th Grade	65.4	63.4	62.5	62.9	63.2	61.8	64.2	62.4	62.3	62.3	63.9	61.6	58.1	60.3	57.5	-2.8
Flavored Alcoholic Beverages <sup>e,m</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	37.9	35.5	-2.5
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	58.6	58.8	+0.2
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	71.0	73.6	+2.5
Cigarettes																
Any Use																
8th Grade	44.0	45.2	45.3	46.1	46.4	49.2	47.3	45.7	44.1	40.5	36.6	31.4	28.4	27.9	25.9	-2.0 s
10th Grade	55.1	53.5	56.3	56.9	57.6	61.2	60.2	57.7	57.6	55.1	52.8	47.4	43.0	40.7	38.9	-1.7
12th Grade	63.1	61.8	61.9	62.0	64.2	63.5	65.4	65.3	64.6	62.5	61.0	57.2	53.7	52.8	50.0	-2.8 s
Smokeless Tobacco <sup>q</sup>																
8th Grade	22.2	20.7	18.7	19.9	20.0	20.4	16.8	15.0	14.4	12.8	11.7	11.2	11.3	11.0	10.1	-0.9
10th Grade	28.2	26.6	28.1	29.2	27.6	27.4	26.3	22.7	20.4	19.1	19.5	16.9	14.6	13.8	14.5	+0.6
12th Grade	—	32.4	31.0	30.7	30.9	29.8	25.3	26.2	23.4	23.1	19.7	18.3	17.0	16.7	17.5	+0.8
Steroids <sup>n</sup>																
8th Grade	1.9	1.7	1.6	2.0	2.0	1.8	1.8	2.3	2.7	3.0	2.8	2.5	2.5	1.9	1.7	-0.2
10th Grade	1.8	1.7	1.7	1.8	2.0	1.8	2.0	2.0	2.7	3.5	3.5	3.5	3.0	2.4	2.0	-0.4
12th Grade	2.1	2.1	2.0	2.4	2.3	1.9	2.4	2.7	2.9	2.5	3.7	4.0	3.5	3.4	2.6	-0.7

Source: The Monitoring the Future Study, the University of Michigan.

## Footnotes for Table 1 to Table 4

Notes: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available.

'‡' indicates some change in the question. See relevant footnote for that drug. Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

Weighted Ns	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
8th Graders	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800
10th Graders	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200
12th Graders	15,000	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700

<sup>a</sup>For 12th graders only: Use of "any illicit drug" includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin, or any use of other narcotics, amphetamines, sedatives (barbiturates), or tranquilizers not under a doctor's orders. For 8th and 10th graders only: The use of other narcotics and barbiturates has been excluded because these younger respondents appear to overreport use (perhaps because they include the use of nonprescription drugs in their answers).

<sup>b</sup>In 2001 the question text was changed on half of the questionnaire forms for each age group. "Other psychedelics" was changed to "other hallucinogens" and "shrooms" was added to the list of examples. For the tranquilizer list of examples, Miltown was replaced with Xanax. For 8th, 10th, and 12th graders: The 2001 data presented here are based on the changed forms only; N is one-half of N indicated. In 2002 the remaining forms were changed to the new wording. The data are based on all forms beginning in 2002. Data for "any illicit drug other than marijuana" and "hallucinogens" are also affected by these changes and have been handled in a parallel manner.

<sup>c</sup>For 12th graders only: Data based on five of six forms in 1991–98; N is five-sixths of N indicated. Data based on three of six forms beginning in 1999; N is one-half of N indicated.

<sup>d</sup>Inhalants are unadjusted for underreporting of amyl and butyl nitrites.

<sup>e</sup>For 12th graders only: Data based on one of six forms; N is one-sixth of N indicated.

<sup>f</sup>Hallucinogens are unadjusted for underreporting of PCP.

<sup>g</sup>For 8th and 10th graders only: Data based on one of two forms in 1996; N is one-half of N indicated. Data based on one-third of N indicated in 1997–2001 due to changes in the questionnaire forms. Data based on two of four forms beginning in 2002; N is one-half of N indicated. For 12th graders only: Data based on one of six forms in 1996–2001; N is one-sixth of N indicated. Data based on two of six forms beginning in 2002; N is two-sixths of N indicated.

<sup>h</sup>For 12th graders only: Data based on four of six forms; N is four-sixths of N indicated.

<sup>i</sup>In 1995 the heroin question was changed in one of two forms for 8th and 10th graders and in three of six forms for 12th graders. Separate questions were asked for use with injection and without injection. In 1996, the heroin question was changed in all remaining 8th- and 10th-grade forms. Data presented here represent the combined data from all forms.

<sup>j</sup>For 8th and 10th graders only: Data based on one of two forms in 1995; N is one-half of N indicated. Data based on all forms beginning in 1996.

For 12th graders only: Data based on three of six forms; N is one-half of N indicated.

<sup>k</sup>Only drug use not under a doctor's orders is included here.

<sup>l</sup>In 2002 the question text was changed in half of the questionnaire forms. The list of examples of narcotics other than heroin was updated: Talwin, laudanum, and paregoric—all of which had negligible rates of use by 2001—were replaced with Vicodin, OxyContin, and Percocet. The 2002 data presented here are based on the changed forms only; N is one-half of N indicated. In 2003, the remaining forms were changed to the new wording. The data are based on all forms beginning in 2003.

<sup>m</sup>For 8th and 10th graders only: Data based on one of four forms; N is one-third of N indicated.

<sup>n</sup>For 12th graders only: Data based on two of six forms; N is two-sixths of N indicated.

<sup>o</sup>For 8th and 10th graders only: Data based on one of two forms in 1996; N is one-half of N indicated. Data based on three of four forms in 1997–98; N is two-thirds of N indicated. Data based on two of four forms in 1999–2001; N is one-third of N indicated. Data based on one of four forms beginning in 2002; N is one-sixth of N indicated. For 12th graders only: Data based on one of six forms in 1996–2001; N is one-sixth of N indicated. Data based on two of six forms beginning in 2002; N is one-third of N indicated. Data for 2001 and 2002 are not comparable due to changes in the questionnaire forms.

<sup>p</sup>For 8th, 10th, and 12th graders: In 1993, the question text was changed slightly in half of the forms to indicate that a "drink" meant "more than just a few sips." The 1993 data are based on the changed forms only; N is one-half of N indicated for these groups. In 1994 the remaining forms were changed to the new wording. The data are based on all forms beginning in 1994. In 2004, the question text was changed slightly in half of the forms. An examination of the data did not show any effect from the wording change. The remaining forms were changed in 2005.

<sup>q</sup>For 8th and 10th graders only: Data based on one of two forms for 1991–96 and on two of four forms beginning in 1997; N is one-half of N indicated. For 12th graders only: Data based on one of six forms; N is one-sixth of N indicated.

<sup>r</sup>For 12th graders only: Data based on two of six forms in 2000; N is two-sixths of N indicated. Data based on three of six forms in 2001; N is one-half of N indicated. Data based on one of six forms beginning in 2002; N is one-sixth of N indicated.

<sup>s</sup>For 12th graders only: Data based on two of six forms in 2000; N is two-sixths of N indicated. Data based on three of six forms beginning in 2001; N is one-half of N indicated.

<sup>t</sup>Daily use is defined as use on 20 or more occasions in the past 30 days except for cigarettes and smokeless tobacco, for which actual daily use is measured, and for 5+ drinks, for which the prevalence of having five or more drinks in a row in the last two weeks is measured.

<sup>u</sup>The 2003 flavored alcoholic beverage data were created by adjusting the 2004 data to reflect the change in the 2003 and 2004 "alcopops" data.

<sup>v</sup>For 12th graders only: Due to a coding error, previously released versions of this table contained a value that was slightly off for the measure of five or more drinks in a row for 2005. This has been corrected here.

**TABLE 2**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Annual</u>															'04-'05
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>change</u>
Any Illicit Drug <sup>a</sup>																
8th Grade	11.3	12.9	15.1	18.5	21.4	23.6	22.1	21.0	20.5	19.5	19.5	17.7	16.1	15.2	15.5	+0.3
10th Grade	21.4	20.4	24.7	30.0	33.3	37.5	38.5	35.0	35.9	36.4	37.2	34.8	32.0	31.1	29.8	-1.3
12th Grade	29.4	27.1	31.0	35.8	39.0	40.2	42.4	41.4	42.1	40.9	41.4	41.0	39.3	38.8	38.4	-0.4
Any Illicit Drug Other Than Marijuana <sup>a,b</sup>																
8th Grade	8.4	9.3	10.4	11.3	12.6	13.1	11.8	11.0	10.5	10.2†	10.8	8.8	8.8	7.9	8.1	+0.1
10th Grade	12.2	12.3	13.9	15.2	17.5	18.4	18.2	16.6	16.7	16.7†	17.9	15.7	13.8	13.5	12.9	-0.7
12th Grade	16.2	14.9	17.1	18.0	19.4	19.8	20.7	20.2	20.7	20.4†	21.6	20.9	19.8	20.5	19.7	-0.7
Any Illicit Drug Including Inhalants <sup>a,c</sup>																
8th Grade	16.7	18.2	21.1	24.2	27.1	28.7	27.2	26.2	25.3	24.0	23.9	21.4	20.4	20.2	20.4	+0.3
10th Grade	23.9	23.5	27.4	32.5	35.6	39.6	40.3	37.1	37.7	38.0	38.7	36.1	33.5	32.9	31.7	-1.2
12th Grade	31.2	28.8	32.5	37.6	40.2	41.9	43.3	42.4	42.8	42.5	42.6	42.1	40.5	39.1	40.3	+1.2
Marijuana/Hashish																
8th Grade	6.2	7.2	9.2	13.0	15.8	18.3	17.7	16.9	16.5	15.6	15.4	14.6	12.8	11.8	12.2	+0.4
10th Grade	16.5	15.2	19.2	25.2	28.7	33.6	34.8	31.1	32.1	32.2	32.7	30.3	28.2	27.5	26.6	-0.9
12th Grade	23.9	21.9	26.0	30.7	34.7	35.8	38.5	37.5	37.8	36.5	37.0	36.2	34.9	34.3	33.6	-0.6
Inhalants <sup>c,d</sup>																
8th Grade	9.0	9.5	11.0	11.7	12.8	12.2	11.8	11.1	10.3	9.4	9.1	7.7	8.7	9.6	9.5	-0.1
10th Grade	7.1	7.5	8.4	9.1	9.6	9.5	8.7	8.0	7.2	7.3	6.6	5.8	5.4	5.9	6.0	+0.1
12th Grade	6.6	6.2	7.0	7.7	8.0	7.6	6.7	6.2	5.6	5.9	4.5	4.5	3.9	4.2	5.0	+0.9
Nitrites <sup>e</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.9	0.5	0.9	1.1	1.1	1.6	1.2	1.4	0.9	0.6	0.6	1.1	0.9	0.8	0.6	-0.2
Hallucinogens <sup>b,f</sup>																
8th Grade	1.9	2.5	2.6	2.7	3.6	4.1	3.7	3.4	2.9	2.8†	3.4	2.6	2.6	2.2	2.4	+0.2
10th Grade	4.0	4.3	4.7	5.8	7.2	7.8	7.6	6.9	6.9	6.1†	6.2	4.7	4.1	4.1	4.0	-0.1
12th Grade	5.8	5.9	7.4	7.6	9.3	10.1	9.8	9.0	9.4	8.1†	9.1	6.6	5.9	6.2	5.5	-0.7
LSD																
8th Grade	1.7	2.1	2.3	2.4	3.2	3.5	3.2	2.8	2.4	2.4	2.2	1.5	1.3	1.1	1.2	+0.1
10th Grade	3.7	4.0	4.2	5.2	6.5	6.9	6.7	5.9	6.0	5.1	4.1	2.6	1.7	1.6	1.5	-0.1
12th Grade	5.2	5.6	6.8	6.9	8.4	8.8	8.4	7.6	8.1	6.6	6.6	3.5	1.9	2.2	1.8	-0.4
Hallucinogens Other Than LSD <sup>b</sup>																
8th Grade	0.7	1.1	1.0	1.3	1.7	2.0	1.8	1.6	1.5	1.4†	2.4	2.1	2.1	1.9	2.0	+0.2
10th Grade	1.3	1.4	1.9	2.4	2.8	3.3	3.3	3.4	3.2	3.1†	4.3	4.0	3.6	3.7	3.5	-0.2
12th Grade	2.0	1.7	2.2	3.1	3.8	4.4	4.6	4.6	4.3	4.4†	5.9	5.4	5.4	5.6	5.0	-0.6
PCP <sup>e</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.4	1.4	1.4	1.6	1.8	2.6	2.3	2.1	1.8	2.3	1.8	1.1	1.3	0.7	1.3	+0.6

