

NATIONAL INSTITUTE ON DRUG ABUSE

# Monitoring the Future

National Results on Adolescent Drug Use

# Overview of Key Findings 2004

National Institutes of Health  
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**MONITORING THE FUTURE**

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

**Overview of Key Findings, 2004**

by

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# Introduction

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Substance use by American young people has proven to be a rapidly-changing phenomenon, requiring frequent assessments and reassessments. Since the mid-1960s 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 help provide an accurate picture of what is happening in this domain and why; and it has served that function for 30 years now.

First results from the Monitoring the Future study's 2004 nationwide survey of nearly 50,000 8th-, 10th-, and 12th-grade students are given in this report. Recent trends in the use of licit and illicit drugs are emphasized. Trends in the levels of perceived risk and personal disapproval associated with each drug are also presented; 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.

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.

Following this introductory section are a synopsis of the methods used in the study and an overview of the key results from the 2004 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 1991-2004 appear for all grades and for 1975-2004 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> We present these prevalence statistics only for the 1991-2004 interval, but statistics on 12th graders are available for earlier years in other publications from the study. The tables indicate for each prevalence period which of the one-year changes between 2003 and 2004 are statistically significant.

A much more extensive analysis of the study's findings on secondary school students may be found in a volume to be published in 2005.<sup>2</sup> The volumes in this 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 2004 data are not available at the time of this writing. They are covered in a second series of volumes that will be updated later this year.<sup>3</sup> Volumes in these two annual series are available from the National 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).

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<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. The prevalence of daily use usually 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. (2004). *Monitoring the Future national survey results on drug use, 1975-2003: Volume I, Secondary school students* (NIH Publication No. 04-5507). 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. (2004). *Monitoring the Future national survey results on drug use, 1975-2003: Volume II, College students and adults ages 19-45* (NIH Publication No. 04-5508). Bethesda, MD: National Institute on Drug Abuse.

## Study Design and Methods

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At the core of Monitoring the Future is a series of large, annual surveys of nationally representative samples of students in public and private secondary schools 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 national samples of 8th graders and 10th graders each year. The year 2004 marked the thirtieth such survey of 12th graders and the fourteenth of 8th and 10th graders.

### Sample Sizes

The 2004 sample sizes were 17,400, 16,800, and 15,200 in 8th, 10th, and 12th grades, respectively. In all, about 49,500 students in 406 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. 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 procedures to protect the confidentiality of subjects and their data are followed.

### 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: “Have you ever smoked cigarettes?” (the answer categories are “never,” “once or twice,” and so on) and “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.). Parallel questions are asked about smokeless tobacco.

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

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The surveys of 8th-, 10th-, and 12th-grade students in the United States conducted over the past three years (i.e., 2002, 2003, and 2004) generated a more positive picture than was seen in recent prior years. Quite a number of substances have shown broad declines—most notably marijuana, LSD, ecstasy, steroids, and cigarettes.

### Drugs Decreasing in Use

Several drugs showed declines in use this year, in most cases building on earlier declines. Only two of the many classes of drugs showed any sign of increase in use.

Over several recent years, the proportion of older students reporting use of **any illicit drug** had been holding fairly steady. Only 8th graders had been showing gradual decline in use. In 2002, however, all grades showed some decline in use in all three prevalence periods (lifetime, past 12 months, past 30 days), and fortunately, these trends have continued through into 2004.

**Marijuana** also showed some decline in all prevalence periods for all three grades in 2002; this trend likewise continued in 2003. (The two-year decline was highly significant in grades 8 and 10 for all three prevalence periods.) Marijuana use again declined in 2004 for all prevalence periods for all three grades. Yet only the 8th grade decline in 30-day use reached statistical significance. In 2002 neither perceived risk nor disapproval moved in the way that would normally be associated with declining use, suggesting that some other factor was causing the beginning of the downturn—perhaps a reduced motivation to use substances more generally because of the sobering experience of the 9/11 disaster in late 2001. But in 2003, perceived risk showed significant increases in all three grades. It seems quite possible that the anti-marijuana ad campaign launched in 2002 by the Office of National Drug Control Policy, in conjunction with the Partnership for a Drug-Free America, had its intended effect by the time of the 2003 survey, raising perceived risk and reducing use as a result. In 2004 the increase in perceived risk continued for 8th and 10th graders but leveled among 12th graders. Disapproval continued to increase for all three grades in 2004.

In 2002 there were declines in the proportions of students in all three grades who reported using **any illicit drug other than marijuana** in the prior 12 months (significant in 8th and 10th grades). In 2003 declines continued on this important index in 10th and 12th grades but leveled temporarily at 8th grade. In 2004 a gradual decline continued at 8th grade, there was rather little change at 10th grade, and 12th grade actually showed a 1-percentage-point increase (not significant). Some specific drugs in this index had longer-term declines. For example, the use of **LSD** has been in decline in all three grades since 1996, but it declined dramatically after 2001. Risk and disapproval have generally not moved in ways that would explain the substantial decline in use of this drug. One possible explanation is that some displacement may have occurred early on as a result of the growth in ecstasy use; however, this interpretation would not fit the changes observed since 2001, when ecstasy use was in decline. Another possible explanation is that declines in availability help account for the decline in use. In 2004, use leveled out in all three grades but at very low levels.

**Ecstasy** use had been climbing steeply since 1998. In 2001 we reported for the first time an increase in the proportion of 12th graders (the only ones for whom data were available at that time) who attributed great risk to ecstasy use. Based on that change, we predicted a turnaround in actual use in 2002, which in fact came to pass. Perceived risk increased again in 2002 as use began to fall, increased further in 2003 as use fell sharply, and increased again in 2004 as use fell further, although in 2004 both the increase in risk and the decline in ecstasy use decelerated considerably.

The Partnership for a Drug-Free America, in conjunction with the Office of National Drug Control Policy, launched an anti-ecstasy advertising campaign in January 2002. In addition to the growing news coverage of some dramatic consequences of ecstasy use by young people, this campaign may well have contributed to the important downturn in the use of the drug. In recent years, the National Institute on Drug Abuse (NIDA) has been particularly active in supporting



research on the effects of ecstasy and in disseminating the results of that research.

In 2003, overall **amphetamine** use showed its first decline in recent years in the two upper grades; among 8th graders it did not show further decline until 2004 after a long period of gradual decline that began after 1996. In 2004 the decline in use continued among 10th graders but halted for 12th graders. Perceived risk for this drug has been rising in recent years among 12th graders (the only ones asked the question), perhaps helping to explain the decline in use last year in the upper grades. In 2004, perceived risk dropped and use leveled. **Methamphetamine** use has been showing a gradual decline over the past several years in all three grades. The decline continued for 8th and 10th grades in 2004 but not for 12th grade.

The use of anabolic **steroids** continued to decline in 8th and 10th grades but showed no decline over the past two years in 12th grade, where use is still at a peak level. After a period of sharp rise in the late 1990s, steroid use first began to decline among 8th graders after 2000 and among 10th graders after 2002, suggesting that a cohort effect may be occurring. The use of two other substances used to build strength and muscle mass, **androstenedione** and **creatine**, also has declined in recent years in all three grades.

### Drugs Holding Steady

Most drugs held fairly steady in 2004, though often at levels below their recent peak levels. These include LSD, hallucinogens other than LSD, heroin, narcotics other than heroin, crack and powder cocaine, tranquilizers, sedatives, “ice” (crystal methamphetamine), and Rohypnol.

**LSD**, as is discussed above, held steady this year, but at dramatically lower levels than just a couple of years ago. **Hallucinogens other than LSD** (the most common of which is psilocybin mushrooms or “shrooms”) showed no declines in 2002, 2003, or 2004 that reached statistical significance. However, the rates observed in 2004 are below those for 2001 in all three grades.

By 2001 **heroin** had finally fallen below its recent peak levels in all three grades. Since then use has held quite steady, including use with and without a needle.

The annual prevalence of use of **narcotics other than heroin**, treated as a class and reported only for 12th graders, had more than doubled between 1992 and 2000, before leveling over the last few years. One drug in this general class, OxyContin, is discussed below. Use of another drug in this class, Vicodin, rose slightly in all three grades in 2003 but then fell slightly in all three grades this year, yielding little change over the two years.

**Cocaine** and **crack** use held generally steady in 2004 at levels somewhat below recent peaks and far below the levels attained in the mid-1980s.

**Tranquilizer** use had declined in 2003 for 12th graders, reflecting a reversal of a decade-long gradual, sustained increase in tranquilizer use. Among 10th graders, 2003 was the second year of decline. There was little change in 8th graders’ rate of tranquilizer use in 2003, which had been steadily declining since 1995. But in 2004 the use of tranquilizers held steady in all three grades.

Two club drugs—**Rohypnol** and **GHB**—have relatively low prevalence-of-use rates among secondary school students; and use of each tends to be at or below their recent high levels. In 2004 the only statistically significant change in the annual prevalence rates for either drug was for use of GHB by 10th graders (which fell by about the same amount that 12th graders’ use rose). Overall, there is little evidence of systematic change in 2004.

### Drugs Showing Signs of Increased Use

Since the turnaround in ecstasy use in 2002, there has been rather little remaining evidence of increases in illicit drug use among adolescents. One class of drug—**inhalants**—showed clear evidence of increase in 2004, particularly among the 8th graders. The annual prevalence of inhalant use by 8th graders rose by a statistically significant 1 percentage point, from 7.7% to 8.7% in 2003 and then to 9.6% in 2004. In 2004 there was some (not statistically significant) increase in grades 10 and 12, as well. These increases are noteworthy primarily because they reflect a turnaround from a long period of sustained declines in use at all three grade levels, including a 40% decline in annual prevalence among the 8th graders between 1995 and 2002. Because perceived risk of inhalant use has declined for the past three years in all grades,

this turnaround in use could reflect some “generational forgetting” of the dangers of inhalants. Perceived risk was higher in the mid- to late 1990s, perhaps due in part to an extensive media campaign by the Partnership for a Drug-Free America, as well as considerable news coverage. The newer, younger cohorts of adolescents have not been exposed as much to these messages. These facts suggest the need for some further media efforts addressing the hazards of this class of substances.

**OxyContin**, a drug in the general class of narcotics other than heroin, also showed some evidence of increased use in 2003 in all grades, and in 2004 among 12th graders, though none of the increases reached statistical significance. However, the rise between 2002 and 2004 for all grades combined was statistically significant. Only annual data are gathered on this drug. Annual prevalence in 2004 was 5.0% among 12th graders for OxyContin—or 1 in every 20 seniors—compared with 4.0% in 2002. Because of the considerable addictive potential of this drug, these absolute levels are of some concern; and the fact that the trends for 12th graders seem to be continuing upward is of additional concern.

### **Implications for Prevention**

The wide divergence in trajectories of the different 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.

### **Cigarettes and Alcohol**

The statistics for use of the licit drugs—cigarettes and alcohol—are also a basis for considerable concern. More than half (53%) of American young people have tried **cigarettes** by 12th grade, and a quarter (25%) of 12th graders are current smokers. Even as early as 8th grade, more than a quarter (28%) 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 or eight years, following a dramatic increase in these rates earlier in the 1990s. But it must be remembered that much of that recent improvement was simply regaining the ground lost in the early 1990s.

**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 2004, current smoking in these grades has fallen considerably (by 56% and 47%, respectively). In 12th grade, peak use occurred a year later than 8th and 10th grades (1997), from which there had been a more modest decline of 33% by 2003, followed by a slight (not significant) increase in use in 2004. 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. Disapproval continued to increase for all three grades. (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 the reduction in cigarette advertising reaching children and the increase in anti-smoking advertising reaching them. But price likely has been an important factor, as well, because cigarette prices have risen appreciably in recent years as cigarette companies try to cover the costs of the tobacco settlement. Prices have risen also because a number of state legislatures raised cigarette taxes—sometimes in the hope of deterring youth smoking. Unfortunately, the declines in smoking in the lower grades have decelerated

sharply, and the decline in 12th grade has also slowed and possibly even ended. Whether some of the forces that have contributed to the declines in youth smoking to date—including increasing prices and continued anti-smoking ad campaigns—will be operating in the future is likely to be critical to whether youth smoking can be reduced further.

**Smokeless tobacco** use has also been in decline in recent years, though the decline continued only among the 10th graders in 2004. Concentrated among males, smokeless tobacco has shown fair proportional declines, though no further improvement was seen in 2003 or 2004 in 8th and 10th grades; in fact, during this period there may actually have been a slight turnaround in use in those grades.

**Alcohol** use remains extremely widespread among today's teenagers. More than three out of every four students (77%) have consumed alcohol (more than just a few sips) by the end of high school; and nearly half (44%) have done so by 8th grade. In fact, more than half (60%) of the 12th graders and a fifth (20%) of the 8th graders in 2004 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 is a proportionally smaller increase than was seen for most of the illicit drugs. Fortunately, binge drinking rates leveled off four or five 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. While the decline continued into 2004 for drinking among 8th and 10th graders (as well as drunkenness among 8th graders in the prior month), these behaviors increased slightly among 12th graders.

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

Clearly, the problems of substance abuse remain sufficiently widespread among American young people to merit concern. Today, about half (51%) 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. While 3 out of 10 (29%) have used some illicit drug *other* than marijuana by the end of 12th grade, 2 in 10 (21%) 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, 71% of seniors today made it through the end of high school without ever using an illicit drug other than marijuana, and more than half (54%) did so without ever using marijuana. Further, the great majority personally disapprove of using most of the illicit drugs.

Of special concern is the fact that the declines in use of inhalants by 8th graders has ended, and even

begun to reverse, with evidence this year suggesting that use may be rising in the upper two grades, as well. We are concerned that these changes may reflect the start of a generational forgetting of the dangers of inhalants as a result of generational replacement, with newer cohorts of young people not hearing as much about the potential harm of these drugs. Clearly, the tragic events of 9/11 and the second war in the Persian Gulf have had the effect of reducing news coverage of many domestic issues, drug use among them. That leaves young people less likely to be exposed to messages about adverse consequences that may result from using many of these drugs. In addition, the last major anti-inhalant media campaign occurred in 1995, over nine years ago.

## Any Illicit Drug Use

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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 Table 1.

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 new 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 51% in 2004.

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, but they showed little further decline for several years.

However, since 2001, both upper grades have been showing declines along with the 8th grade.

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.” For this reason we have an index excluding marijuana use that shows the proportion of these populations 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, followed by a long period of decline 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 tranquilizers.<sup>6</sup>) Since then, the rate has fallen to 29% in 2004. 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.

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

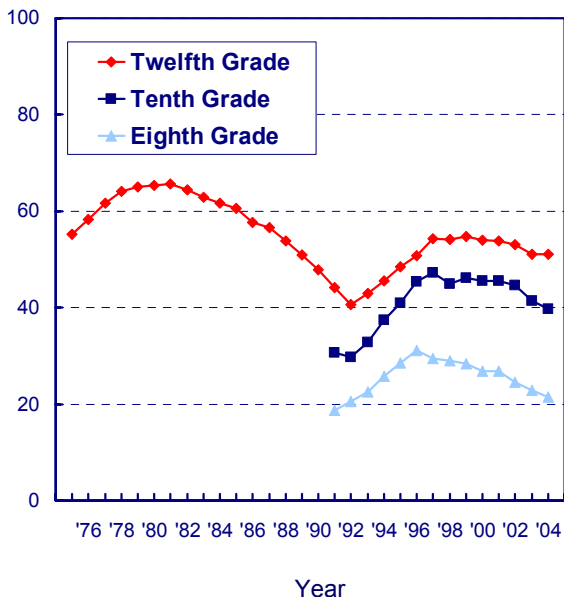
<sup>5</sup>This is the only set of figures in this volume presenting lifetime use statistics. For other drugs, lifetime statistics may be found in the tables at the end of this volume.

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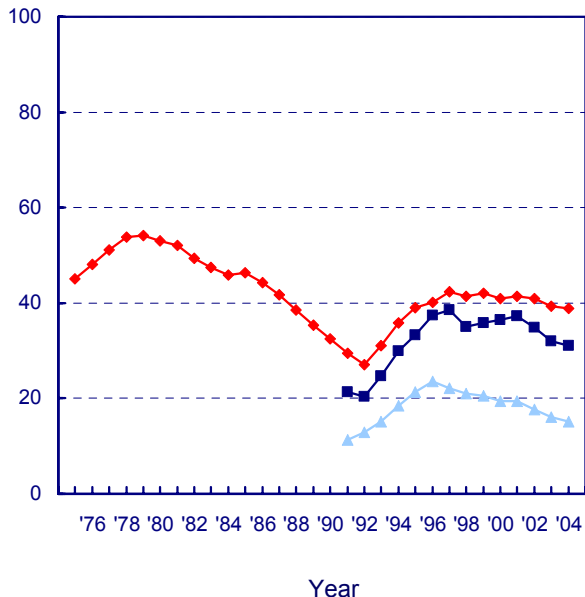
<sup>6</sup>The term “psychedelics” was replaced with “hallucinogens,” and “shrooms” were added to the list of examples, resulting in somewhat more respondents indicating use of this class of drugs. For tranquilizers, Xanax was added to the list of examples given, slightly raising the reported prevalence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

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

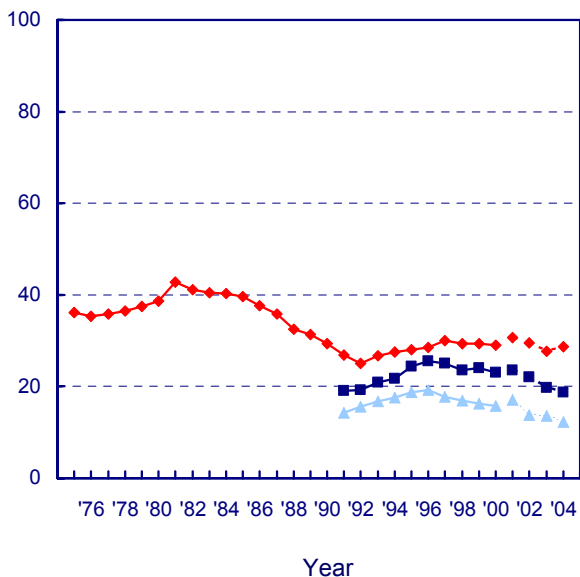
**% who used any illicit drug in lifetime**



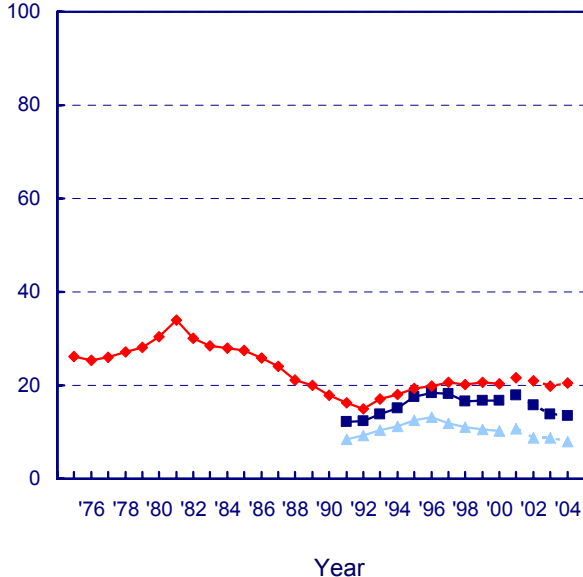
**% who used any illicit drug in last twelve months**



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



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



\*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for "any illicit other than marijuana" are affected by these changes. The dotted lines connect percentages that are based on data from the revised questions.

# Marijuana

---

Marijuana has been the most widely used illicit drug throughout the 30 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. Prior to 2002 there was only a very modest decline from those peak levels, except for a continuing gradual decline among 8th graders. But from 2002 through 2004, use fell appreciably in all grades.

## 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 (again it 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 while use also declined. Since 2002, perceived risk has increased in all grades and use has declined.

## 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 they disapproved of trying marijuana once or twice fell by 17, 21, and 19 percentage points, respectively, over those intervals of decline. 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.

## Availability

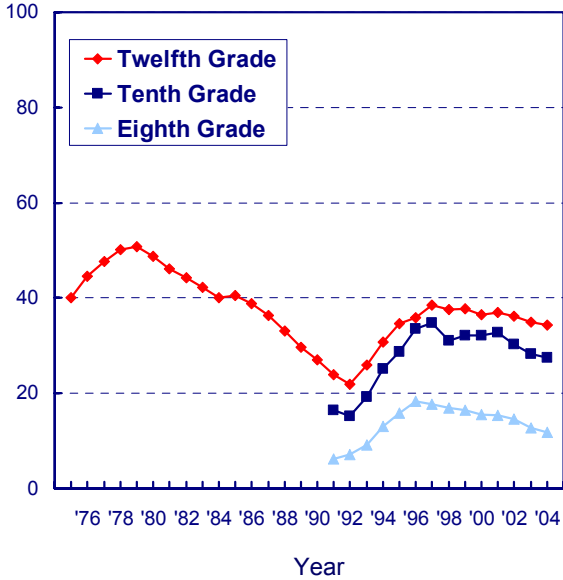
Since the study began in 1975, between 83% and 90% of every senior class have said that they could get marijuana fairly easily or very easily if they wanted some; therefore, it seems clear that this has remained a highly accessible drug. Since 1991, when data were also available for 8th and 10th graders, we have seen that marijuana is considerably less accessible to younger adolescents. Still, in 2004 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

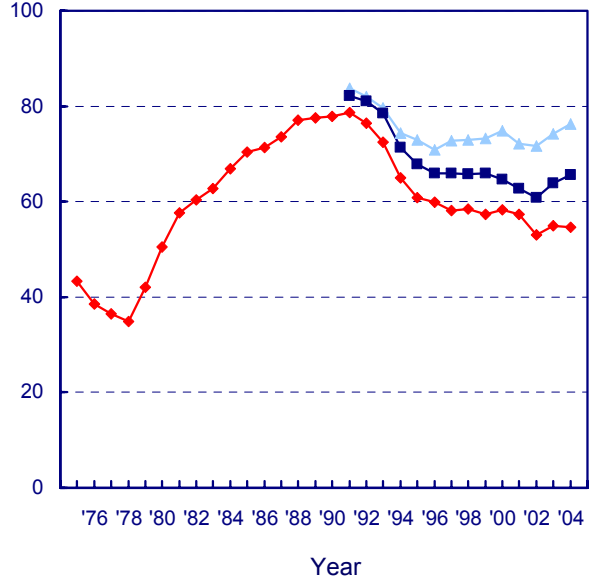
### Use

% who used in last twelve months



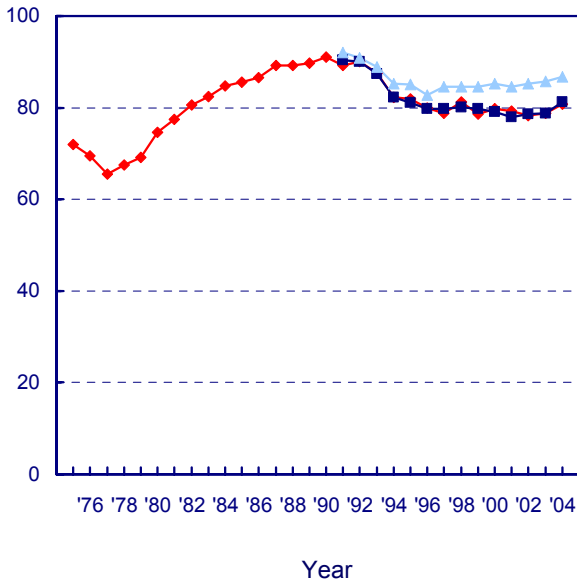
### Risk

% seeing "great risk" in using regularly



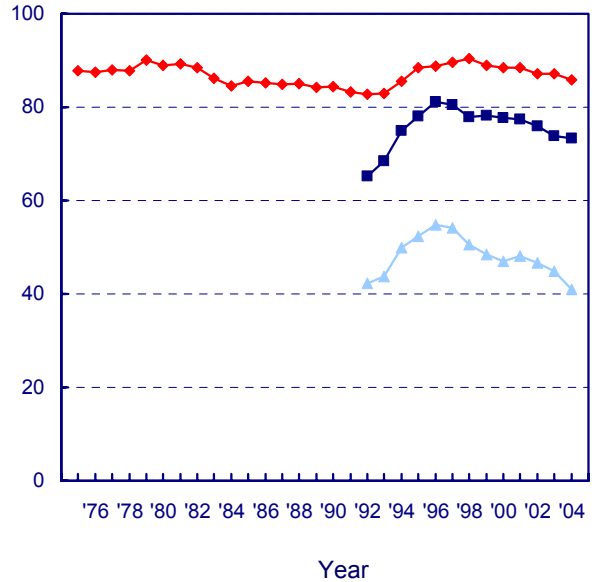
### Disapproval

% disapproving of using regularly



### Availability

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





# 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. The decline in use with age likely reflects their coming to be seen as “kids’ drugs.” In addition, 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, the time 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 there was a statistically significant 1-percentage-point increase in use 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.

## 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 three 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.

## Disapproval

Quite high proportions of students say they would disapprove of even trying an inhalant. There was a very gradual upward drift in this attitude among 8th and 10th graders during much of the 1990s, but some falloff in 2002 and 2003 among 8th graders.

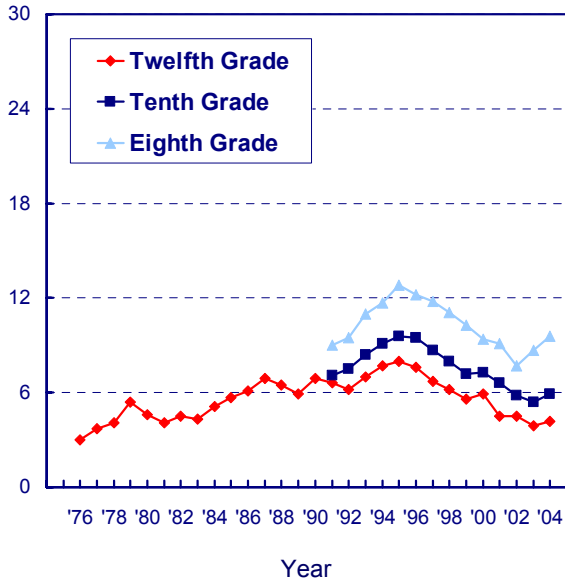
## Availability

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

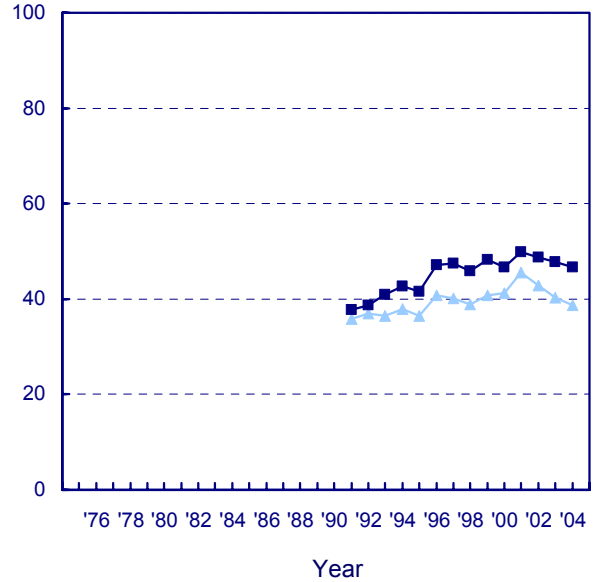
### Use

% who used in last twelve months



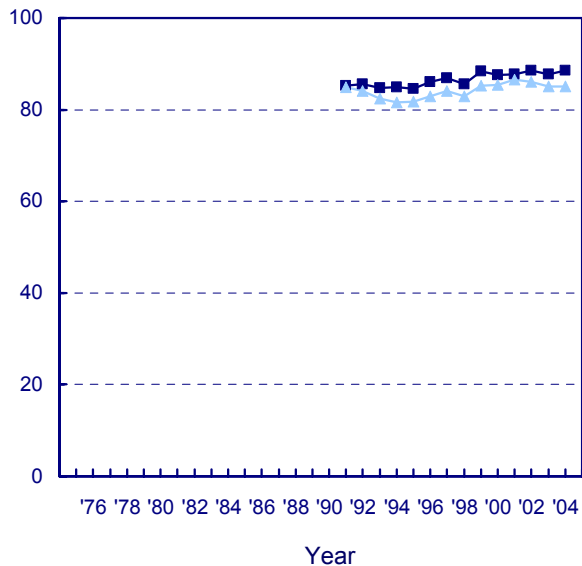
### Risk

% seeing "great risk" in using once or twice



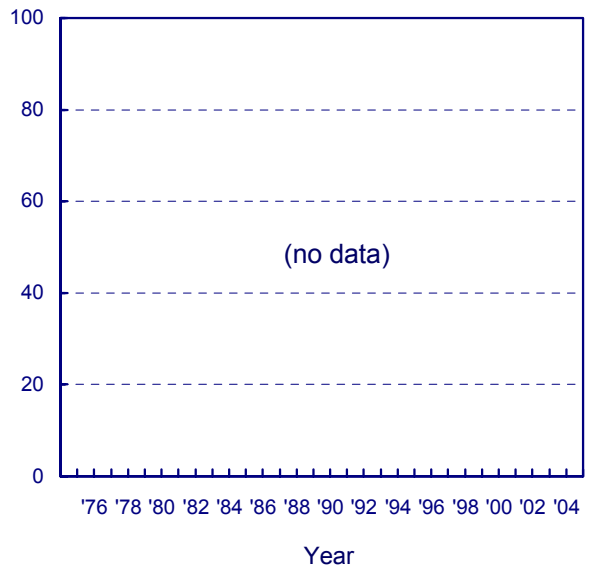
### Disapproval

% disapproving of using once or twice



### Availability

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



# LSD

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

## Trends in Use

The 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 a number of 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 occurred in 2004.