(Table continued on next page)

**TABLE 2 (cont'd)**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Annual</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
MDMA (Ecstasy) <sup>g</sup>																
8th Grade	—	—	—	—	—	2.3	2.3	1.8	1.7	3.1	3.5	2.9	2.1	1.7	1.7	-0.1
10th Grade	—	—	—	—	—	4.6	3.9	3.3	4.4	5.4	6.2	4.9	3.0	2.4	2.6	+0.2
12th Grade	—	—	—	—	—	4.6	4.0	3.6	5.6	8.2	9.2	7.4	4.5	4.0	3.0	-0.9
Cocaine																
8th Grade	1.1	1.5	1.7	2.1	2.6	3.0	2.8	3.1	2.7	2.6	2.5	2.3	2.2	2.0	2.2	+0.2
10th Grade	2.2	1.9	2.1	2.8	3.5	4.2	4.7	4.7	4.9	4.4	3.6	4.0	3.3	3.7	3.5	-0.2
12th Grade	3.5	3.1	3.3	3.6	4.0	4.9	5.5	5.7	6.2	5.0	4.8	5.0	4.8	5.3	5.1	-0.2
Crack																
8th Grade	0.7	0.9	1.0	1.3	1.6	1.8	1.7	2.1	1.8	1.8	1.7	1.6	1.6	1.3	1.4	+0.1
10th Grade	0.9	0.9	1.1	1.4	1.8	2.1	2.2	2.5	2.4	2.2	1.8	2.3	1.6	1.7	1.7	0.0
12th Grade	1.5	1.5	1.5	1.9	2.1	2.1	2.4	2.5	2.7	2.2	2.1	2.3	2.2	2.3	1.9	-0.3
Other Cocaine <sup>h</sup>																
8th Grade	1.0	1.2	1.3	1.7	2.1	2.5	2.2	2.4	2.3	1.9	1.9	1.8	1.6	1.6	1.7	+0.1
10th Grade	2.1	1.7	1.8	2.4	3.0	3.5	4.1	4.0	4.4	3.8	3.0	3.4	2.8	3.3	3.0	-0.3
12th Grade	3.2	2.6	2.9	3.0	3.4	4.2	5.0	4.9	5.8	4.5	4.4	4.4	4.2	4.7	4.5	-0.2
Heroin <sup>i</sup>																
8th Grade	0.7	0.7	0.7	1.2	1.4	1.6	1.3	1.3	1.4	1.1	1.0	0.9	0.9	1.0	0.8	-0.2
10th Grade	0.5	0.6	0.7	0.9	1.1	1.2	1.4	1.4	1.4	1.4	0.9	1.1	0.7	0.9	0.9	0.0
12th Grade	0.4	0.6	0.5	0.6	1.1	1.0	1.2	1.0	1.1	1.5	0.9	1.0	0.8	0.9	0.8	0.0
With a Needle <sup>j</sup>																
8th Grade	—	—	—	—	0.9	1.0	0.8	0.8	0.9	0.6	0.7	0.6	0.6	0.7	0.6	-0.1
10th Grade	—	—	—	—	0.6	0.7	0.7	0.8	0.6	0.5	0.4	0.6	0.5	0.5	0.5	0.0
12th Grade	—	—	—	—	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	+0.1
Without a Needle <sup>j</sup>																
8th Grade	—	—	—	—	0.8	1.0	0.8	0.8	0.9	0.7	0.6	0.6	0.6	0.6	0.5	-0.1
10th Grade	—	—	—	—	0.8	0.9	1.1	1.0	1.1	1.1	0.7	0.8	0.5	0.7	0.7	0.0
12th Grade	—	—	—	—	1.0	1.0	1.2	0.8	1.0	1.6	0.8	0.8	0.8	0.7	0.8	+0.1
Other Narcotics <sup>k,l</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	3.5	3.3	3.6	3.8	4.7	5.4	6.2	6.3	6.7	7.0	6.7†	9.4	9.3	9.5	9.0	-0.5
OxyContin <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	1.3	1.7	1.7	1.8	+0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	—	3.0	3.6	3.5	3.2	-0.3
12th Grade	—	—	—	—	—	—	—	—	—	—	—	4.0	4.5	5.0	5.5	+0.6
Vicodin <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	2.5	2.8	2.5	2.6	+0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	—	6.9	7.2	6.2	5.9	-0.3
12th Grade	—	—	—	—	—	—	—	—	—	—	—	9.6	10.5	9.3	9.5	+0.2
Amphetamines <sup>k</sup>																
8th Grade	6.2	6.5	7.2	7.9	8.7	9.1	8.1	7.2	6.9	6.5	6.7	5.5	5.5	4.9	4.9	+0.1
10th Grade	8.2	8.2	9.6	10.2	11.9	12.4	12.1	10.7	10.4	11.1	11.7	10.7	9.0	8.5	7.8	-0.7
12th Grade	8.2	7.1	8.4	9.4	9.3	9.5	10.2	10.1	10.2	10.5	10.9	11.1	9.9	10.0	8.6	-1.4 s

(Table continued on next page)

**TABLE 2 (cont'd)**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Annual</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
Ritalin <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	2.9	2.8	2.6	2.5	2.4	-0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	4.8	4.8	4.1	3.4	3.4	+0.1
12th Grade	—	—	—	—	—	—	—	—	—	—	5.1	4.0	4.0	5.1	4.4	-0.7
Methamphetamine <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	3.2	2.5	2.8	2.2	2.5	1.5	1.8	+0.2
10th Grade	—	—	—	—	—	—	—	—	4.6	4.0	3.7	3.9	3.3	3.0	2.9	-0.1
12th Grade	—	—	—	—	—	—	—	—	4.7	4.3	3.9	3.6	3.2	3.4	2.5	-0.9 s
Ice <sup>n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.4	1.3	1.7	1.8	2.4	2.8	2.3	3.0	1.9	2.2	2.5	3.0	2.0	2.1	2.3	+0.3
Sedatives (Barbiturates) <sup>k</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	3.4	2.8	3.4	4.1	4.7	4.9	5.1	5.5	5.8	6.2	5.7	6.7	6.0	6.5	7.2	+0.7
Methaqualone <sup>e,k</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.5	0.6	0.2	0.8	0.7	1.1	1.0	1.1	1.1	0.3	0.8	0.9	0.6	0.8	0.9	+0.1
Tranquillizers <sup>b,k</sup>																
8th Grade	1.8	2.0	2.1	2.4	2.7	3.3	2.9	2.6	2.5	2.6†	2.8	2.6	2.7	2.5	2.8	+0.3
10th Grade	3.2	3.5	3.3	3.3	4.0	4.6	4.9	5.1	5.4	5.6†	7.3	6.3	5.3	5.1	4.8	-0.3
12th Grade	3.6	2.8	3.5	3.7	4.4	4.6	4.7	5.5	5.8	5.7†	6.9	7.7	6.7	7.3	6.8	-0.6
Rohypnol <sup>o</sup>																
8th Grade	—	—	—	—	—	1.0	0.8	0.8	0.5	0.5	0.7	0.3	0.5	0.6	0.7	+0.1
10th Grade	—	—	—	—	—	1.1	1.3	1.2	1.0	0.8	1.0	0.7	0.6	0.7	0.5	-0.3
12th Grade	—	—	—	—	—	1.1	1.2	1.4	1.0	0.8	0.9†	1.6	1.3	1.6	1.2	-0.4
GHB <sup>m,r</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	1.2	1.1	0.8	0.9	0.7	0.5	-0.2
10th Grade	—	—	—	—	—	—	—	—	—	1.1	1.0	1.4	1.4	0.8	0.8	0.0
12th Grade	—	—	—	—	—	—	—	—	—	1.9	1.6	1.5	1.4	2.0	1.1	-0.9 s
Ketamine <sup>m,s</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	1.6	1.3	1.3	1.1	0.9	0.6	-0.3
10th Grade	—	—	—	—	—	—	—	—	—	2.1	2.1	2.2	1.9	1.3	1.0	-0.3
12th Grade	—	—	—	—	—	—	—	—	—	2.5	2.5	2.6	2.1	1.9	1.6	-0.3
Alcohol <sup>p</sup>																
Any Use																
8th Grade	54.0	53.7†	45.4	46.8	45.3	46.5	45.5	43.7	43.5	43.1	41.9	38.7	37.2	36.7	33.9	-2.7 ss
10th Grade	72.3	70.2†	63.4	63.9	63.5	65.0	65.2	62.7	63.7	65.3	63.5	60.0	59.3	58.2	56.7	-1.5
12th Grade	77.7	76.8†	72.7	73.0	73.7	72.5	74.8	74.3	73.8	73.2	73.3	71.5	70.1	70.6	68.6	-2.1 s

(Table continued on next page)

**TABLE 2 (cont'd)**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Annual</u>															'04-'05
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>change</u>
Been Drunk <sup>n</sup>																
8th Grade	17.5	18.3	18.2	18.2	18.4	19.8	18.4	17.9	18.5	18.5	16.6	15.0	14.5	14.5	14.1	-0.4
10th Grade	40.1	37.0	37.8	38.0	38.5	40.1	40.7	38.3	40.9	41.6	39.9	35.4	34.7	35.1	34.2	-0.9
12th Grade	52.7	50.3	49.6	51.7	52.5	51.9	53.2	52.0	53.2	51.8	53.2	50.4	48.0	51.8	47.7	-4.1 s
Flavored Alcoholic Beverages <sup>e,m,u</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	27.9	-2.5 s
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	49.7	48.5	-1.2
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	55.2	55.8	58.4	+2.5
Bidis <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	3.9	2.7	2.7	2.0	1.7	1.6	-0.1
10th Grade	—	—	—	—	—	—	—	—	—	6.4	4.9	3.1	2.8	2.1	1.6	-0.5
12th Grade	—	—	—	—	—	—	—	—	—	9.2	7.0	5.9	4.0	3.6	3.3	-0.3
Kreteks <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	2.6	2.6	2.0	1.9	1.4	-0.5
10th Grade	—	—	—	—	—	—	—	—	—	—	6.0	4.9	3.8	3.7	2.8	-0.9
12th Grade	—	—	—	—	—	—	—	—	—	—	10.1	8.4	6.7	6.5	7.1	+0.6
Steroids <sup>n</sup>																
8th Grade	1.0	1.1	0.9	1.2	1.0	0.9	1.0	1.2	1.7	1.7	1.6	1.5	1.4	1.1	1.1	-0.1
10th Grade	1.1	1.1	1.0	1.1	1.2	1.2	1.2	1.2	1.7	2.2	2.1	2.2	1.7	1.5	1.3	-0.3
12th Grade	1.4	1.1	1.2	1.3	1.5	1.4	1.4	1.7	1.8	1.7	2.4	2.5	2.1	2.5	1.5	-1.1 sss

Source: The Monitoring the Future Study, the University of Michigan.

Note: See Table 1 for relevant footnotes.