## 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 also 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 then 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. Since about 1999, there has been some further decline in perceived risk in 8th and 12th grades.

The fact that use has been declining 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 because it had

been rising sharply in popularity and its use is common in some of the same situations as LSD. However, ecstasy use finally declined after 2001 and could not account for any displacement since then.

## 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 a total of 11 percentage points between 1991 and 1996 among 12th graders. After 1996 there emerged a slight increase in disapproval among 12th graders, accompanied by a leveling among 10th graders and some further decline among 8th graders. In recent years, 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. Despite these various trends, use fell very sharply in all grades before leveling in 2004.

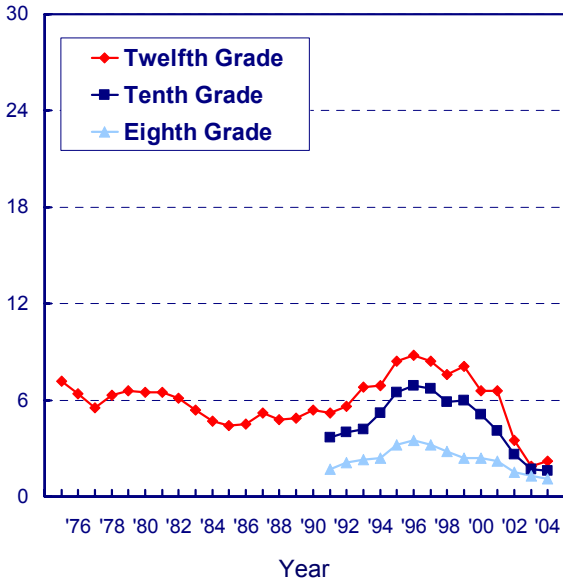
## Availability

Reported availability of LSD by 12th graders has varied quite a bit over the years. It fell considerably from 1975 to 1983, remained level for a few years, and then 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 some considerable falloff in availability 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 some real 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.

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

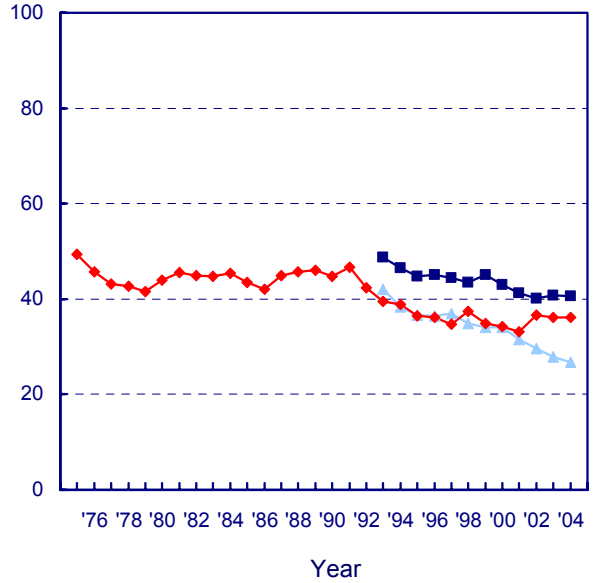
### Use

% who used in past year



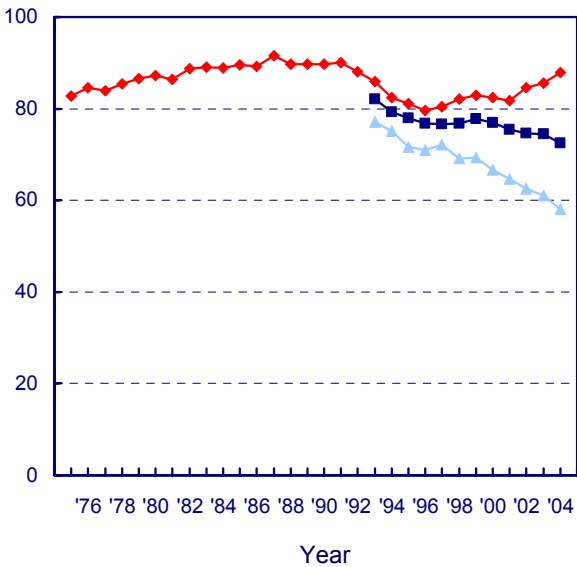
### Risk

% seeing "great risk" in using once or twice



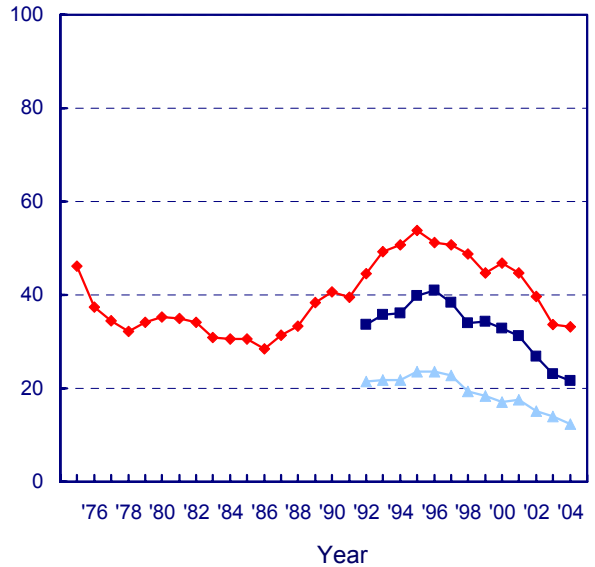
### Disapproval

% disapproving of using once or twice



### Availability

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



# Cocaine

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For some years cocaine was used almost exclusively in powder form, 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 comprised almost entirely of powder cocaine use. Data on these two components of overall cocaine use are contained in the tables in this report, and the crack results are presented 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, then 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 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 decline halted after 2001.

## 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 began. 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 was originally reported as resulting from his first experience with cocaine. Though that later turned out not to be the case, the message had already “taken.” We believe 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 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 modest decline in perceived risk.

## Availability

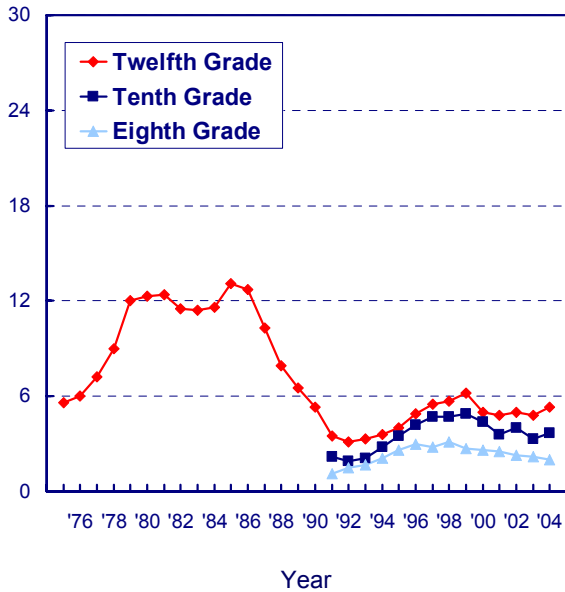
The proportion of 12th graders saying that it would be “fairly easy” or “very easy” for them to get cocaine if they wanted some was 33% in 1977, rose to 48% by 1980, held fairly level through 1985, and increased further to 59% by 1989 (in a period of rapidly *declining* use). It then fell back to about 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. 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 (documented in our other publications).

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

## Eighth, Tenth, and Twelfth Graders

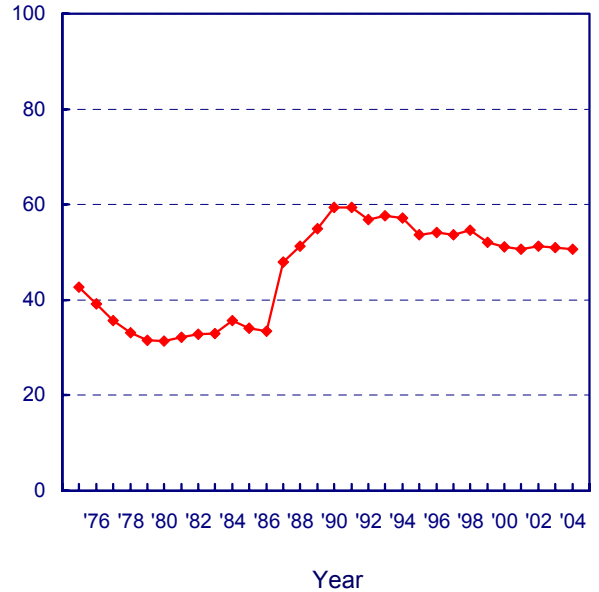
### Use

% who used in last 12 months



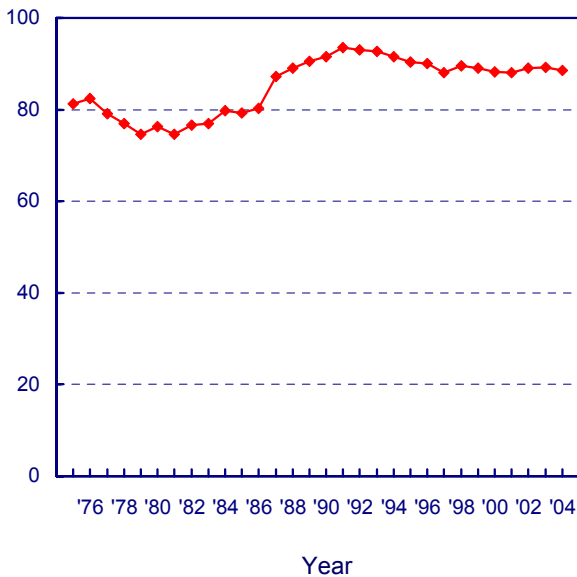
### Risk

% seeing "great risk" in using once or twice



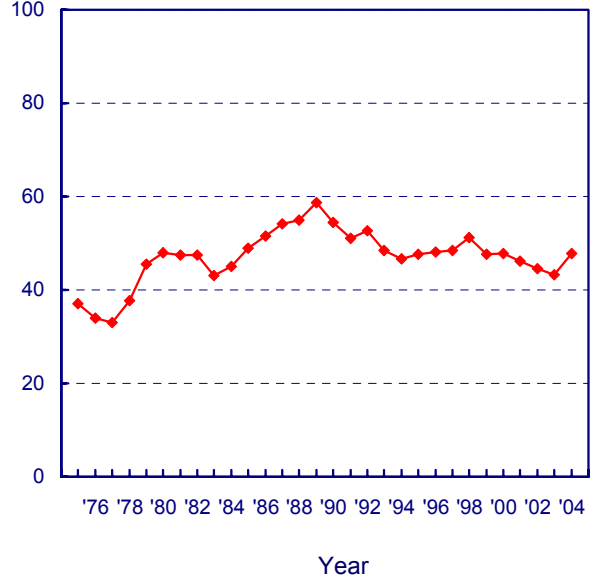
### Disapproval

% disapproving of using once or twice



### Availability

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



# Crack Cocaine

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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—one 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 and steady increase in use through 1998. Indeed, crack was one of the few drugs still increasing in use in 1998. After 1998, crack use finally started to drop in 8th and 10th grades and after 1999 among 12th graders. The past three years have seen steady use, except for some further decline in 8th grade.

## 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 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.

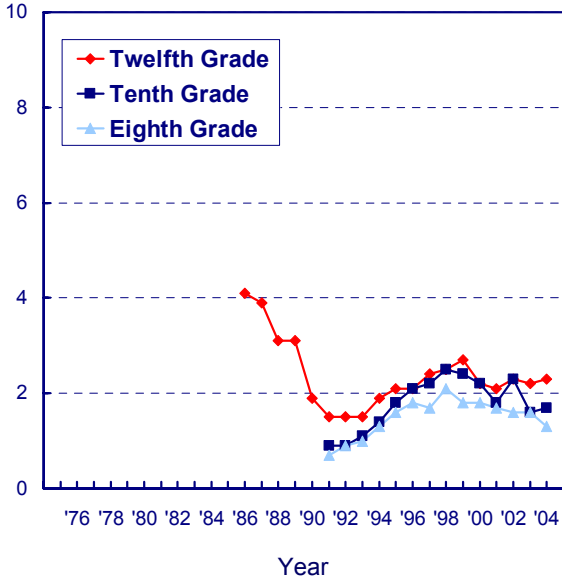
NOTE: The distinction between crack cocaine and other forms of cocaine (mostly powder) was not made until the middle of the life of the study. The figures on the facing page begin their trend lines when these distinctions were introduced for the different types of measures. Figures are not presented 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.) The absolute levels of use, risk, etc., are somewhat different, but the trends are very similar. 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

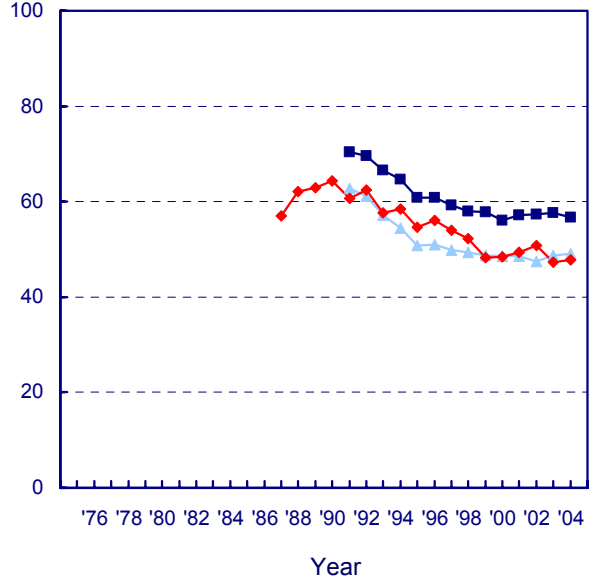
### Use

% who used in last twelve months



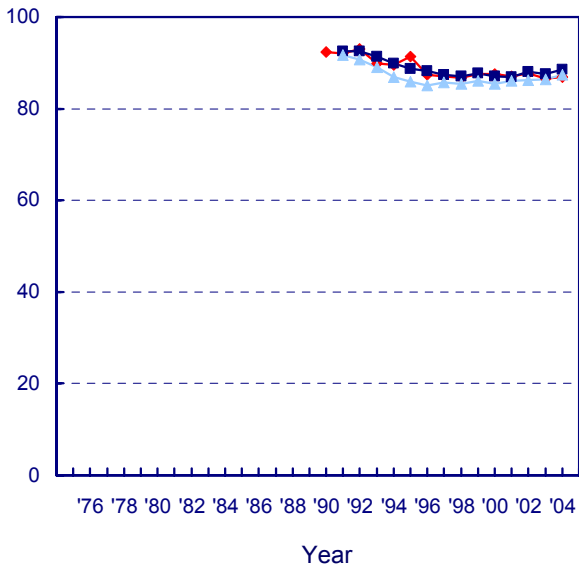
### Risk

% seeing "great risk" in using once or twice



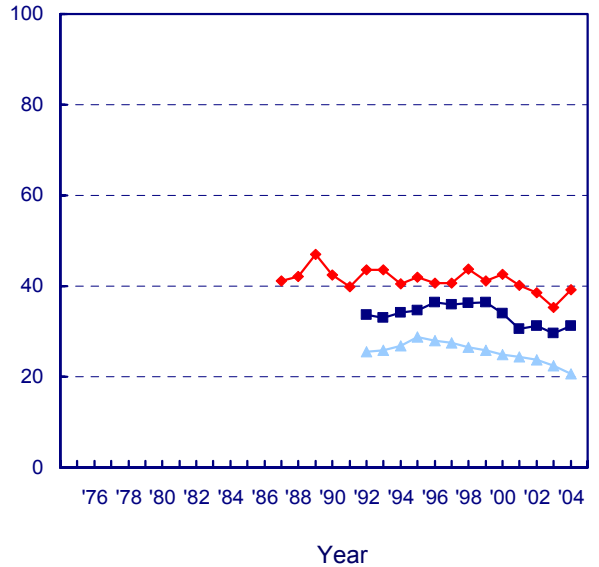
### Disapproval

% disapproving of using once or twice



### Availability

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





# Amphetamines

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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 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 1997. Since those peak years, use declined steadily in 8th grade, sporadically in 10th grade, and not until 2003 in 12th grade. There was no significant change in 2004.

## 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 occurred in 2003 among 12th graders.

## Disapproval

Disapproval of amphetamine use was 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 increased from 2001 to 2003, then leveled in 2004.

## Availability

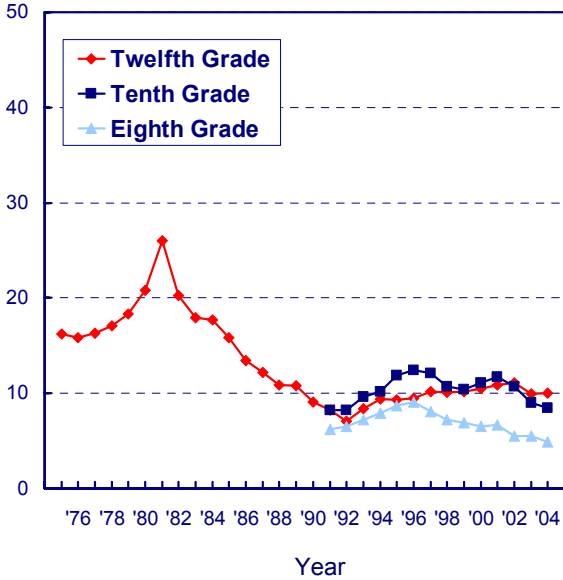
When the study started in 1975, amphetamines had a high level of reported availability. The level fell by about 10 percentage points by 1977, drifted up a bit through 1980, jumped sharply in 1981, and then began a long, gradual decline through 1991. There was a modest increase in availability at all 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.

# Amphetamines: Trends in Annual Use, Risk, Disapproval, and Availability

## Eighth, Tenth, and Twelfth Graders

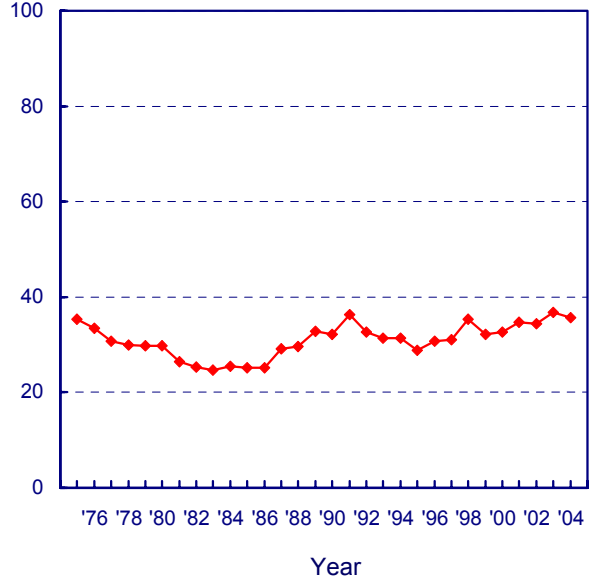
### Use

% who used in last twelve months



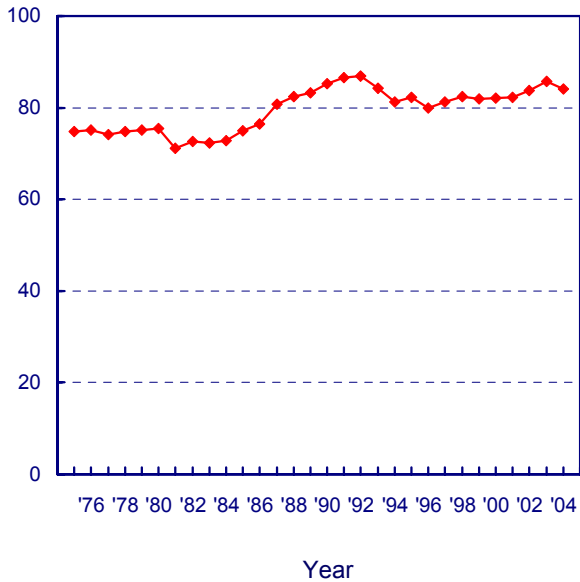
### Risk

% seeing "great risk" in using once or twice



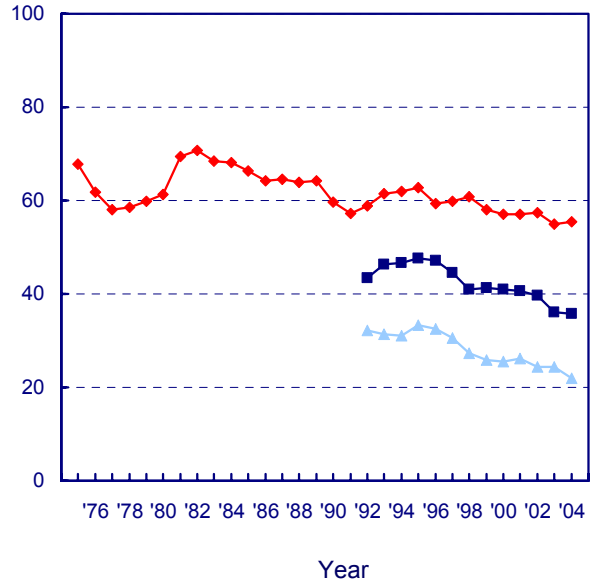
### Disapproval

% disapproving of using once or twice



### Availability

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



## Methamphetamine and Ice

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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 which 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 rose to 3.7% by 1981 (the peak year), before declining for a long period of time to 0.4% by 1992. It 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, 1.3% indicated any use in the prior year, a figure

that climbed to 3.0% by 1998, where it returned in 2002 after dropping. Use then dropped to 2.1% by 2004. This variable is shown in the first facing panel.

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 show annual prevalence rates in 2004 of 1.5%, 3.0%, and 3.4% for 8th, 10th, and 12th graders, respectively. All of these levels are down considerably from 1999, when they were 3.2%, 4.6%, and 4.7%, respectively (see Table 2).

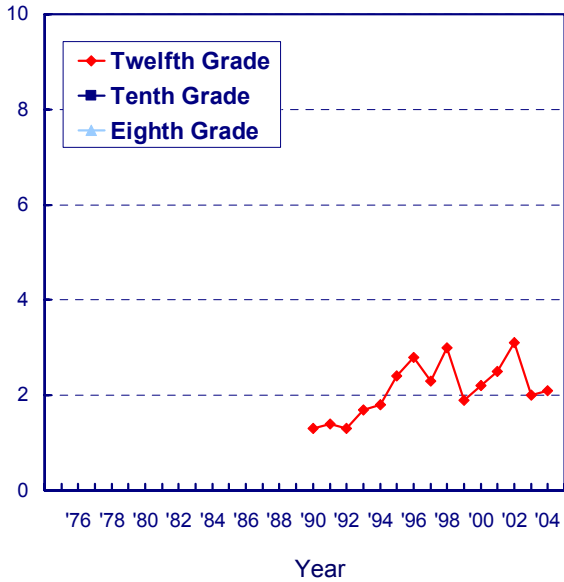
### Other Measures

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

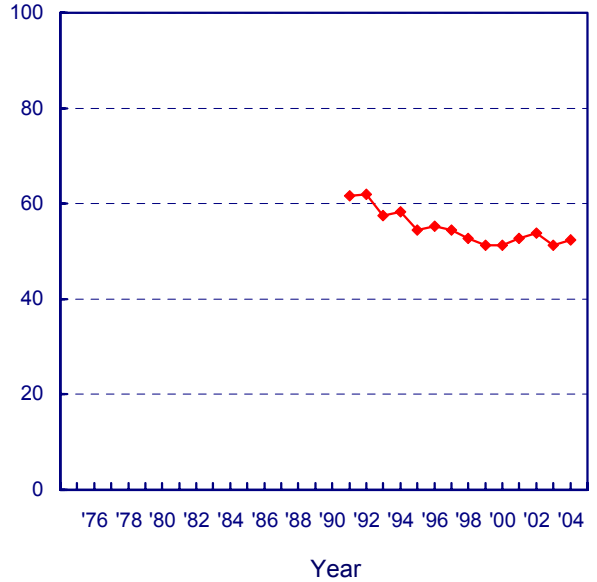
### Use

% who used in last twelve months



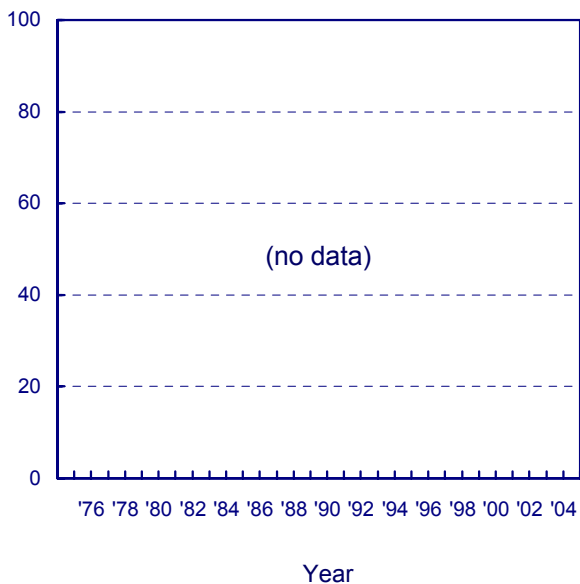
### Risk

% seeing "great risk" in using once or twice



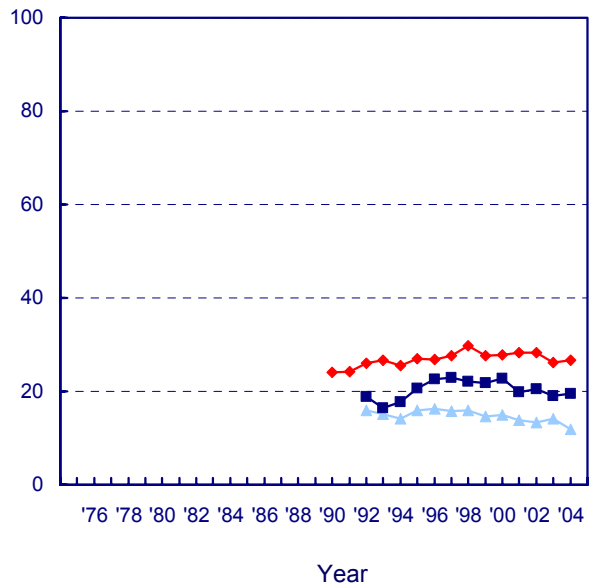
### Disapproval

% disapproving of using once or twice



### Availability

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



# Heroin

---

Heroin, a derivative of opium, was taken for many decades 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 (like snorting and smoking) practical alternatives to injection. Therefore, in 1995 we introduced questions that asked separately about using heroin with and without a needle so that we might see to what extent non-injection 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 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, all of the decrease in use since 2000 has been due to decreasing use without injecting.