**TABLE 3**  
**Trends in 30-Day Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>30-Day</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
Any Illicit Drug <sup>a</sup>																
8th Grade	5.7	6.8	8.4	10.9	12.4	14.6	12.9	12.1	12.2	11.9	11.7	10.4	9.7	8.4	8.5	+0.1
10th Grade	11.6	11.0	14.0	18.5	20.2	23.2	23.0	21.5	22.1	22.5	22.7	20.8	19.5	18.3	17.3	-1.0
12th Grade	16.4	14.4	18.3	21.9	23.8	24.6	26.2	25.6	25.9	24.9	25.7	25.4	24.1	23.4	23.1	-0.2
Any Illicit Drug Other Than Marijuana <sup>a,b</sup>																
8th Grade	3.8	4.7	5.3	5.6	6.5	6.9	6.0	5.5	5.5	5.6†	5.5	4.7	4.7	4.1	4.1	0.0
10th Grade	5.5	5.7	6.5	7.1	8.9	8.9	8.8	8.6	8.6	8.5†	8.7	8.1	6.9	6.9	6.4	-0.6
12th Grade	7.1	6.3	7.9	8.8	10.0	9.5	10.7	10.7	10.4	10.4†	11.0	11.3	10.4	10.8	10.3	-0.5
Any Illicit Drug Including Inhalants <sup>a,c</sup>																
8th Grade	8.8	10.0	12.0	14.3	16.1	17.5	16.0	14.9	15.1	14.4	14.0	12.6	12.1	11.2	11.2	0.0
10th Grade	13.1	12.6	15.5	20.0	21.6	24.5	24.1	22.5	23.1	23.6	23.6	21.7	20.5	19.3	18.4	-1.0
12th Grade	17.8	15.5	19.3	23.0	24.8	25.5	26.9	26.6	26.4	26.4	26.5	25.9	24.6	23.3	24.2	+1.0
Marijuana/Hashish																
8th Grade	3.2	3.7	5.1	7.8	9.1	11.3	10.2	9.7	9.7	9.1	9.2	8.3	7.5	6.4	6.6	+0.3
10th Grade	8.7	8.1	10.9	15.8	17.2	20.4	20.5	18.7	19.4	19.7	19.8	17.8	17.0	15.9	15.2	-0.7
12th Grade	13.8	11.9	15.5	19.0	21.2	21.9	23.7	22.8	23.1	21.6	22.4	21.5	21.2	19.9	19.8	-0.2
Inhalants <sup>c,d</sup>																
8th Grade	4.4	4.7	5.4	5.6	6.1	5.8	5.6	4.8	5.0	4.5	4.0	3.8	4.1	4.5	4.2	-0.3
10th Grade	2.7	2.7	3.3	3.6	3.5	3.3	3.0	2.9	2.6	2.6	2.4	2.4	2.2	2.4	2.2	-0.2
12th Grade	2.4	2.3	2.5	2.7	3.2	2.5	2.5	2.3	2.0	2.2	1.7	1.5	1.5	1.5	2.0	+0.5
Nitrites <sup>e</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.4	0.3	0.6	0.4	0.4	0.7	0.7	1.0	0.4	0.3	0.5	0.6	0.7	0.7	0.5	-0.3
Hallucinogens <sup>b,f</sup>																
8th Grade	0.8	1.1	1.2	1.3	1.7	1.9	1.8	1.4	1.3	1.2†	1.6	1.2	1.2	1.0	1.1	+0.1
10th Grade	1.6	1.8	1.9	2.4	3.3	2.8	3.3	3.2	2.9	2.3†	2.1	1.6	1.5	1.6	1.5	0.0
12th Grade	2.2	2.1	2.7	3.1	4.4	3.5	3.9	3.8	3.5	2.6†	3.3	2.3	1.8	1.9	1.9	0.0
LSD																
8th Grade	0.6	0.9	1.0	1.1	1.4	1.5	1.5	1.1	1.1	1.0	1.0	0.7	0.6	0.5	0.5	0.0
10th Grade	1.5	1.6	1.6	2.0	3.0	2.4	2.8	2.7	2.3	1.6	1.5	0.7	0.6	0.6	0.6	0.0
12th Grade	1.9	2.0	2.4	2.6	4.0	2.5	3.1	3.2	2.7	1.6	2.3	0.7	0.6	0.7	0.7	0.0
Hallucinogens Other Than LSD <sup>b</sup>																
8th Grade	0.3	0.4	0.5	0.7	0.8	0.9	0.7	0.7	0.6	0.6†	1.1	1.0	1.0	0.8	0.9	+0.1
10th Grade	0.4	0.5	0.7	1.0	1.0	1.0	1.2	1.4	1.2	1.2†	1.4	1.4	1.2	1.4	1.3	-0.1
12th Grade	0.7	0.5	0.8	1.2	1.3	1.6	1.7	1.6	1.6	1.7†	1.9	2.0	1.5	1.7	1.6	-0.1
PCP <sup>e</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.5	0.6	1.0	0.7	0.6	1.3	0.7	1.0	0.8	0.9	0.5	0.4	0.6	0.4	0.7	+0.3

(Table continued on next page)

**TABLE 3 (cont'd)**  
**Trends in 30-Day Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>30-Day</u>															'04-'05
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>change</u>
MDMA (Ecstasy) <sup>g</sup>																
8th Grade	—	—	—	—	—	1.0	1.0	0.9	0.8	1.4	1.8	1.4	0.7	0.8	0.6	-0.2
10th Grade	—	—	—	—	—	1.8	1.3	1.3	1.8	2.6	2.6	1.8	1.1	0.8	1.0	+0.2
12th Grade	—	—	—	—	—	2.0	1.6	1.5	2.5	3.6	2.8	2.4	1.3	1.2	1.0	-0.3
Cocaine																
8th Grade	0.5	0.7	0.7	1.0	1.2	1.3	1.1	1.4	1.3	1.2	1.2	1.1	0.9	0.9	1.0	+0.1
10th Grade	0.7	0.7	0.9	1.2	1.7	1.7	2.0	2.1	1.8	1.8	1.3	1.6	1.3	1.7	1.5	-0.1
12th Grade	1.4	1.3	1.3	1.5	1.8	2.0	2.3	2.4	2.6	2.1	2.1	2.3	2.1	2.3	2.3	-0.1
Crack																
8th Grade	0.3	0.5	0.4	0.7	0.7	0.8	0.7	0.9	0.8	0.8	0.8	0.8	0.7	0.6	0.6	0.0
10th Grade	0.3	0.4	0.5	0.6	0.9	0.8	0.9	1.1	0.8	0.9	0.7	1.0	0.7	0.8	0.7	-0.1
12th Grade	0.7	0.6	0.7	0.8	1.0	1.0	0.9	1.0	1.1	1.0	1.1	1.2	0.9	1.0	1.0	-0.1
Other Cocaine <sup>h</sup>																
8th Grade	0.5	0.5	0.6	0.9	1.0	1.0	0.8	1.0	1.1	0.9	0.9	0.8	0.7	0.7	0.7	0.0
10th Grade	0.6	0.6	0.7	1.0	1.4	1.3	1.6	1.8	1.6	1.6	1.2	1.3	1.1	1.5	1.3	-0.2
12th Grade	1.2	1.0	1.2	1.3	1.3	1.6	2.0	2.0	2.5	1.7	1.8	1.9	1.8	2.2	2.0	-0.2
Heroin <sup>i</sup>																
8th Grade	0.3	0.4	0.4	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.4	0.5	0.5	0.0
10th Grade	0.2	0.2	0.3	0.4	0.6	0.5	0.6	0.7	0.7	0.5	0.3	0.5	0.3	0.5	0.5	0.0
12th Grade	0.2	0.3	0.2	0.3	0.6	0.5	0.5	0.5	0.5	0.7	0.4	0.5	0.4	0.5	0.5	0.0
With a Needle <sup>j</sup>																
8th Grade	—	—	—	—	0.4	0.5	0.4	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.0
10th Grade	—	—	—	—	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.0
12th Grade	—	—	—	—	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	+0.1
Without a Needle <sup>j</sup>																
8th Grade	—	—	—	—	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.0
10th Grade	—	—	—	—	0.3	0.3	0.4	0.5	0.5	0.4	0.2	0.4	0.2	0.3	0.3	0.0
12th Grade	—	—	—	—	0.6	0.4	0.6	0.4	0.4	0.7	0.3	0.5	0.4	0.3	0.5	+0.1
Other Narcotics <sup>k,l</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.1	1.2	1.3	1.5	1.8	2.0	2.3	2.4	2.6	2.9	3.0†	4.0	4.1	4.3	3.9	-0.4
Amphetamines <sup>k</sup>																
8th Grade	2.6	3.3	3.6	3.6	4.2	4.6	3.8	3.3	3.4	3.4	3.2	2.8	2.7	2.3	2.3	0.0
10th Grade	3.3	3.6	4.3	4.5	5.3	5.5	5.1	5.1	5.0	5.4	5.6	5.2	4.3	4.0	3.7	-0.4
12th Grade	3.2	2.8	3.7	4.0	4.0	4.1	4.8	4.6	4.5	5.0	5.6	5.5	5.0	4.6	3.9	-0.7 s
Methamphetamine <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	1.1	0.8	1.3	1.1	1.2	0.6	0.7	+0.2
10th Grade	—	—	—	—	—	—	—	—	1.8	2.0	1.5	1.8	1.4	1.3	1.1	-0.2
12th Grade	—	—	—	—	—	—	—	—	1.7	1.9	1.5	1.7	1.7	1.4	0.9	-0.6 s
Ice <sup>n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.6	0.5	0.6	0.7	1.1	1.1	0.8	1.2	0.8	1.0	1.1	1.2	0.8	0.8	0.9	+0.1

(Table continued on next page)

**TABLE 3 (cont'd)**  
**Trends in 30-Day Prevalence of Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>30-Day</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
Sedatives (Barbiturates) <sup>k</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.4	1.1	1.3	1.7	2.2	2.1	2.1	2.6	2.6	3.0	2.8	3.2	2.9	2.9	3.3	+0.4
Methaqualone <sup>e,k</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.2	0.4	0.1	0.4	0.4	0.6	0.3	0.6	0.4	0.2	0.5	0.3	0.4	0.5	0.5	0.0
Tranquillizers <sup>b,k</sup>																
8th Grade	0.8	0.8	0.9	1.1	1.2	1.5	1.2	1.2	1.1	1.4†	1.2	1.2	1.4	1.2	1.3	+0.1
10th Grade	1.2	1.5	1.1	1.5	1.7	1.7	2.2	2.2	2.2	2.5†	2.9	2.9	2.4	2.3	2.3	-0.1
12th Grade	1.4	1.0	1.2	1.4	1.8	2.0	1.8	2.4	2.5	2.6†	2.9	3.3	2.8	3.1	2.9	-0.2
Rohypnol <sup>p</sup>																
8th Grade	—	—	—	—	—	0.5	0.3	0.4	0.3	0.3	0.4	0.2	0.1	0.2	0.2	0.0
10th Grade	—	—	—	—	—	0.5	0.5	0.4	0.5	0.4	0.2	0.4	0.2	0.3	0.2	0.0
12th Grade	—	—	—	—	—	0.5	0.3	0.3	0.3	0.4	0.3	—	—	—	—	—
Alcohol <sup>p</sup>																
Any Use																
8th Grade	25.1	26.1†	24.3	25.5	24.6	26.2	24.5	23.0	24.0	22.4	21.5	19.6	19.7	18.6	17.1	-1.5
10th Grade	42.8	39.9†	38.2	39.2	38.8	40.4	40.1	38.8	40.0	41.0	39.0	35.4	35.4	35.2	33.2	-2.0 s
12th Grade	54.0	51.3†	48.6	50.1	51.3	50.8	52.7	52.0	51.0	50.0	49.8	48.6	47.5	48.0	47.0	-1.0
Been Drunk <sup>n</sup>																
8th Grade	7.6	7.5	7.8	8.7	8.3	9.6	8.2	8.4	9.4	8.3	7.7	6.7	6.7	6.2	6.0	-0.2
10th Grade	20.5	18.1	19.8	20.3	20.8	21.3	22.4	21.1	22.5	23.5	21.9	18.3	18.2	18.5	17.6	-1.0
12th Grade	31.6	29.9	28.9	30.8	33.2	31.3	34.2	32.9	32.9	32.3	32.7	30.3	30.9	32.5	30.2	-2.4
Flavored Alcoholic Beverages <sup>e,m</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	14.6	12.9	-1.7
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	25.1	23.1	-2.1
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	31.1	30.5	-0.6
Cigarettes																
Any Use																
8th Grade	14.3	15.5	16.7	18.6	19.1	21.0	19.4	19.1	17.5	14.6	12.2	10.7	10.2	9.2	9.3	+0.1
10th Grade	20.8	21.5	24.7	25.4	27.9	30.4	29.8	27.6	25.7	23.9	21.3	17.7	16.7	16.0	14.9	-1.0
12th Grade	28.3	27.8	29.9	31.2	33.5	34.0	36.5	35.1	34.6	31.4	29.5	26.7	24.4	25.0	23.2	-1.8
Smokeless Tobacco <sup>q</sup>																
8th Grade	6.9	7.0	6.6	7.7	7.1	7.1	5.5	4.8	4.5	4.2	4.0	3.3	4.1	4.1	3.3	-0.8
10th Grade	10.0	9.6	10.4	10.5	9.7	8.6	8.9	7.5	6.5	6.1	6.9	6.1	5.3	4.9	5.6	+0.7
12th Grade	—	11.4	10.7	11.1	12.2	9.8	9.7	8.8	8.4	7.6	7.8	6.5	6.7	6.7	7.6	+0.9
Steroids <sup>n</sup>																
8th Grade	0.4	0.5	0.5	0.5	0.6	0.4	0.5	0.5	0.7	0.8	0.7	0.8	0.7	0.5	0.5	0.0
10th Grade	0.6	0.6	0.5	0.6	0.6	0.5	0.7	0.6	0.9	1.0	0.9	1.0	0.8	0.8	0.6	-0.2
12th Grade	0.8	0.6	0.7	0.9	0.7	0.7	1.0	1.1	0.9	0.8	1.3	1.4	1.3	1.6	0.9	-0.6 s

Source: The Monitoring the Future Study, the University of Michigan.