## 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.

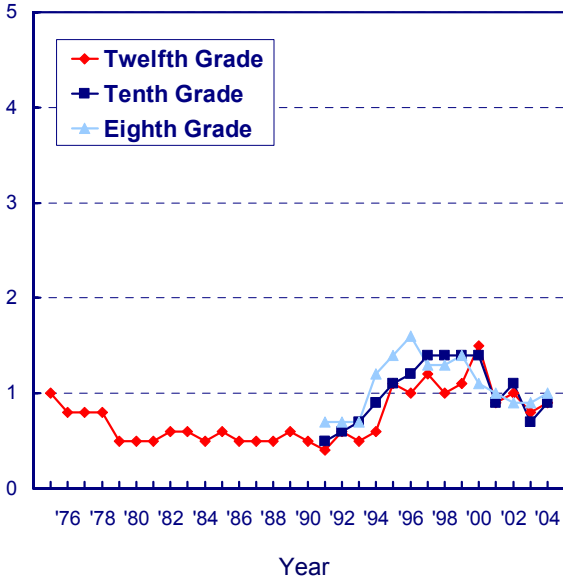
## Availability

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

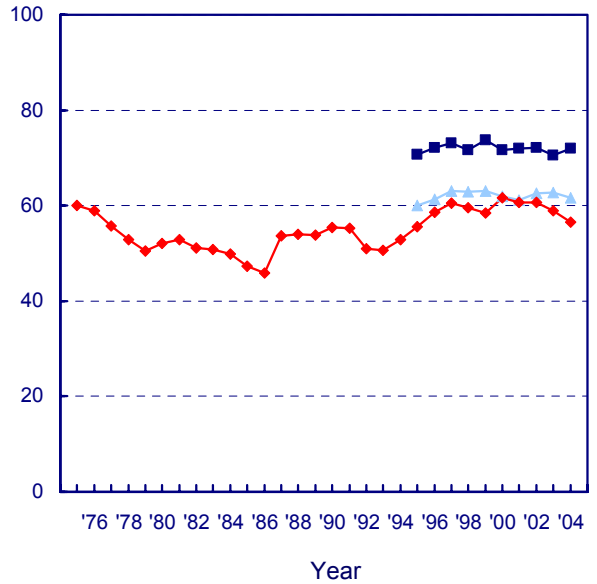
### Use

% who used in last twelve months



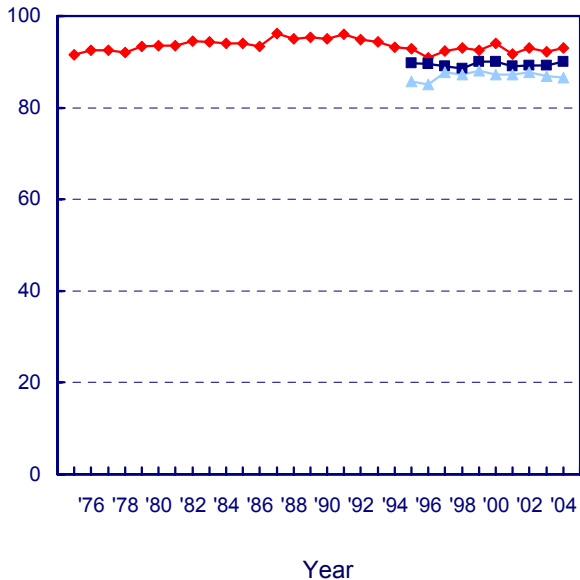
### Risk

% seeing "great risk" in using once or twice\*



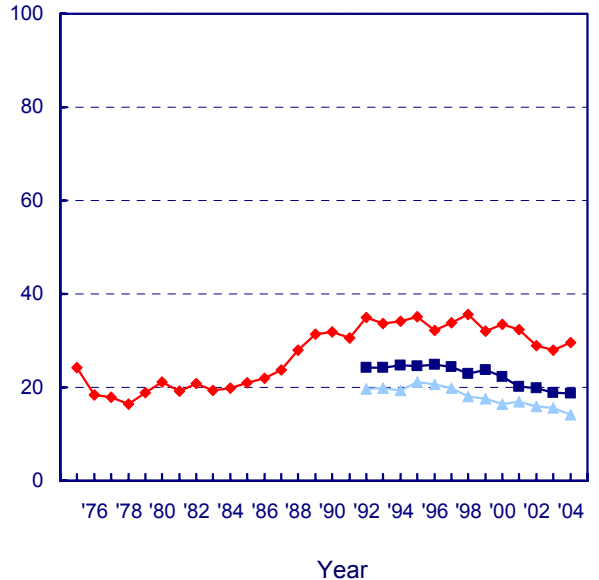
### Disapproval

% disapproving of using once or twice\*



### Availability

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



\*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 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 and not beginning to decline until 2003. Use also has been rising steadily among 10th graders but began to decline some in 2002. Use peaked among 8th graders in 1996 and then declined for two years while climbing in the upper grades. 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.

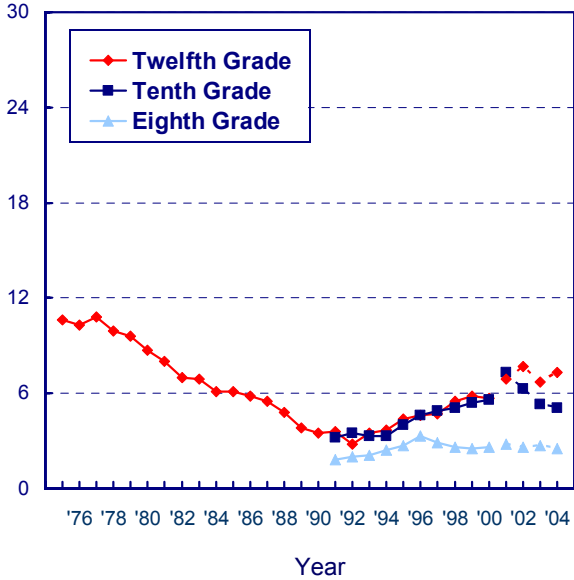
## Availability

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 from 72% in 1975 to 33% in 1999, before leveling. Most of that decline occurred before the 1990s. There was some further drop in availability during the 1990s at all three grade levels, despite the fact that use rose some. And availability is down slightly in the first half decade of the 2000s in all three grades.

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

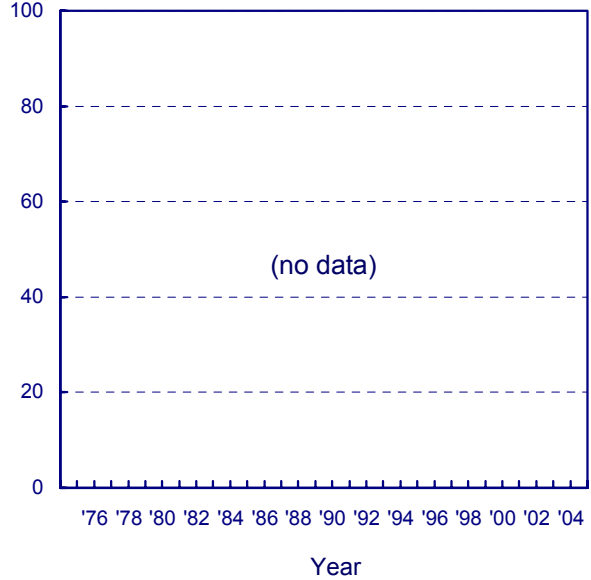
### Use

% who used in last twelve months\*



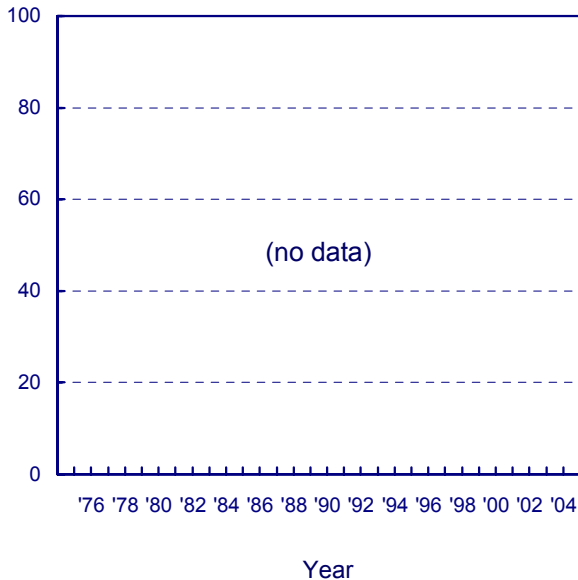
### Risk

% seeing "great risk" in using once or twice



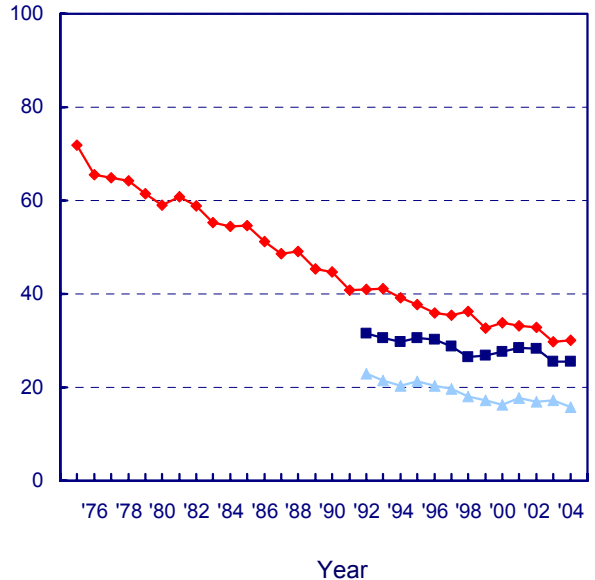
### Disapproval

% disapproving of using once or twice



### Availability

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



\*Beginning in 2001 a revised set of questions on tranquilizer use was introduced, in which "Xanax" replaced "Miltown" in the list of examples. The dotted lines connect percentages that are based on data from the revised questions.



## Sedatives (Barbiturates)

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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, not leveling until after 2002 (at 6.5% in 2004).

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. Use then dropped to 0.8% by 2004.

### 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, which may help account for the leveling in use after 2002.

### 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 2002 and 2003.

### Availability

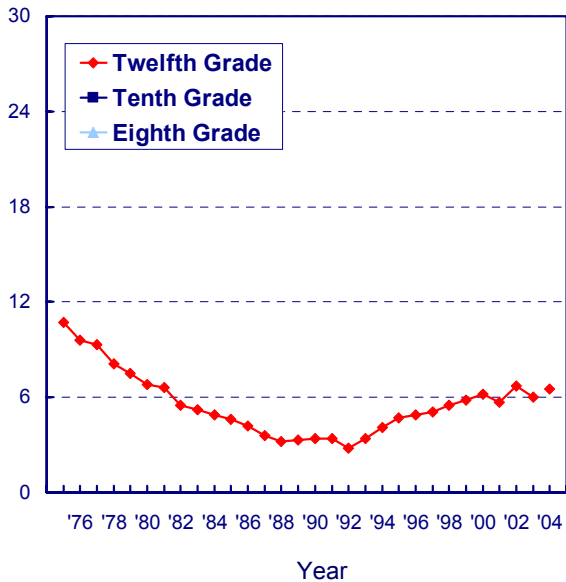
As the fourth facing panel shows, the availability of sedatives (barbiturates) has generally been declining during most of the life of the study, except for one shift up that occurred in 1981.

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

### Eighth, Tenth, and Twelfth Graders

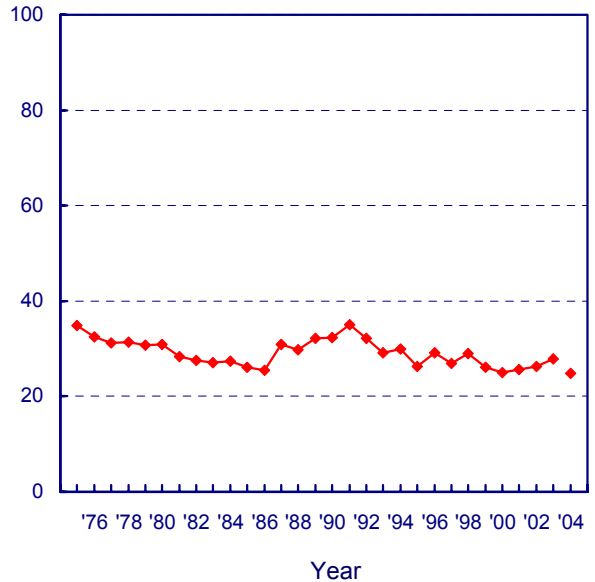
#### Use

% who used in last twelve months\*



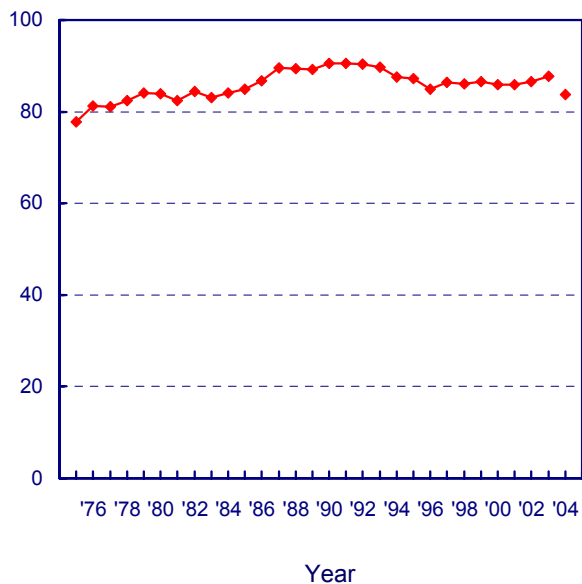
#### Risk

% seeing "great risk" in using once or twice\*



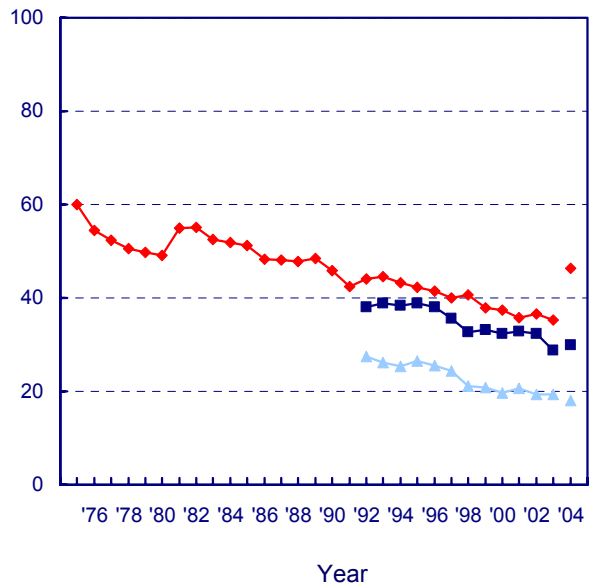
#### Disapproval

% disapproving of using once or twice\*



#### Availability

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



\*In 2004 the question text was changed from "barbiturates" to "sedative/barbiturates" and the list of examples was changed. The dotted lines connect percentages that are based on data from the revised questions.