Note: See Table 1 for relevant footnotes.

**TABLE 4**  
**Trends in 30-Day Prevalence of Daily Use of Various Drugs**  
**for Eighth, Tenth, and Twelfth Graders**

	<u>Daily</u>															'04-'05
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	change
Marijuana/Hashish, daily <sup>t</sup>																
8th Grade	0.2	0.2	0.4	0.7	0.8	1.5	1.1	1.1	1.4	1.3	1.3	1.2	1.0	0.8	1.0	+0.2
10th Grade	0.8	0.8	1.0	2.2	2.8	3.5	3.7	3.6	3.8	3.8	4.5	3.9	3.6	3.2	3.1	-0.1
12th Grade	2.0	1.9	2.4	3.6	4.6	4.9	5.8	5.6	6.0	6.0	5.8	6.0	6.0	5.6	5.0	-0.6
Alcohol <sup>p,t</sup>																
Any daily use																
8th Grade	0.5	0.6†	1.0	1.0	0.7	1.0	0.8	0.9	1.0	0.8	0.9	0.7	0.8	0.6	0.5	-0.1
10th Grade	1.3	1.2†	1.8	1.7	1.7	1.6	1.7	1.9	1.9	1.8	1.9	1.8	1.5	1.3	1.3	0.0
12th Grade	3.6	3.4†	3.4	2.9	3.5	3.7	3.9	3.9	3.4	2.9	3.6	3.5	3.2	2.8	3.1	+0.3
Been Drunk, daily <sup>n,t</sup>																
8th Grade	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.0
10th Grade	0.2	0.3	0.4	0.4	0.6	0.4	0.6	0.6	0.7	0.5	0.6	0.5	0.5	0.4	0.4	+0.1
12th Grade	0.9	0.8	0.9	1.2	1.3	1.6	2.0	1.5	1.9	1.7	1.4	1.2	1.6	1.8	1.5	-0.3
5+ drinks in a row in last 2 weeks <sup>v</sup>																
8th Grade	12.9	13.4	13.5	14.5	14.5	15.6	14.5	13.7	15.2	14.1	13.2	12.4	11.9	11.4	10.5	-1.0
10th Grade	22.9	21.1	23.0	23.6	24.0	24.8	25.1	24.3	25.6	26.2	24.9	22.4	22.2	22.0	21.0	-1.0
12th Grade	29.8	27.9	27.5	28.2	29.8	30.2	31.3	31.5	30.8	30.0	29.7	28.6	27.9	29.2	27.1	-2.1 s
Cigarettes																
Any daily use																
8th Grade	7.2	7.0	8.3	8.8	9.3	10.4	9.0	8.8	8.1	7.4	5.5	5.1	4.5	4.4	4.0	-0.3
10th Grade	12.6	12.3	14.2	14.6	16.3	18.3	18.0	15.8	15.9	14.0	12.2	10.1	8.9	8.3	7.5	-0.7
12th Grade	18.5	17.2	19.0	19.4	21.6	22.2	24.6	22.4	23.1	20.6	19.0	16.9	15.8	15.6	13.6	-1.9 s
1/2 pack+/day																
8th Grade	3.1	2.9	3.5	3.6	3.4	4.3	3.5	3.6	3.3	2.8	2.3	2.1	1.8	1.7	1.7	-0.1
10th Grade	6.5	6.0	7.0	7.6	8.3	9.4	8.6	7.9	7.6	6.2	5.5	4.4	4.1	3.3	3.1	-0.2
12th Grade	10.7	10.0	10.9	11.2	12.4	13.0	14.3	12.6	13.2	11.3	10.3	9.1	8.4	8.0	6.9	-1.1 s
Smokeless Tobacco, daily <sup>q</sup>																
8th Grade	1.6	1.8	1.5	1.9	1.2	1.5	1.0	1.0	0.9	0.9	1.2	0.8	0.8	1.0	0.7	-0.3
10th Grade	3.3	3.0	3.3	3.0	2.7	2.2	2.2	2.2	1.5	1.9	2.2	1.7	1.8	1.6	1.9	+0.3
12th Grade	—	4.3	3.3	3.9	3.6	3.3	4.4	3.2	2.9	3.2	2.8	2.0	2.2	2.8	2.5	-0.2

Source: The Monitoring the Future Study, the University of Michigan.

Note: See Table 1 for relevant footnotes.

**TABLE 5**  
**Trends in Harmfulness of Drugs as Perceived by Eighth Graders**

<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	Percentage saying "great risk" <sup>a</sup>															'04-'05 change
	8th Graders															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Try marijuana once or twice	40.4	39.1	36.2	31.6	28.9	27.9	25.3	28.1	28.0	29.0	27.7	28.2	30.2	31.9	31.4	-0.5
Smoke marijuana occasionally	57.9	56.3	53.8	48.6	45.9	44.3	43.1	45.0	45.7	47.4	46.3	46.0	48.6	50.5	48.9	-1.6
Smoke marijuana regularly	83.8	82.0	79.6	74.3	73.0	70.9	72.7	73.0	73.3	74.8	72.2	71.7	74.2	76.2	73.9	-2.3 s
Try inhalants once or twice <sup>b</sup>	35.9	37.0	36.5	37.9	36.4	40.8	40.1	38.9	40.8	41.2	45.6	42.8	40.3	38.7	37.5	-1.3
Try inhalants regularly <sup>b</sup>	65.6	64.4	64.6	65.5	64.8	68.2	68.7	67.2	68.8	69.9	71.6	69.9	67.4	66.4	64.1	-2.3
Take LSD once or twice <sup>c</sup>	—	—	42.1	38.3	36.7	36.5	37.0	34.9	34.1	34.0	31.6	29.6	27.9	26.8	25.8	-1.0
Take LSD regularly <sup>c</sup>	—	—	68.3	65.8	64.4	63.6	64.1	59.6	58.8	57.5	52.9	49.3	48.2	45.2	44.0	-1.2
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	35.8	38.9	41.9	42.5	40.0	-2.5
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	55.5	61.8	65.8	65.1	60.8	-4.3 ss
Try crack once or twice <sup>b</sup>	62.8	61.2	57.2	54.4	50.8	51.0	49.9	49.3	48.7	48.5	48.6	47.4	48.7	49.0	49.6	+0.6
Take crack occasionally <sup>b</sup>	82.2	79.6	76.8	74.4	72.1	71.6	71.2	70.6	70.6	70.1	70.0	69.7	70.3	70.4	69.4	-1.0
Try cocaine powder once or twice <sup>b</sup>	55.5	54.1	50.7	48.4	44.9	45.2	45.0	44.0	43.3	43.3	43.9	43.2	43.7	44.4	44.2	-0.2
Take cocaine powder occasionally <sup>b</sup>	77.0	74.3	71.8	69.1	66.4	65.7	65.8	65.2	65.4	65.5	65.8	64.9	65.8	66.0	65.3	-0.7
Try heroin once or twice without using a needle <sup>c</sup>	—	—	—	—	60.1	61.3	63.0	62.8	63.0	62.0	61.1	62.6	62.7	61.6	61.4	-0.2
Take heroin occasionally without using a needle <sup>c</sup>	—	—	—	—	76.8	76.6	79.2	79.0	78.9	78.6	78.5	78.5	77.8	77.5	76.8	-0.7
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	11.0	12.1	12.4	11.6	11.6	11.8	10.4	12.1	11.6	11.9	12.2	12.5	12.6	13.7	13.9	+0.1
Take one or two drinks nearly every day	31.8	32.4	32.6	29.9	30.5	28.6	29.1	30.3	29.7	30.4	30.0	29.6	29.9	31.0	31.4	+0.4
Have five or more drinks once or twice each weekend	59.1	58.0	57.7	54.7	54.1	51.8	55.6	56.0	55.3	55.9	56.1	56.4	56.5	56.9	57.2	+0.3
Smoke one or more packs of cigarettes per day <sup>e</sup>	51.6	50.8	52.7	50.8	49.8	50.4	52.6	54.3	54.8	58.8	57.1	57.5	57.7	62.4	61.5	-0.9
Use smokeless tobacco regularly	35.1	35.1	36.9	35.5	33.5	34.0	35.2	36.5	37.1	39.0	38.2	39.4	39.7	41.3	40.8	-0.5
Take steroids <sup>f</sup>	64.2	69.5	70.2	67.6	—	—	—	—	—	—	—	—	—	—	—	—

*Approx. N = 17,400 18,700 18,400 17,400 17,500 17,900 18,800 18,100 16,700 16,700 16,200 15,100 16,500 17,000 16,800*

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup>Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar.

<sup>b</sup>Beginning in 1997, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>c</sup>Data based on one of two forms in 1993–96; N is one-half of N indicated. Beginning in 1997, data based on one-third of N indicated due to changes in questionnaire forms.

<sup>d</sup>Data based on one-third of N indicated.

<sup>e</sup>Beginning in 1999, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>f</sup>Data based on two forms in 1991 and 1992. Data based on one of two forms in 1993 and 1994; N is one-half of N indicated.