## 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 2004 was 0.7%, 0.8%, and 2.0% in grades 8, 10, and 12, and the annual prevalence of **ketamine** use was 0.9%, 1.3%, and 1.9%. Both have shown little change since they were first measured in 2000 except among 10th graders, among whom both drugs decreased significantly in 2004 (see Table 2).

**Rohypnol** was added to the survey in 1996, and low levels of use were reported—around 1% in all three grade levels. Use at 8th grade began falling immediately after 1996 and by 1999 had fallen by half. In the upper two grades, use first rose for a year or two before beginning to fall back to its original level by 1999. There has been rather little systematic change since then. Limitations on questionnaire space precluded asking about perceived risk, disapproval, or availability.

### 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 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 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.

### Perceived Risk and Disapproval

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 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, perceived risk continued to increase, though at a much decelerated rate.

Disapproval of ecstasy use had been declining slightly since 1998 but increased significantly in all three grades in 2002. The significant increases in disapproval continued in 2003 for 8th and 10th graders and in 2004 for 10th and 12th graders.

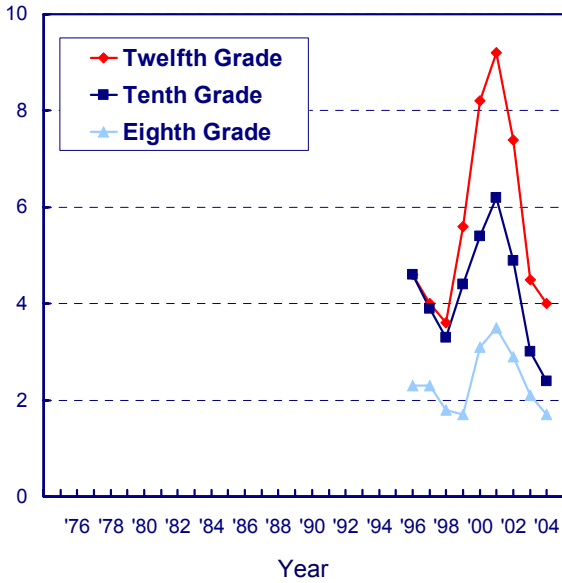
### Availability

The figures also show 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 has been declining since.

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

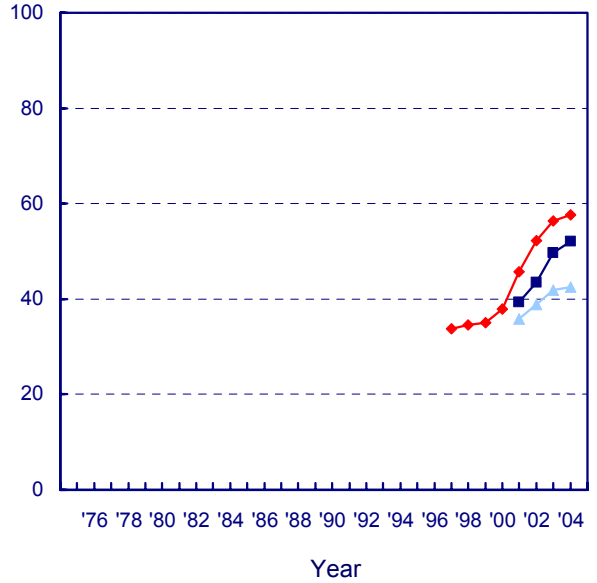
## Use

% who used in last twelve months



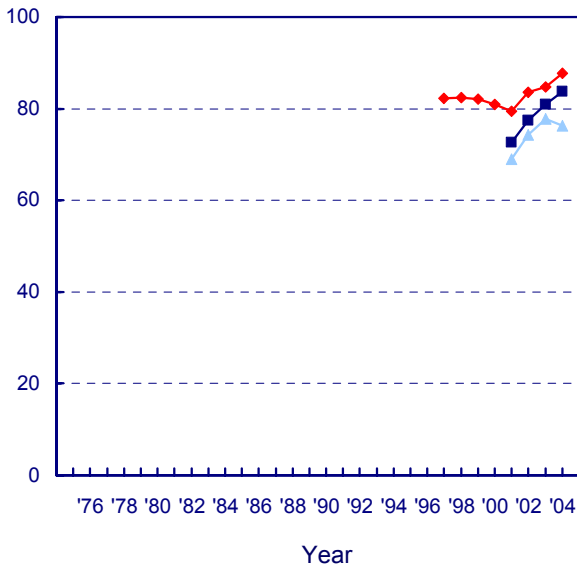
## Risk

% seeing "great risk" in using once or twice



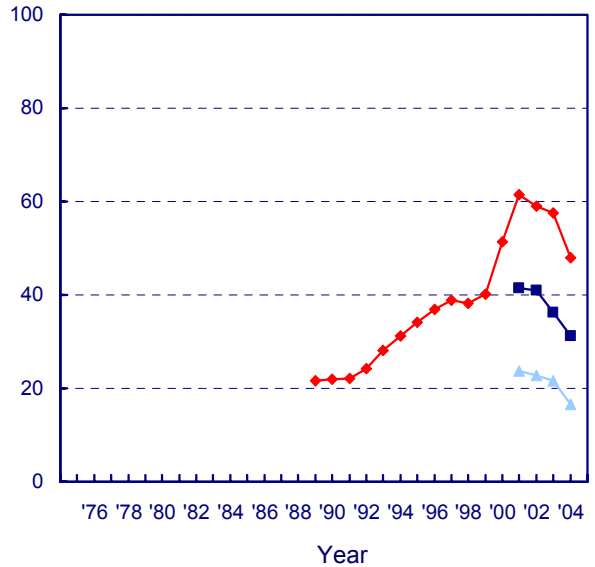
## Disapproval

% disapproving of using once or twice



## Availability

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



# Alcohol

---

Alcoholic beverages—which include beer, wine, wine coolers, and hard liquor—have been among the most widely used substances by American young people for a very long time.<sup>7</sup> In 2004 the proportions of 8th, 10th, and 12th graders who admitted drinking an alcoholic beverage in the 30-day period prior to the survey were 19%, 35%, and 48%, respectively. We have a number of measures of alcohol use, all of which are contained 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. We present the prevalence of such binge drinking behavior in the first panel.

## 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 and between 1992 (21%) and 1999 (26%) among 10th graders. In the years following those recent peaks, there was only a slight decline in use in all three grades until 2002, when the rate dropped appreciably in all three grades (as did self-reported drunkenness in the past 30 days). Use declined again in 2003, but only slightly. In 2004, use continued to

decrease for 8th grade, leveled for 10th grade, and increased some for 12th grade.

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 44%. 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 did 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 remained at a very high level (about 95%).

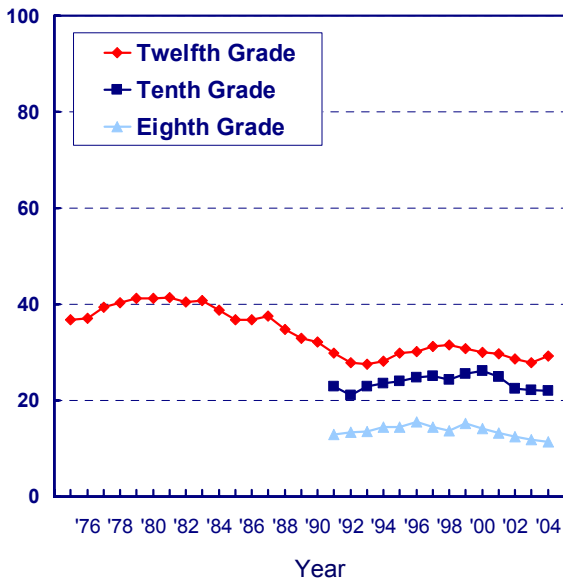
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<sup>7</sup>In 2003 a single question was added to one of the 12th-grade questionnaire forms about a fairly new class of alcoholic beverage—flavored alcoholic beverages or “alcopops”—to determine the extent of use. The annual prevalence of use among 12th graders was 56%. As a result of this high rate of use, the normal set of questions covering all three prevalence periods was added in all grades beginning in 2004. There was no change in prevalence in 2004.

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

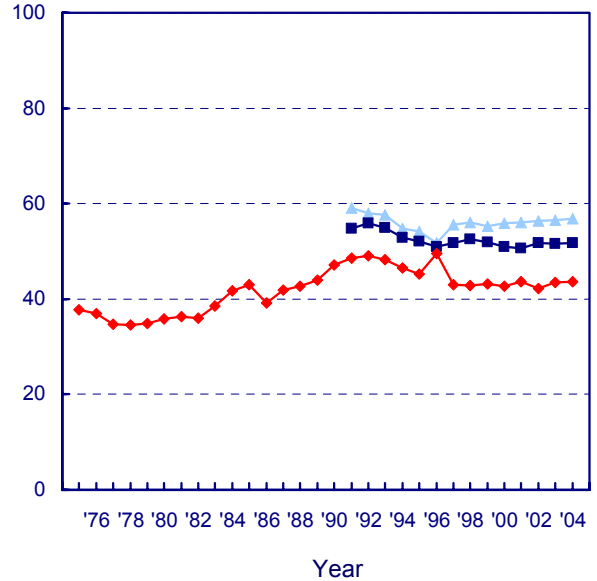
### Use

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



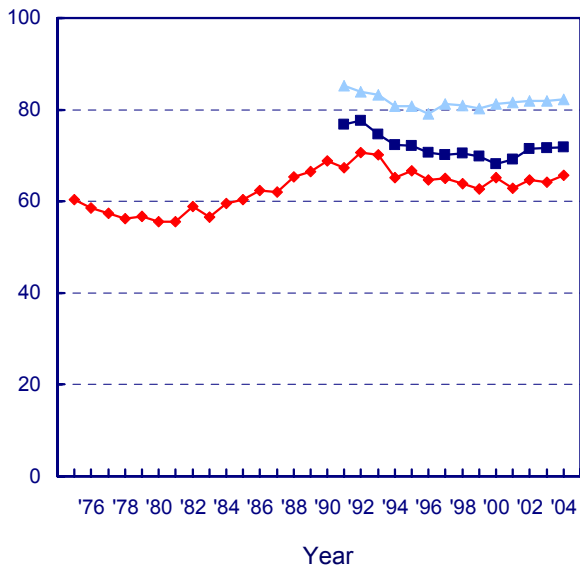
### Risk

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



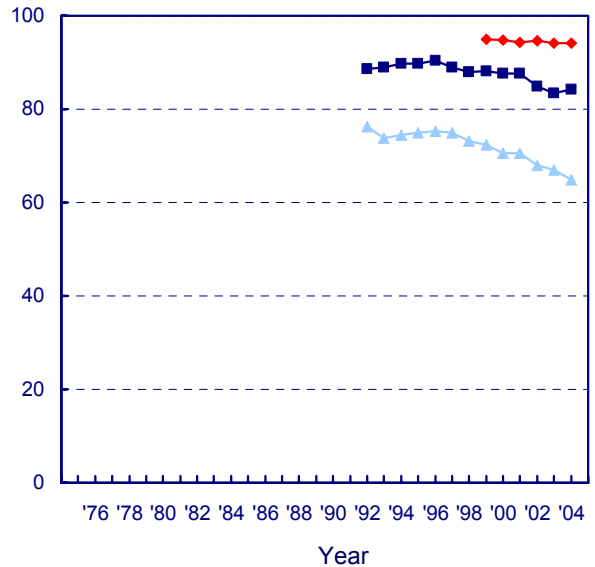
### Disapproval

**% 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 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, 30-day prevalence of smoking has 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.

### 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; but 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 12th grade). In 2000 and 2003, perceived risk leveled in all grades. In 2004, perceived risk increased significantly for 8th and 10th graders and by a less than significant amount among 12th graders. (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. 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, which also were becoming more negative.) So, even though the decline in use has decelerated sharply, perceived risk and disapproval continue to rise.

### Availability

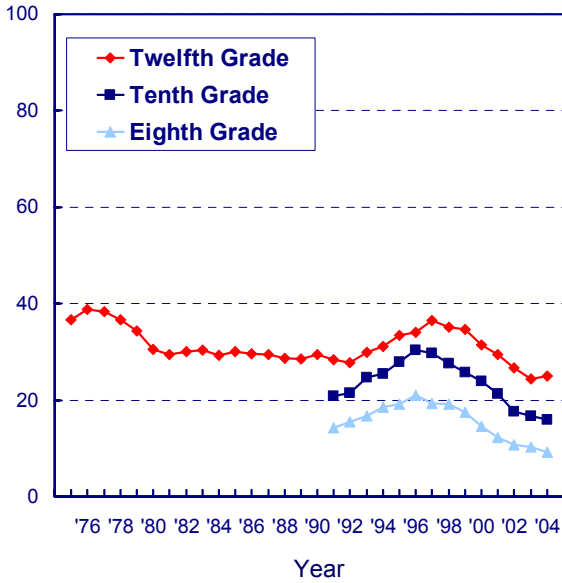
Availability of cigarettes is reported as very high by 8th and 10th graders. (We did not ask the question of 12th graders, for whom we assumed accessibility to be nearly universal.) Since 1996, availability has been steadily declining, especially among the 8th graders. The 10th graders' reports of availability leveled in 2004.