**TABLE 6**  
**Trends in Harmfulness of Drugs as Perceived by Tenth Graders**

<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	Percentage saying "great risk" <sup>a</sup>															'04-'05 change
	10th Graders															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Try marijuana once or twice	30.0	31.9	29.7	24.4	21.5	20.0	18.8	19.6	19.2	18.5	17.9	19.9	21.1	22.0	22.3	+0.2
Smoke marijuana occasionally	48.6	48.9	46.1	38.9	35.4	32.8	31.9	32.5	33.5	32.4	31.2	32.0	34.9	36.2	36.6	+0.5
Smoke marijuana regularly	82.1	81.1	78.5	71.3	67.9	65.9	65.9	65.8	65.9	64.7	62.8	60.8	63.9	65.6	65.5	-0.1
Try inhalants once or twice <sup>b</sup>	37.8	38.7	40.9	42.7	41.6	47.2	47.5	45.8	48.2	46.6	49.9	48.7	47.7	46.7	45.7	-0.9
Try inhalants regularly <sup>b</sup>	69.8	67.9	69.6	71.5	71.8	75.8	74.5	73.3	76.3	75.0	76.4	73.4	72.2	73.0	71.2	-1.8
Take LSD once or twice <sup>c</sup>	—	—	48.7	46.5	44.7	45.1	44.5	43.5	45.0	43.0	41.3	40.1	40.8	40.6	40.3	-0.4
Take LSD regularly <sup>c</sup>	—	—	78.9	75.9	75.5	75.3	73.8	72.3	73.9	72.0	68.8	64.9	63.0	63.1	60.8	-2.3
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	39.4	43.5	49.7	52.0	51.4	-0.6
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	64.8	67.3	71.7	74.6	72.8	-1.8
Try crack once or twice <sup>b</sup>	70.4	69.6	66.6	64.7	60.9	60.9	59.2	58.0	57.8	56.1	57.1	57.4	57.6	56.7	57.0	+0.4
Take crack occasionally <sup>b</sup>	87.4	86.4	84.4	83.1	81.2	80.3	78.7	77.5	79.1	76.9	77.3	75.7	76.4	76.7	76.9	+0.3
Try cocaine powder once or twice <sup>b</sup>	59.1	59.2	57.5	56.4	53.5	53.6	52.2	50.9	51.6	48.8	50.6	51.3	51.8	50.7	51.3	+0.7
Take cocaine powder occasionally <sup>b</sup>	82.2	80.1	79.1	77.8	75.6	75.0	73.9	71.8	73.6	70.9	72.3	71.0	71.4	72.2	72.4	+0.2
Try heroin once or twice without using a needle <sup>c</sup>	—	—	—	—	70.7	72.1	73.1	71.7	73.7	71.7	72.0	72.2	70.6	72.0	72.4	+0.3
Take heroin occasionally without using a needle <sup>c</sup>	—	—	—	—	85.1	85.8	86.5	84.9	86.5	85.2	85.4	83.4	83.5	85.4	85.2	-0.2
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	9.0	10.1	10.9	9.4	9.3	8.9	9.0	10.1	10.5	9.6	9.8	11.5	11.5	10.8	11.5	+0.8
Take one or two drinks nearly every day	36.1	36.8	35.9	32.5	31.7	31.2	31.8	31.9	32.9	32.3	31.5	31.0	30.9	31.3	32.6	+1.3
Have five or more drinks once or twice each weekend	54.7	55.9	54.9	52.9	52.0	50.9	51.8	52.5	51.9	51.0	50.7	51.7	51.6	51.7	53.3	+1.6
Smoke one or more packs of cigarettes per day <sup>e</sup>	60.3	59.3	60.7	59.0	57.0	57.9	59.9	61.9	62.7	65.9	64.7	64.3	65.7	68.4	68.1	-0.4
Use smokeless tobacco regularly	40.3	39.6	44.2	42.2	38.2	41.0	42.2	42.8	44.2	46.7	46.2	46.9	48.0	47.8	46.1	-1.8
Take steroids <sup>f</sup>	67.1	72.7	73.4	72.5	—	—	—	—	—	—	—	—	—	—	—	—

*Approx. N = 14,700 14,800 15,300 15,900 17,000 15,700 15,600 15,000 13,600 14,300 14,000 14,300 15,800 16,400 16,200*

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup>Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar.

<sup>b</sup>Beginning in 1997, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>c</sup>Data based on one of two forms in 1993–96; N is one-half of N indicated. Beginning in 1997, data based on one-third of N indicated due to changes in questionnaire forms.

<sup>d</sup>Data based on one-third of N indicated.

<sup>e</sup>Beginning in 1999, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>f</sup>Data based on two forms in 1991 and 1992. Data based on one of two forms in 1993 and 1994; N is one-half of N indicated.

**TABLE 7**  
**Trends in Harmfulness of Drugs as Perceived by Twelfth Graders**

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying "great risk" <sup>a</sup>																
	12th Graders																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	
Try marijuana once or twice	15.1	11.4	9.5	8.1	9.4	10.0	13.0	11.5	12.7	14.7	14.8	15.1	18.4	19.0	23.6	23.1	
Smoke marijuana occasionally	18.1	15.0	13.4	12.4	13.5	14.7	19.1	18.3	20.6	22.6	24.5	25.0	30.4	31.7	36.5	36.9	
Smoke marijuana regularly	43.3	38.6	36.4	34.9	42.0	50.4	57.6	60.4	62.8	66.9	70.4	71.3	73.5	77.0	77.5	77.8	
Try LSD once or twice	49.4	45.7	43.2	42.7	41.6	43.9	45.5	44.9	44.7	45.4	43.5	42.0	44.9	45.7	46.0	44.7	
Take LSD regularly	81.4	80.8	79.1	81.1	82.4	83.0	83.5	83.5	83.2	83.8	82.9	82.6	83.8	84.2	84.3	84.5	
Try PCP once or twice	—	—	—	—	—	—	—	—	—	—	—	—	55.6	58.8	56.6	55.2	
Try MDMA (ecstasy) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Try cocaine once or twice	42.6	39.1	35.6	33.2	31.5	31.3	32.1	32.8	33.0	35.7	34.0	33.5	47.9	51.2	54.9	59.4	
Take cocaine occasionally	—	—	—	—	—	—	—	—	—	—	—	54.2	66.8	69.2	71.8	73.9	
Take cocaine regularly	73.1	72.3	68.2	68.2	69.5	69.2	71.2	73.0	74.3	78.8	79.0	82.2	88.5	89.2	90.2	91.1	
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	57.0	62.1	62.9	64.3	
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	70.4	73.2	75.3	80.4	
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.8	85.6	91.6	
Try cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	45.3	51.7	53.8	53.9	
Take cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	56.8	61.9	65.8	71.1	
Take cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	81.4	82.9	83.9	90.2	
Try heroin once or twice	60.1	58.9	55.8	52.9	50.4	52.1	52.9	51.1	50.8	49.8	47.3	45.8	53.6	54.0	53.8	55.4	
Take heroin occasionally	75.6	75.6	71.9	71.4	70.9	70.9	72.2	69.8	71.8	70.7	69.8	68.2	74.6	73.8	75.5	76.6	
Take heroin regularly	87.2	88.6	86.1	86.6	87.5	86.2	87.5	86.0	86.1	87.2	86.0	87.1	88.7	88.8	89.5	90.2	
Try heroin once or twice without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Take heroin occasionally without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Try amphetamines once or twice	35.4	33.4	30.8	29.9	29.7	29.7	26.4	25.3	24.7	25.4	25.2	25.1	29.1	29.6	32.8	32.2	
Take amphetamines regularly	69.0	67.3	66.6	67.1	69.9	69.1	66.1	64.7	64.8	67.1	67.2	67.3	69.4	69.8	71.2	71.2	
Try crystal meth. (ice) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Try barbiturates once or twice <sup>b</sup>	34.8	32.5	31.2	31.3	30.7	30.9	28.4	27.5	27.0	27.4	26.1	25.4	30.9	29.7	32.2	32.4	
Take barbiturates regularly <sup>b</sup>	69.1	67.7	68.6	68.4	71.6	72.2	69.9	67.6	67.7	68.5	68.3	67.2	69.4	69.6	70.5	70.2	
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	5.3	4.8	4.1	3.4	4.1	3.8	4.6	3.5	4.2	4.6	5.0	4.6	6.2	6.0	6.0	8.3	
Take one or two drinks nearly every day	21.5	21.2	18.5	19.6	22.6	20.3	21.6	21.6	21.6	23.0	24.4	25.1	26.2	27.3	28.5	31.3	
Take four or five drinks nearly every day	63.5	61.0	62.9	63.1	66.2	65.7	64.5	65.5	66.8	68.4	69.8	66.5	69.7	68.5	69.8	70.9	
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	34.5	34.9	35.9	36.3	36.0	38.6	41.7	43.0	39.1	41.9	42.6	44.0	47.1	
Smoke one or more packs of cigarettes per day	51.3	56.4	58.4	59.0	63.0	63.7	63.3	60.5	61.2	63.8	66.5	66.0	68.6	68.0	67.2	68.2	
Use smokeless tobacco regularly	—	—	—	—	—	—	—	—	—	—	—	25.8	30.0	33.2	32.9	34.2	
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63.8	69.9	
	<i>Approx. N =</i>	2,804	2,918	3,052	3,770	3,250	3,234	3,604	3,557	3,305	3,262	3,250	3,020	3,315	3,276	2,796	2,553

Cont'd

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available. '+' indicates some change in the question. See relevant footnote. Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

**TABLE 7 (cont'd)**  
**Trends in Harmfulness of Drugs as Perceived by Twelfth Graders**

<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	Percentage saying "great risk" <sup>a</sup>															'04-'05 change
	<u>12th Graders</u>															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Try marijuana once or twice	27.1	24.5	21.9	19.5	16.3	15.6	14.9	16.7	15.7	13.7	15.3	16.1	16.1	15.9	16.1	+0.2
Smoke marijuana occasionally	40.6	39.6	35.6	30.1	25.6	25.9	24.7	24.4	23.9	23.4	23.5	23.2	26.6	25.4	25.8	+0.4
Smoke marijuana regularly	78.6	76.5	72.5	65.0	60.8	59.9	58.1	58.5	57.4	58.3	57.4	53.0	54.9	54.6	58.0	+3.4
Try LSD once or twice	46.6	42.3	39.5	38.8	36.4	36.2	34.7	37.4	34.9	34.3	33.2	36.7	36.2	36.2	36.5	+0.3
Take LSD regularly	84.3	81.8	79.4	79.1	78.1	77.8	76.6	76.5	76.1	75.9	74.1	73.9	72.3	70.2	69.9	-0.4
Try PCP once or twice	51.7	54.8	50.8	51.5	49.1	51.0	48.8	46.8	44.8	45.0	46.2	48.3	45.2	47.1	46.6	-0.5
Try MDMA (ecstasy) once or twice	—	—	—	—	—	—	33.8	34.5	35.0	37.9	45.7	52.2	56.3	57.7	60.1	+2.4
Try cocaine once or twice	59.4	56.8	57.6	57.2	53.7	54.2	53.6	54.6	52.1	51.1	50.7	51.2	51.0	50.7	50.5	-0.2
Take cocaine occasionally	75.5	75.1	73.3	73.7	70.8	72.1	72.4	70.1	70.1	69.5	69.9	68.3	69.1	67.2	66.7	-0.5
Take cocaine regularly	90.4	90.2	90.1	89.3	87.9	88.3	87.1	86.3	85.8	86.2	84.1	84.5	83.0	82.2	82.8	+0.6
Try crack once or twice	60.6	62.4	57.6	58.4	54.6	56.0	54.0	52.2	48.2	48.4	49.4	50.8	47.3	47.8	48.4	+0.7
Take crack occasionally	76.5	76.3	73.9	73.8	72.8	71.4	70.3	68.7	67.3	65.8	65.4	65.6	64.0	64.5	63.8	-0.7
Take crack regularly	90.1	89.3	87.5	89.6	88.6	88.0	86.2	85.3	85.4	85.3	85.8	84.1	83.2	83.5	83.3	-0.2
Try cocaine powder once or twice	53.6	57.1	53.2	55.4	52.0	53.2	51.4	48.5	46.1	47.0	49.0	49.5	46.2	45.4	46.2	+0.9
Take cocaine powder occasionally	69.8	70.8	68.6	70.6	69.1	68.8	67.7	65.4	64.2	64.7	63.2	64.4	61.4	61.6	60.8	-0.8
Take cocaine powder regularly	88.9	88.4	87.0	88.6	87.8	86.8	86.0	84.1	84.6	85.5	84.4	84.2	82.3	81.7	82.7	+1.0
Try heroin once or twice	55.2	50.9	50.7	52.8	50.9	52.5	56.7	57.8	56.0	54.2	55.6	56.0	58.0	56.6	55.2	-1.4
Take heroin occasionally	74.9	74.2	72.0	72.1	71.0	74.8	76.3	76.9	77.3	74.6	75.9	76.6	78.5	75.7	76.0	+0.3
Take heroin regularly	89.6	89.2	88.3	88.0	87.2	89.5	88.9	89.1	89.9	89.2	88.3	88.5	89.3	86.8	87.5	+0.6
Try heroin once or twice without using a needle	—	—	—	—	55.6	58.6	60.5	59.6	58.5	61.6	60.7	60.6	58.9	61.2	60.5	-0.7
Take heroin occasionally without using a needle	—	—	—	—	71.2	71.0	74.3	73.4	73.6	74.7	74.4	74.7	73.0	76.1	73.3	-2.8
Try amphetamines once or twice	36.3	32.6	31.3	31.4	28.8	30.8	31.0	35.3	32.2	32.6	34.7	34.4	36.8	35.7	37.7	+2.0
Take amphetamines regularly	74.1	72.4	69.9	67.0	65.9	66.8	66.0	67.7	66.4	66.3	67.1	64.8	65.6	63.9	67.1	+3.2
Try crystal meth. (ice) once or twice	61.6	61.9	57.5	58.3	54.4	55.3	54.4	52.7	51.2	51.3	52.7	53.8	51.2	52.4	54.6	+2.3
Try barbiturates once or twice <sup>b</sup>	35.1	32.2	29.2	29.9	26.3	29.1	26.9	29.0	26.1	25.0	25.7	26.2	27.9†	24.9	24.7	-0.2
Take barbiturates regularly <sup>b</sup>	70.5	70.2	66.1	63.3	61.6	60.4	56.8	56.3	54.1	52.3	50.3	49.3	49.6†	54.0	54.1	+0.1
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	9.1	8.6	8.2	7.6	5.9	7.3	6.7	8.0	8.3	6.4	8.7	7.6	8.4	8.6	8.5	-0.1
Take one or two drinks nearly every day	32.7	30.6	28.2	27.0	24.8	25.1	24.8	24.3	21.8	21.7	23.4	21.0	20.1	23.0	23.7	+0.7
Take four or five drinks nearly every day	69.5	70.5	67.8	66.2	62.8	65.6	63.0	62.1	61.1	59.9	60.7	58.8	57.8	59.2	61.8	+2.6
Have five or more drinks once or twice each weekend	48.6	49.0	48.3	46.5	45.2	49.5	43.0	42.8	43.1	42.7	43.6	42.2	43.5	43.6	45.0	+1.4
Smoke one or more packs of cigarettes per day	69.4	69.2	69.5	67.6	65.6	68.2	68.7	70.8	70.8	73.1	73.3	74.2	72.1	74.0	76.5	+2.5
Use smokeless tobacco regularly	37.4	35.5	38.9	36.6	33.2	37.4	38.6	40.9	41.1	42.2	45.4	42.6	43.3	45.0	43.6	-1.4
Take steroids	65.6	70.7	69.1	66.1	66.4	67.6	67.2	68.1	62.1	57.9	58.9	57.1	55.0	55.7	56.8	+1.0
	<i>Approx. N =</i> 2,549 2,684 2,759 2,591 2,603 2,449 2,579 2,564 2,306 2,130 2,173 2,198 2,466 2,491 2,512															