# Cigarettes: Trends in 30-Day Use, Risk, Disapproval, and Availability

## Eighth, Tenth, and Twelfth Graders

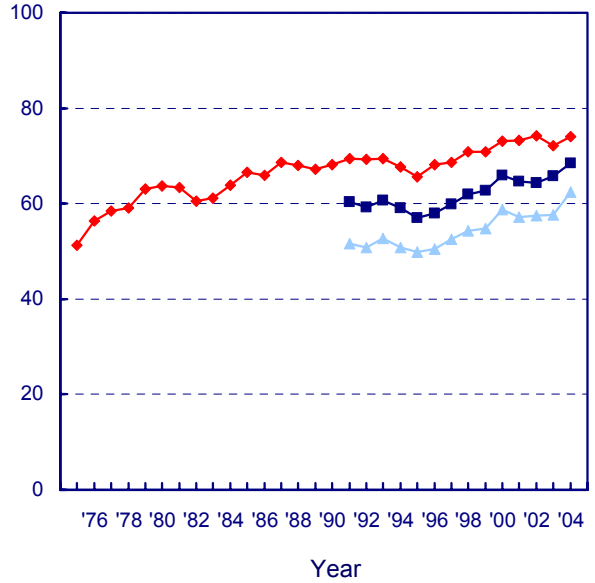
### Use

% who used in past 30 days



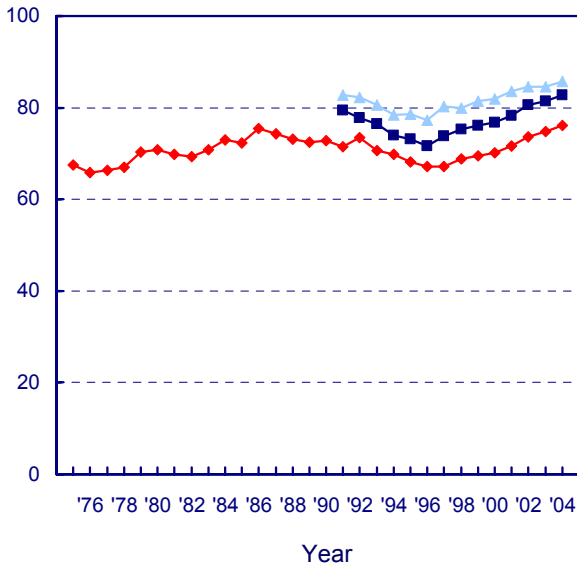
### Risk

% seeing "great risk" in smoking a pack or more per day



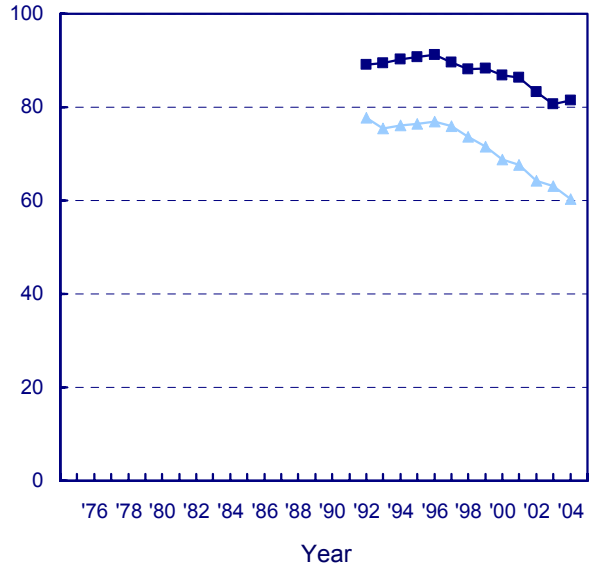
### Disapproval

% disapproving of smoking a pack or more per day



### Availability

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





## Smokeless Tobacco

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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, increasing slightly to 4.1% in 2004; 10th graders’ use is down from a 1994 peak of 10.5% to 4.9% in 2004; and 12th graders’ use decreased from a 1995 peak of 12.2% to 6.5% in 2002, about where it has remained since (6.7% in 2004). These reflect relative declines from peak levels of 45% to 53%. One could say, more generally, that teen use of smokeless tobacco is down by about one-half from the peak levels reached in the mid-1990s. However, the decline has clearly halted among 8th and 12th graders, and seems to be on the verge of halting among 10th graders, as well.

Thirty-day prevalence of *daily* use of smokeless tobacco also has fallen gradually, but appreciably, in recent years. The daily usage rates in 2004 are 1.0%, 1.6%, and 2.8% in grades 8, 10, and 12. These rates also are down by about a half from the peak levels recorded in the 1990s; but, again, the decline has halted.

It should be noted that smokeless tobacco use among American young people is almost exclusively a male behavior. For example, among males

the 30-day prevalence rates in 2004 are 6.4%, 9.0%, and 12.2% in grades 8, 10, and 12, respectively, *versus* 1.7%, 1.0%, and 1.6% among females. The respective current *daily* use rates for males are 1.7%, 3.0%, and 5.6% compared to 0.3%, 0.2%, and 0.2% for females.

There are some other important demographic differences as well. Use tends to be higher in the South than in other regions of the country, more concentrated in non-metropolitan areas than metropolitan ones, and negatively correlated with the education level of the parents. Use also tends to be higher among White students than among African American or Hispanic students.

### Perceived Risk

The 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 there is a great risk in using it regularly—among 8th graders, from 34% to 41% in 2004; and among 10th graders, from 38% to 48%. Among 12th graders, perceived risk increased from 33% in 1995 to 45% in 2004. 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.

### Disapproval

Only 8th and 10th graders are asked about their personal disapproval of using smokeless tobacco regularly. The recent low points for disapproval in both grades were 1995 and 1996. Since 1996, disapproval has risen from 74% to 81% among 8th graders and from 71% to 80% among 10th graders.

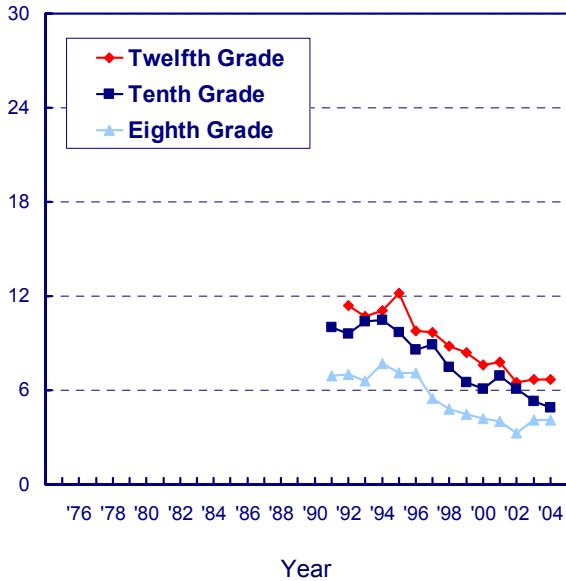
### Availability

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

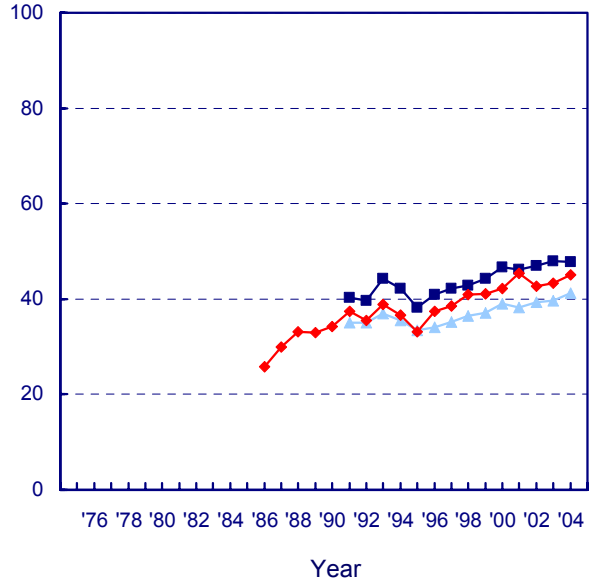
### Use

% who used in past 30 days



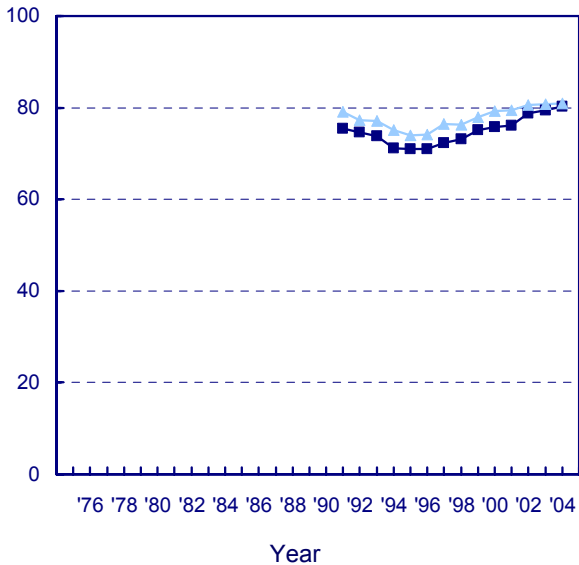
### Risk

% seeing "great risk" in using regularly



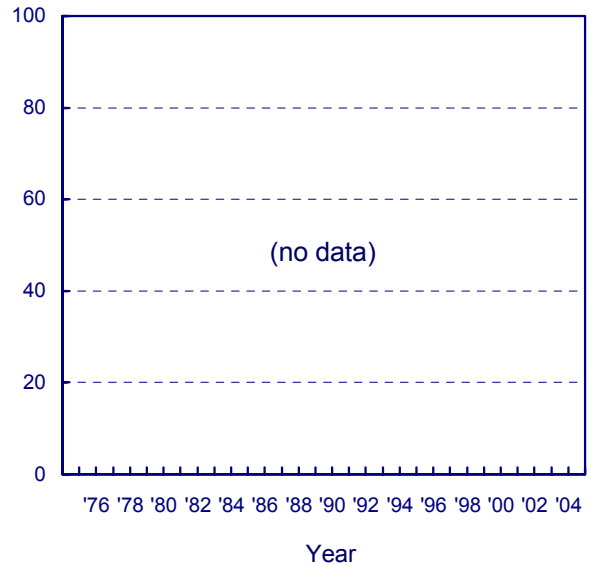
### Disapproval

% disapproving of using regularly



### Availability

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



## Steroids

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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

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, annual prevalence rates were 1.3%, 2.3%, and 3.3% for boys in grades 8, 10, and 12, compared with 1.0%, 0.9%, and 1.7% 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 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 to 1.1% in 2004. Among 10th graders, use continued to increase, reaching 2.2% in 2002, but declined significantly to 1.5% by 2004.

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.

### 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 2004, perceived risk rose slightly to 56%.

### 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 in 2001 there was a significant decrease in disapproval as well; no significant change occurred after 2002. In 2004, disapproval among 12th graders rose to 88%, although the change was not significant.

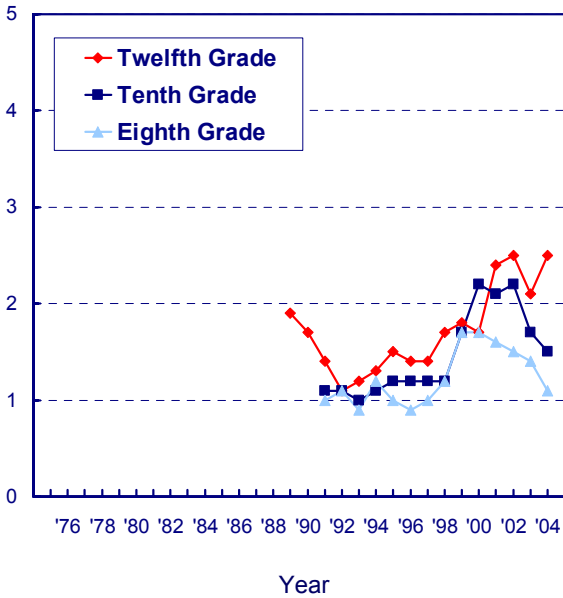
### Availability

Perceived availability is relatively high for steroids and increases with grade level. Yet some over-the-counter substances, 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.) Availability has declined in the lower grades in recent years but has not shown much decline yet at 12th grade.

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

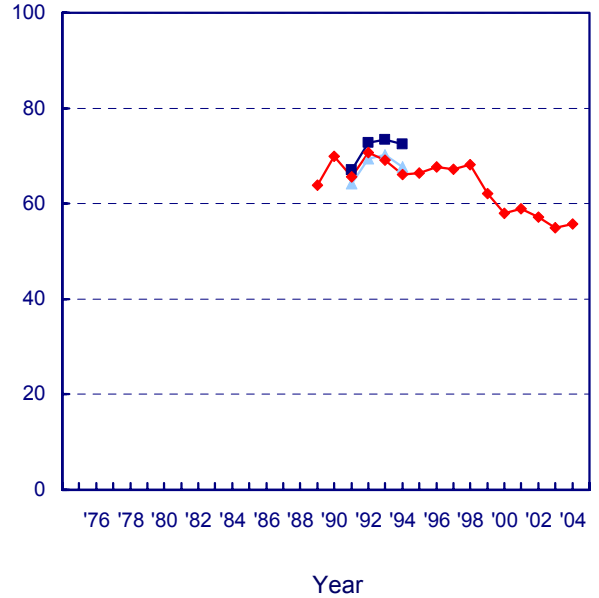
## Use

% who used in last twelve months



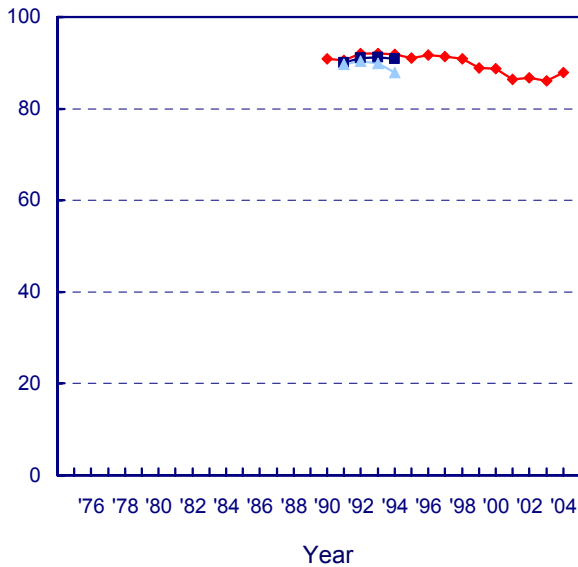
## Risk

% seeing "great risk" in using once or twice



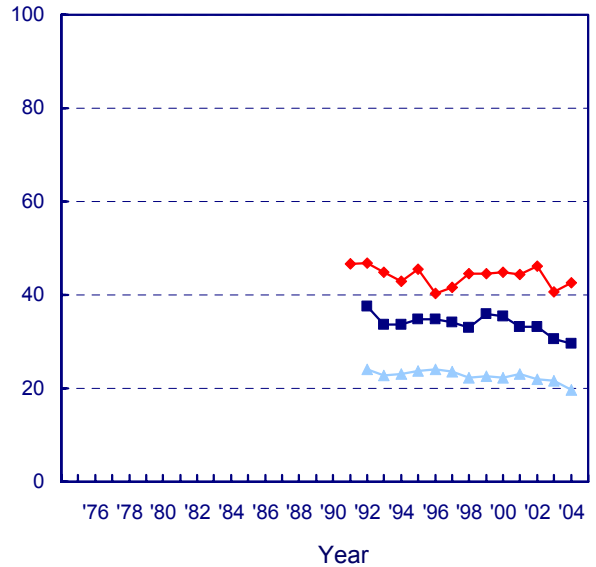
## Disapproval

% disapproving of using once or twice



## Availability

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



## Subgroup Differences

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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 publications of Volume I in this same series—both the one published in 2004 and the one forthcoming in 2005—contain 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 those volumes also present a more in-depth discussion and interpretation of those 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 60*, available on the study's Web site ([www.monitoringthefuture.org](http://www.monitoringthefuture.org)), 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), much higher rates of smokeless tobacco and steroid use, higher rates of heavy drinking, and roughly equivalent rates of cigarette smoking (although among 12th graders the two genders have reversed order twice during the life of the study). These gender differences 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 cigarette smoking while in high school than are the college-bound. 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 general, 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). 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 once 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 (until 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 the 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**

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 re-emerging 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 have been 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 for Whites, 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 a needle, ice, and Rohypnol—and their usage levels of heroin without a needle, 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.