<sup>a</sup>Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar.

<sup>b</sup>In 2004 the question text was changed from "barbiturates" to "sedatives/barbiturates" and the list of examples was changed from "downers, goofballs, reds, yellows, etc." to just "downers." These changes likely explain the discontinuity in the 2004 results.

**TABLE 8**  
**Trends in Disapproval of Drug Use by Eighth Graders**

	Percentage who "disapprove" or "strongly disapprove" <sup>a</sup>															'04-'05 change
	<u>8th Graders</u>															
<i>Do you disapprove of people who . . .</i>	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Try marijuana once or twice	84.6	82.1	79.2	72.9	70.7	67.5	67.6	69.0	70.7	72.5	72.4	73.3	73.8	75.9	75.3	-0.6
Smoke marijuana occasionally	89.5	88.1	85.7	80.9	79.7	76.5	78.1	78.4	79.3	80.6	80.6	80.9	81.5	83.1	82.4	-0.8
Smoke marijuana regularly	92.1	90.8	88.9	85.3	85.1	82.8	84.6	84.5	84.5	85.3	84.5	85.3	85.7	86.8	86.3	-0.5
Try inhalants once or twice <sup>b</sup>	84.9	84.0	82.5	81.6	81.8	82.9	84.1	83.0	85.2	85.4	86.6	86.1	85.1	85.1	84.6	-0.5
Try inhalants regularly <sup>b</sup>	90.6	90.0	88.9	88.1	88.8	89.3	90.3	89.5	90.3	90.2	90.5	90.4	89.8	90.1	89.8	-0.3
Take LSD once or twice <sup>c</sup>	—	—	77.1	75.2	71.6	70.9	72.1	69.1	69.4	66.7	64.6	62.6	61.0	58.1	58.5	+0.4
Take LSD regularly <sup>c</sup>	—	—	79.8	78.4	75.8	75.3	76.3	72.5	72.5	69.3	67.0	65.5	63.5	60.5	60.7	+0.2
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	69.0	74.3	77.7	76.3	75.0	-1.3
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	73.6	78.6	81.3	79.4	77.9	-1.5
Try crack once or twice <sup>b</sup>	91.7	90.7	89.1	86.9	85.9	85.0	85.7	85.4	86.0	85.4	86.0	86.2	86.4	87.4	87.6	+0.2
Take crack occasionally <sup>b</sup>	93.3	92.5	91.7	89.9	89.8	89.3	90.3	89.5	89.9	88.8	89.8	89.6	89.8	90.3	90.5	+0.3
Try cocaine powder once or twice <sup>b</sup>	91.2	89.6	88.5	86.1	85.3	83.9	85.1	84.5	85.2	84.8	85.6	85.8	85.6	86.8	87.0	+0.1
Take cocaine powder occasionally <sup>b</sup>	93.1	92.4	91.6	89.7	89.7	88.7	90.1	89.3	89.9	88.8	89.6	89.9	89.8	90.3	90.7	+0.4
Try heroin once or twice without using a needle <sup>c</sup>	—	—	—	—	85.8	85.0	87.7	87.3	88.0	87.2	87.2	87.8	86.9	86.6	86.9	+0.4
Try heroin occasionally without using a needle <sup>c</sup>	—	—	—	—	88.5	87.7	90.1	89.7	90.2	88.9	88.9	89.6	89.0	88.6	88.5	0.0
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	51.7	52.2	50.9	47.8	48.0	45.5	45.7	47.5	48.3	48.7	49.8	51.1	49.7	51.1	51.2	+0.1
Take one or two drinks nearly every day	82.2	81.0	79.6	76.7	75.9	74.1	76.6	76.9	77.0	77.8	77.4	78.3	77.1	78.6	78.7	+0.1
Have five or more drinks once or twice each weekend	85.2	83.9	83.3	80.7	80.7	79.1	81.3	81.0	80.3	81.2	81.6	81.9	81.9	82.3	82.9	+0.6
Smoke one or more packs of cigarettes per day <sup>e</sup>	82.8	82.3	80.6	78.4	78.6	77.3	80.3	80.0	81.4	81.9	83.5	84.6	84.6	85.7	85.3	-0.5
Use smokeless tobacco regularly	79.1	77.2	77.1	75.1	74.0	74.1	76.5	76.3	78.0	79.2	79.4	80.6	80.7	81.0	82.0	+1.0
Take steroids <sup>f</sup>	89.8	90.3	89.9	87.9	—	—	—	—	—	—	—	—	—	—	—	—

*Approx. N = 17,400 18,500 18,400 17,400 17,600 18,000 18,800 18,100 16,700 16,700 16,200 15,100 16,500 17,000 16,800*

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup>Answer alternatives were: (1) Don't disapprove, (2) Disapprove, (3) Strongly disapprove, and (4) Can't say, drug unfamiliar.

<sup>b</sup>Beginning in 1997, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>c</sup>Data based on one of two forms in 1993–96; N is one-half of N indicated. Beginning in 1997, data based on one-third of N indicated due to changes in questionnaire forms.

<sup>d</sup>Data based on one-third of N indicated.

<sup>e</sup>Beginning in 1999, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>f</sup>Data based on two forms in 1991 and 1992. Data based on one of two forms in 1993 and 1994; N is one-half of N indicated.

**TABLE 9**  
**Trends in Disapproval of Drug Use by Tenth Graders**

	Percentage who "disapprove" or "strongly disapprove" <sup>a</sup>															'04-'05 change
	10th Graders															
<i>Do you disapprove of people who . . .</i>	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Try marijuana once or twice	74.6	74.8	70.3	62.4	59.8	55.5	54.1	56.0	56.2	54.9	54.8	57.8	58.1	60.4	61.3	+1.0
Smoke marijuana occasionally	83.7	83.6	79.4	72.3	70.0	66.9	66.2	67.3	68.2	67.2	66.2	68.3	68.4	70.8	71.9	+1.1
Smoke marijuana regularly	90.4	90.0	87.4	82.2	81.1	79.7	79.7	80.1	79.8	79.1	78.0	78.6	78.8	81.3	82.0	+0.7
Try inhalants once or twice <sup>b</sup>	85.2	85.6	84.8	84.9	84.5	86.0	86.9	85.6	88.4	87.5	87.8	88.6	87.7	88.5	88.1	-0.4
Try inhalants regularly <sup>b</sup>	91.0	91.5	90.9	91.0	90.9	91.7	91.7	91.1	92.4	91.8	91.3	91.8	91.0	92.3	91.9	-0.3
Take LSD once or twice <sup>c</sup>	—	—	82.1	79.3	77.9	76.8	76.6	76.7	77.8	77.0	75.4	74.6	74.4	72.4	71.8	-0.6
Take LSD regularly <sup>c</sup>	—	—	86.8	85.6	84.8	84.5	83.4	82.9	84.3	82.1	80.8	79.4	77.6	75.9	75.0	-0.8
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	72.6	77.4	81.0	83.7	83.1	-0.6
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	81.0	84.6	86.3	88.0	87.4	-0.6
Try crack once or twice <sup>b</sup>	92.5	92.5	91.4	89.9	88.7	88.2	87.4	87.1	87.8	87.1	86.9	88.0	87.6	88.6	88.8	+0.3
Take crack occasionally <sup>b</sup>	94.3	94.4	93.6	92.5	91.7	91.9	91.0	90.6	91.5	90.9	90.6	91.0	91.0	91.8	91.8	-0.1
Try cocaine powder once or twice <sup>b</sup>	90.8	91.1	90.0	88.1	86.8	86.1	85.1	84.9	86.0	84.8	85.3	86.4	85.9	86.8	86.9	+0.1
Take cocaine powder occasionally <sup>b</sup>	94.0	94.0	93.2	92.1	91.4	91.1	90.4	89.7	90.7	89.9	90.2	89.9	90.4	91.2	91.2	-0.1
Try heroin once or twice without using a needle <sup>c</sup>	—	—	—	—	89.7	89.5	89.1	88.6	90.1	90.1	89.1	89.2	89.3	90.1	90.3	+0.2
Try heroin occasionally without using a needle <sup>c</sup>	—	—	—	—	91.6	91.7	91.4	90.5	91.8	92.3	90.8	90.7	90.6	91.8	92.0	+0.2
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	37.6	39.9	38.5	36.5	36.1	34.2	33.7	34.7	35.1	33.4	34.7	37.7	36.8	37.6	38.5	+0.9
Take one or two drinks nearly every day	81.7	81.7	78.6	75.2	75.4	73.8	75.4	74.6	75.4	73.8	73.8	74.9	74.2	75.1	76.9	+1.8
Have five or more drinks once or twice each weekend	76.7	77.6	74.7	72.3	72.2	70.7	70.2	70.5	69.9	68.2	69.2	71.5	71.6	71.8	73.7	+1.9
Smoke one or more packs of cigarettes per day <sup>e</sup>	79.4	77.8	76.5	73.9	73.2	71.6	73.8	75.3	76.1	76.7	78.2	80.6	81.4	82.7	84.3	+1.6
Use smokeless tobacco regularly	75.4	74.6	73.8	71.2	71.0	71.0	72.3	73.2	75.1	75.8	76.1	78.7	79.4	80.2	80.5	+0.2
Take steroids <sup>f</sup>	90.0	91.0	91.2	90.8	—	—	—	—	—	—	—	—	—	—	—	—

*Approx. N = 14,800 14,800 15,300 15,900 17,000 15,700 15,600 15,000 13,600 14,300 14,000 14,300 15,800 16,400 16,200*

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. '—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup>Answer alternatives were: (1) Don't disapprove, (2) Disapprove, (3) Strongly disapprove, and (4) Can't say, drug unfamiliar.

<sup>b</sup>Beginning in 1997, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>c</sup>Data based on one of two forms in 1993–96; N is one-half of N indicated. Beginning in 1997, data based on one-third of N indicated due to changes in questionnaire forms.

<sup>d</sup>Data based on one-third of N indicated.

<sup>e</sup>Beginning in 1999, data based on two-thirds of N indicated due to changes in questionnaire forms.

<sup>f</sup>Data based on two forms in 1991 and 1992. Data based on one of two forms in 1993 and 1994; N is one-half of N indicated.

**TABLE 10**  
**Trends in Disapproval of Drug Use by Twelfth Graders**

<i>Do you disapprove of people (who are 18 or older) doing each of the following?<sup>a</sup></i>	Percentage "disapproving" <sup>b</sup>																
	<u>12th Graders</u>																
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	
Try marijuana once or twice	47.0	38.4	33.4	33.4	34.2	39.0	40.0	45.5	46.3	49.3	51.4	54.6	56.6	60.8	64.6	67.8	
Smoke marijuana occasionally	54.8	47.8	44.3	43.5	45.3	49.7	52.6	59.1	60.7	63.5	65.8	69.0	71.6	74.0	77.2	80.5	
Smoke marijuana regularly	71.9	69.5	65.5	67.5	69.2	74.6	77.4	80.6	82.5	84.7	85.5	86.6	89.2	89.3	89.8	91.0	
Try LSD once or twice	82.8	84.6	83.9	85.4	86.6	87.3	86.4	88.8	89.1	88.9	89.5	89.2	91.6	89.8	89.7	89.8	
Take LSD regularly	94.1	95.3	95.8	96.4	96.9	96.7	96.8	96.7	97.0	96.8	97.0	96.6	97.8	96.4	96.4	96.3	
Try MDMA (ecstasy) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Try cocaine once or twice	81.3	82.4	79.1	77.0	74.7	76.3	74.6	76.6	77.0	79.7	79.3	80.2	87.3	89.1	90.5	91.5	
Take cocaine regularly	93.3	93.9	92.1	91.9	90.8	91.1	90.7	91.5	93.2	94.5	93.8	94.3	96.7	96.2	96.4	96.7	
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.3	
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.3	
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.9	
Try cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	87.9	
Take cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.1	
Take cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.7	
Try heroin once or twice	91.5	92.6	92.5	92.0	93.4	93.5	93.5	94.6	94.3	94.0	94.0	93.3	96.2	95.0	95.4	95.1	
Take heroin occasionally	94.8	96.0	96.0	96.4	96.8	96.7	97.2	96.9	96.9	97.1	96.8	96.6	97.9	96.9	97.2	96.7	
Take heroin regularly	96.7	97.5	97.2	97.8	97.9	97.6	97.8	97.5	97.7	98.0	97.6	97.6	98.1	97.2	97.4	97.5	
Try heroin once or twice without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Take heroin occasionally without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Try amphetamines once or twice	74.8	75.1	74.2	74.8	75.1	75.4	71.1	72.6	72.3	72.8	74.9	76.5	80.7	82.5	83.3	85.3	
Take amphetamines regularly	92.1	92.8	92.5	93.5	94.4	93.0	91.7	92.0	92.6	93.6	93.3	93.5	95.4	94.2	94.2	95.5	
Try barbiturates once or twice <sup>c</sup>	77.7	81.3	81.1	82.4	84.0	83.9	82.4	84.4	83.1	84.1	84.9	86.8	89.6	89.4	89.3	90.5	
Take barbiturates regularly <sup>c</sup>	93.3	93.6	93.0	94.3	95.2	95.4	94.2	94.4	95.1	95.1	95.5	94.9	96.4	95.3	95.3	96.4	
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	21.6	18.2	15.6	15.6	15.8	16.0	17.2	18.2	18.4	17.4	20.3	20.9	21.4	22.6	27.3	29.4	
Take one or two drinks nearly every day	67.6	68.9	66.8	67.7	68.3	69.0	69.1	69.9	68.9	72.9	70.9	72.8	74.2	75.0	76.5	77.9	
Take four or five drinks nearly every day	88.7	90.7	88.4	90.2	91.7	90.8	91.8	90.9	90.0	91.0	92.0	91.4	92.2	92.8	91.6	91.9	
Have five or more drinks once or twice each weekend	60.3	58.6	57.4	56.2	56.7	55.6	55.5	58.8	56.6	59.6	60.4	62.4	62.0	65.3	66.5	68.9	
Smoke one or more packs of cigarettes per day	67.5	65.9	66.4	67.0	70.3	70.8	69.9	69.4	70.8	73.0	72.3	75.4	74.3	73.1	72.4	72.8	
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.8	
	<i>Approx. N =</i>	<i>2,677</i>	<i>2,957</i>	<i>3,085</i>	<i>3,686</i>	<i>3,221</i>	<i>3,261</i>	<i>3,610</i>	<i>3,651</i>	<i>3,341</i>	<i>3,254</i>	<i>3,265</i>	<i>3,113</i>	<i>3,302</i>	<i>3,311</i>	<i>2,799</i>	<i>2,566</i>



Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available.

'†' indicates some change in the question. See relevant footnote.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

**TABLE 10 (cont'd)**  
**Trends in Disapproval of Drug Use by Twelfth Graders**

<i>Do you disapprove of people (who are 18 or older) doing each of the following?<sup>a</sup></i>	Percentage "disapproving" <sup>b</sup>															
	12th Graders															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	'04-'05 change
Try marijuana once or twice	68.7	69.9	63.3	57.6	56.7	52.5	51.0	51.6	48.8	52.5	49.1	51.6	53.4	52.7	55.0	+2.3
Smoke marijuana occasionally	79.4	79.7	75.5	68.9	66.7	62.9	63.2	64.4	62.5	65.8	63.2	63.4	64.2	65.4	67.8	+2.4
Smoke marijuana regularly	89.3	90.1	87.6	82.3	81.9	80.0	78.8	81.2	78.6	79.7	79.3	78.3	78.7	80.7	82.0	+1.3
Try LSD once or twice	90.1	88.1	85.9	82.5	81.1	79.6	80.5	82.1	83.0	82.4	81.8	84.6	85.5	87.9	87.9	0.0
Take LSD regularly	96.4	95.5	95.8	94.3	92.5	93.2	92.9	93.5	94.3	94.2	94.0	94.0	94.4	94.6	95.6	+1.0
Try MDMA (ecstasy) once or twice	—	—	—	—	—	—	82.2	82.5	82.1	81.0	79.5	83.6	84.7	87.7	88.4	+0.7
Try cocaine once or twice	93.6	93.0	92.7	91.6	90.3	90.0	88.0	89.5	89.1	88.2	88.1	89.0	89.3	88.6	88.9	+0.3
Take cocaine regularly	97.3	96.9	97.5	96.6	96.1	95.6	96.0	95.6	94.9	95.5	94.9	95.0	95.8	95.4	96.0	+0.6
Try crack once or twice	92.1	93.1	89.9	89.5	91.4	87.4	87.0	86.7	87.6	87.5	87.0	87.8	86.6	86.9	86.7	-0.1
Take crack occasionally	94.2	95.0	92.8	92.8	94.0	91.2	91.3	90.9	92.3	91.9	91.6	91.5	90.8	92.1	91.9	-0.3
Take crack regularly	95.0	95.5	93.4	93.1	94.1	93.0	92.3	91.9	93.2	92.8	92.2	92.4	91.2	93.1	92.1	-0.9
Try cocaine powder once or twice	88.0	89.4	86.6	87.1	88.3	83.1	83.0	83.1	84.3	84.1	83.3	83.8	83.6	82.2	83.2	+1.0
Take cocaine powder occasionally	93.0	93.4	91.2	91.0	92.7	89.7	89.3	88.7	90.0	90.3	89.8	90.2	88.9	90.0	89.4	-0.6
Take cocaine powder regularly	94.4	94.3	93.0	92.5	93.8	92.9	91.5	91.1	92.3	92.6	92.5	92.2	90.7	92.6	92.0	-0.6
Try heroin once or twice	96.0	94.9	94.4	93.2	92.8	92.1	92.3	93.7	93.5	93.0	93.1	94.1	94.1	94.2	94.3	0.0
Take heroin occasionally	97.3	96.8	97.0	96.2	95.7	95.0	95.4	96.1	95.7	96.0	95.4	95.6	95.9	96.4	96.3	-0.1
Take heroin regularly	97.8	97.2	97.5	97.1	96.4	96.3	96.4	96.6	96.4	96.6	96.2	96.2	97.1	97.1	96.7	-0.4
Try heroin once or twice without using a needle	—	—	—	—	92.9	90.8	92.3	93.0	92.6	94.0	91.7	93.1	92.2	93.1	93.2	+0.1
Take heroin occasionally without using a needle	—	—	—	—	94.7	93.2	94.4	94.3	93.8	95.2	93.5	94.4	93.5	94.4	95.0	+0.5
Try amphetamines once or twice	86.5	86.9	84.2	81.3	82.2	79.9	81.3	82.5	81.9	82.1	82.3	83.8	85.8	84.1	86.1	+2.0
Take amphetamines regularly	96.0	95.6	96.0	94.1	94.3	93.5	94.3	94.0	93.7	94.1	93.4	93.5	94.0	93.9	94.8	+0.9
Try barbiturates once or twice <sup>c</sup>	90.6	90.3	89.7	87.5	87.3	84.9	86.4	86.0	86.6	85.9	85.9	86.6	87.8‡	83.7	85.4	+1.7
Take barbiturates regularly <sup>c</sup>	97.1	96.5	97.0	96.1	95.2	94.8	95.3	94.6	94.7	95.2	94.5	94.7	94.4‡	94.2	95.2	+1.0
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	29.8	33.0	30.1	28.4	27.3	26.5	26.1	24.5	24.6	25.2	26.6	26.3	27.2	26.0	26.4	+0.4
Take one or two drinks nearly every day	76.5	75.9	77.8	73.1	73.3	70.8	70.0	69.4	67.2	70.0	69.2	69.1	68.9	69.5	70.8	+1.3
Take four or five drinks nearly every day	90.6	90.8	90.6	89.8	88.8	89.4	88.6	86.7	86.9	88.4	86.4	87.5	86.3	87.8	89.4	+1.6
Have five or more drinks once or twice each weekend	67.4	70.7	70.1	65.1	66.7	64.7	65.0	63.8	62.7	65.2	62.9	64.7	64.2	65.7	66.5	+0.8
Smoke one or more packs of cigarettes per day	71.4	73.5	70.6	69.8	68.2	67.2	67.1	68.8	69.5	70.1	71.6	73.6	74.8	76.2	79.8	+3.6 s
Take steroids	90.5	92.1	92.1	91.9	91.0	91.7	91.4	90.8	88.9	88.8	86.4	86.8	86.0	87.9	88.8	+0.9
	<i>Approx. N =</i> 2,547 2,645 2,723 2,588 2,603 2,399 2,601 2,545 2,310 2,150 2,144 2,160 2,442 2,455 2,460															

<sup>a</sup>The 1975 question asked about people who are "20 or older."

<sup>b</sup>Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

<sup>c</sup>In 2004 the question text was changed from "barbiturates" to "sedatives/barbiturates" and the list of examples was changed from "downers, goofballs, reds, yellows, etc." to just "downers." These changes likely explain the discontinuity in the 2004 results.

**TABLE 11**  
**Trends in Availability of Drugs as Perceived by Eighth Graders**

How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Percentage saying "fairly easy" or "very easy" to get <sup>a</sup>														'04-'05 change
	8th Graders														
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Marijuana	42.3	43.8	49.9	52.4	54.8	54.2	50.6	48.4	47.0	48.1	46.6	44.8	41.0	41.1	+0.1
LSD	21.5	21.8	21.8	23.5	23.6	22.7	19.3	18.3	17.0	17.6	15.2	14.0	12.3	11.5	-0.8
PCP <sup>b</sup>	18.0	18.5	17.7	19.0	19.6	19.2	17.5	17.1	16.0	15.4	14.1	13.7	11.4	11.0	-0.5
MDMA (ecstasy) <sup>b</sup>	—	—	—	—	—	—	—	—	—	23.8	22.8	21.6	16.6	15.6	-1.0
Crack	25.6	25.9	26.9	28.7	27.9	27.5	26.5	25.9	24.9	24.4	23.7	22.5	20.6	20.8	+0.3
Cocaine powder	25.7	25.9	26.4	27.8	27.2	26.9	25.7	25.0	23.9	23.9	22.5	21.6	19.4	19.9	+0.4
Heroin	19.7	19.8	19.4	21.1	20.6	19.8	18.0	17.5	16.5	16.9	16.0	15.6	14.1	13.2	-0.9
Other narcotics <sup>b</sup>	19.8	19.0	18.3	20.3	20.0	20.6	17.1	16.2	15.6	15.0	14.7	15.0	12.4	12.9	+0.5
Amphetamines	32.2	31.4	31.0	33.4	32.6	30.6	27.3	25.9	25.5	26.2	24.4	24.4	21.9	21.0	-0.9
Crystal meth. (ice) <sup>b</sup>	16.0	15.1	14.1	16.0	16.3	15.7	16.0	14.7	14.9	13.9	13.3	14.1	11.9	13.5	+1.6
Barbiturates	27.4	26.1	25.3	26.5	25.6	24.4	21.1	20.8	19.7	20.7	19.4	19.3	18.0	17.6	-0.4
Tranquillizers	22.9	21.4	20.4	21.3	20.4	19.6	18.1	17.3	16.2	17.8	16.9	17.3	15.8	14.8	-1.0
Alcohol	76.2	73.9	74.5	74.9	75.3	74.9	73.1	72.3	70.6	70.6	67.9	67.0	64.9	64.2	-0.7
Cigarettes	77.8	75.5	76.1	76.4	76.9	76.0	73.6	71.5	68.7	67.7	64.3	63.1	60.3	59.1	-1.2
Steroids	24.0	22.7	23.1	23.8	24.1	23.6	22.3	22.6	22.3	23.1	22.0	21.7	19.7	18.1	-1.6 s
	<i>Approx. N = 8,355 16,775 16,119 15,496 16,318 16,482 16,208 15,397 15,180 14,804 13,972 15,583 15,944 15,730</i>														

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup>Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, (5) Very easy, and (6) Can't say, drug unfamiliar.

<sup>b</sup>Beginning in 1993, data based on half of forms; N is one-half of N indicated.

**TABLE 12**  
**Trends in Availability of Drugs as Perceived by Tenth Graders**

<i>How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?</i>	Percentage saying "fairly easy" or "very easy" to get <sup>a</sup>														'04-'05 change
	1992	1993	1994	1995	1996	1997	10th Graders 1998	1999	2000	2001	2002	2003	2004	2005	
Marijuana	65.2	68.4	75.0	78.1	81.1	80.5	77.9	78.2	77.7	77.4	75.9	73.9	73.3	72.6	-0.7
LSD	33.6	35.8	36.1	39.8	41.0	38.3	34.0	34.3	32.9	31.2	26.8	23.1	21.6	20.7	-0.9
PCP <sup>b</sup>	23.7	23.4	23.8	24.7	26.8	24.8	23.9	24.5	25.0	21.6	20.8	19.4	18.0	18.1	+0.1
MDMA (ecstasy) <sup>b</sup>	—	—	—	—	—	—	—	—	—	41.4	41.0	36.3	31.2	30.2	-1.0
Crack	33.7	33.0	34.2	34.6	36.4	36.0	36.3	36.5	34.0	30.6	31.3	29.6	30.6	31.0	+0.4
Cocaine powder	35.0	34.1	34.5	35.3	36.9	37.1	36.8	36.7	34.5	31.0	31.8	29.6	31.2	31.5	+0.3
Heroin	24.3	24.3	24.7	24.6	24.8	24.4	23.0	23.7	22.3	20.1	19.9	18.8	18.7	19.3	+0.6
Other narcotics <sup>b</sup>	26.9	24.9	26.9	27.8	29.4	29.0	26.1	26.6	27.2	25.8	25.4	23.5	23.1	23.6	+0.5
Amphetamines	43.4	46.4	46.6	47.7	47.2	44.6	41.0	41.3	40.9	40.6	39.6	36.1	35.7	35.6	-0.2
Crystal meth. (ice) <sup>b</sup>	18.8	16.4	17.8	20.7	22.6	22.9	22.1	21.8	22.8	19.9	20.5	19.0	19.5	21.6	+2.1
Barbiturates	38.0	38.8	38.3	38.8	38.1	35.6	32.7	33.2	32.4	32.8	32.4	28.8	30.0	29.7	-0.2
Tranquillizers	31.6	30.5	29.8	30.6	30.3	28.7	26.5	26.8	27.6	28.5	28.3	25.6	25.6	25.4	-0.1
Alcohol	88.6	88.9	89.8	89.7	90.4	89.0	88.0	88.2	87.7	87.7	84.8	83.4	84.3	83.7	-0.6
Cigarettes	89.1	89.4	90.3	90.7	91.3	89.6	88.1	88.3	86.8	86.3	83.3	80.7	81.4	81.5	+0.1
Steroids	37.6	33.6	33.6	34.8	34.8	34.2	33.0	35.9	35.4	33.1	33.2	30.6	29.6	29.7	+0.1
<i>Approx. N = 7,014 14,652 15,192 16,209 14,887 14,856 14,423 13,112 13,690 13,518 13,694 15,255 15,806 15,636</i>															

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup>Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, (5) Very easy, and (6) Can't say, drug unfamiliar.

<sup>b</sup>Beginning in 1993, data based on half of forms; N is one-half of N indicated.

**TABLE 13**  
**Trends in Availability of Drugs as Perceived by Twelfth Graders**

How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	Percentage saying "fairly easy" or "very easy" to get <sup>a</sup>															
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	<b>12th Graders</b>															
Marijuana	87.8	87.4	87.9	87.8	90.1	89.0	89.2	88.5	86.2	84.6	85.5	85.2	84.8	85.0	84.3	84.4
Amyl/butyl nitrites	—	—	—	—	—	—	—	—	—	—	—	—	23.9	25.9	26.8	24.4
LSD	46.2	37.4	34.5	32.2	34.2	35.3	35.0	34.2	30.9	30.6	30.5	28.5	31.4	33.3	38.3	40.7
Some other psychedelic/hallucinogen <sup>b</sup>	47.8	35.7	33.8	33.8	34.6	35.0	32.7	30.6	26.6	26.6	26.1	24.9	25.0	26.2	28.2	28.3
PCP	—	—	—	—	—	—	—	—	—	—	—	—	22.8	24.9	28.9	27.7
MDMA (ecstasy)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.7	22.0
Cocaine	37.0	34.0	33.0	37.8	45.5	47.9	47.5	47.4	43.1	45.0	48.9	51.5	54.2	55.0	58.7	54.5
Crack	—	—	—	—	—	—	—	—	—	—	—	—	41.1	42.1	47.0	42.4
Cocaine powder	—	—	—	—	—	—	—	—	—	—	—	—	52.9	50.3	53.7	49.0
Heroin	24.2	18.4	17.9	16.4	18.9	21.2	19.2	20.8	19.3	19.9	21.0	22.0	23.7	28.0	31.4	31.9
Some other narcotic (including methadone)	34.5	26.9	27.8	26.1	28.7	29.4	29.6	30.4	30.0	32.1	33.1	32.2	33.0	35.8	38.3	38.1
Amphetamines	67.8	61.8	58.1	58.5	59.9	61.3	69.5	70.8	68.5	68.2	66.4	64.3	64.5	63.9	64.3	59.7
Crystal meth. (ice)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.1
Barbiturates <sup>c</sup>	60.0	54.4	52.4	50.6	49.8	49.1	54.9	55.2	52.5	51.9	51.3	48.3	48.2	47.8	48.4	45.9
Tranquilizers	71.8	65.5	64.9	64.3	61.4	59.1	60.8	58.9	55.3	54.5	54.7	51.2	48.6	49.1	45.3	44.7
Alcohol	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	<i>Approx. N =</i> 2,627 2,865 3,065 3,598 3,172 3,240 3,578 3,602 3,385 3,269 3,274 3,077 3,271 3,231 2,806 2,549															

Cont'd

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

'‡' indicates some change in the question. See relevant footnote.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup> Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, (5) Very easy, and (6) Can't say, drug unfamiliar.

<sup>b</sup> In 2001 the question text was changed from "other psychedelics" to "other hallucinogens" and "shrooms" was added to the list of examples. These changes likely explain the discontinuity in the 2001 results.

<sup>c</sup> In 2004 the question text was changed from "barbiturates" to "sedatives/barbiturates" and the list of examples was changed from "downers, goofballs, reds, yellows, etc." to just "downers." These changes likely explain the discontinuity in the 2004 results.

**TABLE 13 (cont'd)**  
**Trends in Availability of Drugs as Perceived by Twelfth Graders**

<i>How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?</i>	Percentage saying "fairly easy" or "very easy" to get <sup>a</sup>															'04-'05 change
	12th Graders															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Marijuana	83.3	82.7	83.0	85.5	88.5	88.7	89.6	90.4	88.9	88.5	88.5	87.2	87.1	85.8	85.6	-0.2
Amyl/butyl nitrites	22.7	25.9	25.9	26.7	26.0	23.9	23.8	25.1	21.4	23.3	22.5	22.3	19.7	20.0	19.7	-0.4
LSD	39.5	44.5	49.2	50.8	53.8	51.3	50.7	48.8	44.7	46.9	44.7	39.6	33.6	33.1	28.6	-4.5 ss
Some other psychedelic/hallucinogen <sup>b</sup>	28.0	29.9	33.5	33.8	35.8	33.9	33.9	35.1	29.5	34.5‡	48.5	47.7	47.2	49.4	45.0	-4.4 s
PCP	27.6	31.7	31.7	31.4	31.0	30.5	30.0	30.7	26.7	28.8	27.2	25.8	21.9	24.2	23.2	-1.0
MDMA (ecstasy)	22.1	24.2	28.1	31.2	34.2	36.9	38.8	38.2	40.1	51.4	61.5	59.1	57.5	47.9	40.3	-7.7 sss
Cocaine	51.0	52.7	48.5	46.6	47.7	48.1	48.5	51.3	47.6	47.8	46.2	44.6	43.3	47.8	44.7	-3.1
Crack	39.9	43.5	43.6	40.5	41.9	40.7	40.6	43.8	41.1	42.6	40.2	38.5	35.3	39.2	39.3	+0.1
Cocaine powder	46.0	48.0	45.4	43.7	43.8	44.4	43.3	45.7	43.7	44.6	40.7	40.2	37.4	41.7	41.6	-0.1
Heroin	30.6	34.9	33.7	34.1	35.1	32.2	33.8	35.6	32.1	33.5	32.3	29.0	27.9	29.6	27.3	-2.3
Some other narcotic (including methadone)	34.6	37.1	37.5	38.0	39.8	40.0	38.9	42.8	40.8	43.9	40.5	44.0	39.3	40.2	39.2	-0.9
Amphetamines	57.3	58.8	61.5	62.0	62.8	59.4	59.8	60.8	58.1	57.1	57.1	57.4	55.0	55.4	51.2	-4.2 s
Crystal meth. (ice)	24.3	26.0	26.6	25.6	27.0	26.9	27.6	29.8	27.6	27.8	28.3	28.3	26.1	26.7	27.2	+0.4
Barbiturates <sup>c</sup>	42.4	44.0	44.5	43.3	42.3	41.4	40.0	40.7	37.9	37.4	35.7	36.6	35.3‡	46.3	44.4	-1.9
Tranquilizers	40.8	40.9	41.1	39.2	37.8	36.0	35.4	36.2	32.7	33.8	33.1	32.9	29.8	30.1	25.7	-4.4 ss
Alcohol	—	—	—	—	—	—	—	—	95.0	94.8	94.3	94.7	94.2	94.2	93.0	-1.2
Steroids	46.7	46.8	44.8	42.9	45.5	40.3	41.7	44.5	44.6	44.8	44.4	45.5	40.7	42.6	39.7	-2.9
	<i>Approx. N =</i>															
	2,476	2,586	2,670	2,526	2,552	2,340	2,517	2,520	2,215	2,095	2,120	2,138	2,391	2,169	2,161	

Source: The Monitoring the Future Study, the University of Michigan.

Notes: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

'‡' indicates some change in the question. See relevant footnote.

Any apparent inconsistency between the change estimate and the prevalence-of-use estimates for the two most recent classes is due to rounding error.

<sup>a</sup>Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, (5) Very easy, and (6) Can't say, drug unfamiliar.

<sup>b</sup>In 2001 the question text was changed from "other psychedelics" to "other hallucinogens" and "shrooms" was added to the list of examples. These changes likely explain the discontinuity in the 2001 results.

<sup>c</sup>In 2004 the question text was changed from "barbiturates" to "sedatives/barbiturates" and the list of examples was changed from "downers, goofballs, reds, yellows, etc." to just "downers." These changes likely explain the discontinuity in the 2004 results.



NIH Publication No. 06-5882  
Printed April 2006