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

	<u>Lifetime</u>														'03-'04
	<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>change</u>
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	-1.4
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	-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	+0.1
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	-1.4
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	-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	+1.0
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	0.0
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	-1.8
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	+0.2
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	-1.2
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	-1.3
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	-0.4
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	+1.5 s
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	-0.3
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	-0.3
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	-0.3
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	-0.5
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	-0.5
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	-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	-0.4
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	-0.7
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	-1.3 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	-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	-0.1
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	-0.3
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	-0.9

(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>														'03-'04	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	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	-0.4	
10th Grade	—	—	—	—	—	5.6	5.7	5.1	6.0	7.3	8.0	6.6	5.4	4.3	-1.1 s	
12th Grade	—	—	—	—	—	6.1	6.9	5.8	8.0	11.0	11.7	10.5	8.3	7.5	-0.8	
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	-0.2	
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	+0.3	
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	+0.5	
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	-0.2	
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	-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	+0.3	
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	-0.1	
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	+0.3	
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	+0.6	
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	0.0	
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	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	-0.1	
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	+0.2	
10th Grade	—	—	—	—	1.0	1.1	1.1	1.2	1.3	1.0	0.8	1.0	0.9	0.8	-0.1	
12th Grade	—	—	—	—	0.7	0.8	0.9	0.8	0.9	0.8	0.7	0.8	0.7	0.7	0.0	
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	-0.1	
10th Grade	—	—	—	—	1.1	1.7	1.7	1.7	1.6	1.7	1.3	1.3	1.0	1.1	+0.1	
12th Grade	—	—	—	—	1.4	1.7	2.1	1.6	1.8	2.4	1.5	1.6	1.8	1.4	-0.3	
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	+0.3	
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	-0.9	
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	-1.2	
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	+0.6	
Methamphetamine <sup>m,n</sup>																
8th Grade	—	—	—	—	—	—	—	—	—	4.5	4.2	4.4	3.5	3.9	2.5	-1.4 ss
10th Grade	—	—	—	—	—	—	—	—	—	7.3	6.9	6.4	6.1	5.2	5.3	0.0
12th Grade	—	—	—	—	—	—	—	—	—	8.2	7.9	6.9	6.7	6.2	6.2	0.0
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	+0.2	

(Table continued on next page)



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

	Lifetime														'03-'04
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	change
Sedatives (Barbituates) <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	+1.0
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	+0.3
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	-0.4
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	-0.5
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	+0.4
Rohypnol <sup>o</sup>															
8th Grade	—	—	—	—	—	1.5	1.1	1.4	1.3	1.0	1.1	0.8	1.0	1.0	0.0
10th Grade	—	—	—	—	—	1.5	1.7	2.0	1.8	1.3	1.5	1.3	1.0	1.2	+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	-1.6
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	-1.8
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	+0.2
Flavored alcoholic beverages <sup>e,m</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	37.9	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	58.6	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	71.0	—
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	-0.3
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	-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	+2.3
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	-0.5
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	-2.3 s
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	-0.9
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	-0.4
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	-0.8
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	-0.4
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	-0.6 s
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	-0.6 s
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	-0.2

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
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
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
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

<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 only: 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.

<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>For 12th graders only: The 2003 flavored alcoholic beverage data were created by adjusting the 2004 data to reflect the observed 2003 to 2004 change in a slightly different version of the flavored alcoholic beverage question. In 2004 the original question was revised to include wine coolers among the examples—a change that had very little affect on the observed prevalence of use rate in 2004.

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

	<u>Annual</u>														'03-'04 change
	<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>	
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	-0.9
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	-0.9
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	-0.5
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	-0.8
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	-0.2
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	+0.6
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	-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	-0.6
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	-1.4
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	-0.9
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	-0.8
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	-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	+0.9
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	+0.5
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	+0.2
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	-0.2
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	-0.3
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	0.0
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	+0.2
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	-0.2
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	-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	+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	-0.3
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	+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	+0.2
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	-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>														'03-'04 change
	<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>	
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	-0.3
10th Grade	—	—	—	—	—	4.6	3.9	3.3	4.4	5.4	6.2	4.9	3.0	2.4	-0.6
12th Grade	—	—	—	—	—	4.6	4.0	3.6	5.6	8.2	9.2	7.4	4.5	4.0	-0.6
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	-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	+0.4
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	+0.5
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	-0.2
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	+0.1
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	+0.1
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	-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	+0.5
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	+0.5
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	0.0
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	+0.2
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	+0.1
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	+0.1
10th Grade	—	—	—	—	0.6	0.7	0.7	0.8	0.6	0.5	0.4	0.6	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	0.0
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	-0.1
10th Grade	—	—	—	—	0.8	0.9	1.1	1.0	1.1	1.1	0.7	0.8	0.5	0.7	+0.1
12th Grade	—	—	—	—	1.0	1.0	1.2	0.8	1.0	1.6	0.8	0.8	0.8	0.7	-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	+0.3
OxyContin <sup>m,n</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	1.3	1.7	1.7	0.0
10th Grade	—	—	—	—	—	—	—	—	—	—	—	3.0	3.6	3.5	-0.1
12th Grade	—	—	—	—	—	—	—	—	—	—	—	4.0	4.5	5.0	+0.5
Vicodin <sup>m,n</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	2.5	2.8	2.5	-0.3
10th Grade	—	—	—	—	—	—	—	—	—	—	—	6.9	7.2	6.2	-1.0
12th Grade	—	—	—	—	—	—	—	—	—	—	—	9.6	10.5	9.3	-1.3
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	-0.6
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	-0.5
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	+0.1

(Table continued on next page)

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

	Annual														'03-'04 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Ritalin <sup>m,n</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	—	2.9	2.8	2.6	2.5	-0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	4.8	4.8	4.1	3.4	-0.7
12th Grade	—	—	—	—	—	—	—	—	—	—	5.1	4.0	4.0	5.1	+1.1
Methamphetamine <sup>m,n</sup>															
8th Grade	—	—	—	—	—	—	—	—	3.2	2.5	2.8	2.2	2.5	1.5	-1.0 ss
10th Grade	—	—	—	—	—	—	—	—	4.6	4.0	3.7	3.9	3.3	3.0	-0.3
12th Grade	—	—	—	—	—	—	—	—	4.7	4.3	3.9	3.6	3.2	3.4	+0.2
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	+0.1
Sedatives (Barbituates) <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	+0.5
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	+0.2
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	-0.1
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	-0.2
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	+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	+0.1
10th Grade	—	—	—	—	—	1.1	1.3	1.2	1.0	0.8	1.0	0.7	0.6	0.7	+0.1
12th Grade	—	—	—	—	—	1.1	1.2	1.4	1.0	0.8	0.9‡	1.6	1.3	1.6	+0.3
GHB <sup>m,r</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	1.2	1.1	0.8	0.9	0.7	-0.2
10th Grade	—	—	—	—	—	—	—	—	—	1.1	1.0	1.4	1.4	0.8	-0.6 s
12th Grade	—	—	—	—	—	—	—	—	—	1.9	1.6	1.5	1.4	2.0	+0.6
Ketamine <sup>m,s</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	1.6	1.3	1.3	1.1	0.9	-0.3
10th Grade	—	—	—	—	—	—	—	—	—	2.1	2.1	2.2	1.9	1.3	-0.6 s
12th Grade	—	—	—	—	—	—	—	—	—	2.5	2.5	2.6	2.1	1.9	-0.2
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	-0.5
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	-1.1
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	+0.5

(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>														'03-'04
	<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>change</u>
Flavored alcoholic beverages <sup>e,m,u</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	49.7	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	55.2	55.8	+0.6
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	0.0
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	+0.4
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	+3.8
Bidis <sup>m,n</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	3.9	2.7	2.7	2.0	1.7	-0.3
10th Grade	—	—	—	—	—	—	—	—	—	6.4	4.9	3.1	2.8	2.1	-0.7
12th Grade	—	—	—	—	—	—	—	—	—	9.2	7.0	5.9	4.0	3.6	-0.4
Kreteks <sup>m,n</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	—	2.6	2.6	2.0	1.9	-0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	6.0	4.9	3.8	3.7	-0.2
12th Grade	—	—	—	—	—	—	—	—	—	—	10.1	8.4	6.7	6.5	-0.2
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	-0.3 s
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	-0.2
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	+0.4

NOTE: See Table 1 for relevant footnotes.

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

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

	<u>30-Day</u>														'03-'04
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	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	-1.3 s
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	-1.2
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	-0.8
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	-0.6
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	0.0
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	+0.4
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	-0.8
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	-1.2
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	-1.3
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	-1.2 s
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	-1.2
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	-1.3
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	+0.4
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	+0.1
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	0.0
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	0.0
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	-0.2
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	+0.1
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	+0.1
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	-0.1
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	0.0
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	+0.1
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	-0.2
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	+0.2
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	+0.2
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	-0.2

(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>														'03-'04
	<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>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	+0.1
10th Grade	—	—	—	—	—	1.8	1.3	1.3	1.8	2.6	2.6	1.8	1.1	0.8	-0.4
12th Grade	—	—	—	—	—	2.0	1.6	1.5	2.5	3.6	2.8	2.4	1.3	1.2	0.0
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	0.0
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	+0.4
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	+0.3
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	-0.1
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	+0.1
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	+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	0.0
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	+0.4 s
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	+0.4
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	0.0
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	+0.1
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	+0.1
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	0.0
10th Grade	—	—	—	—	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.2	0.3	+0.1
12th Grade	—	—	—	—	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	-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	0.0
10th Grade	—	—	—	—	0.3	0.3	0.4	0.5	0.5	0.4	0.2	0.4	0.2	0.3	+0.1
12th Grade	—	—	—	—	0.6	0.4	0.6	0.4	0.4	0.7	0.3	0.5	0.4	0.3	-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	+0.2
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	-0.5
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	-0.2
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	-0.3
Methamphetamine <sup>m,n</sup>															
8th Grade	—	—	—	—	—	—	—	—	1.1	0.8	1.3	1.1	1.2	0.6	-0.6 ss
10th Grade	—	—	—	—	—	—	—	—	1.8	2.0	1.5	1.8	1.4	1.3	-0.1
12th Grade	—	—	—	—	—	—	—	—	1.7	1.9	1.5	1.7	1.7	1.4	-0.3
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	+0.1

(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>														'03-'04
	<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>change</u>
Sedatives (Barbituates) <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	0.0
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	+0.1
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	-0.2
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	-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	+0.4
Rohypnol <sup>o</sup>															
8th Grade	—	—	—	—	—	0.5	0.3	0.4	0.3	0.3	0.4	0.2	0.1	0.2	+0.1
10th Grade	—	—	—	—	—	0.5	0.5	0.4	0.5	0.4	0.2	0.4	0.2	0.3	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	-1.2
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	-0.2
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	+0.5
Flavored alcoholic beverages <sup>e,m</sup>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	14.6	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	25.1	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	31.1	—
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	-0.5
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	+0.3
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	+1.6
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	-1.0
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	-0.7
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	+0.6
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	0.0
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	-0.4
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	0.0
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	-0.1
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	+0.1
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	+0.3

NOTE: See Table 1 for relevant footnotes.

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

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

	Daily														'03-'04
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	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	-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	-0.5
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	-0.4
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	-0.2
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	-0.2
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	-0.4
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	0.0
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	-0.1
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	+0.2
5+ drinks in a row in last 2 weeks															
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	-0.5
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	-0.2
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	+1.3
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	-0.2
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	-0.6
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	-0.3
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	-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	-0.9
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	-0.3
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	+0.2
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	-0.2
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	+0.6

NOTE: See Table 1 for relevant footnotes.

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

**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>														'03-'04 change
	1991	1992	1993	1994	1995	1996	8th Graders		1999	2000	2001	2002	2003	2004	
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	+1.7 s
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	+1.9
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	+2.0 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	-1.6
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	-1.0
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	-1.1
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	-3.1
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	35.8	38.9	41.9	42.5	+0.6
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	55.5	61.8	65.8	65.1	-0.7
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	+0.3
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	+0.1
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	+0.7
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	+0.2
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	-1.1
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	-0.3
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	+1.1
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	+1.2
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	+0.4
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	+4.7 ss
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	+1.6
Take steroids <sup>f</sup>	64.2	69.5	70.2	67.6	—	—	—	—	—	—	—	—	—	—	—
	<i>Approx. N = 17400 18700 18400 17400 17500 17900 18800 18100 16700 16700 16200 15100 16500 17000</i>														

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.

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

<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**

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying "great risk" <sup>a</sup>													'03-'04 change	
	1991	1992	1993	1994	1995	1996	10th Graders		1999	2000	2001	2002	2003		2004
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	+0.9
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	+1.3
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	+1.7
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	-1.0
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	+0.8
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	-0.2
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	+0.1
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	39.4	43.5	49.7	52.0	+2.3
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	64.8	67.3	71.7	74.6	+3.0 s
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	-0.9
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	+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	-1.1
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	+0.8
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	+1.4
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	+1.9
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	-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	+0.4
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	0.0
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	+2.8 s
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	-0.2
Take steroids <sup>f</sup>	67.1	72.7	73.4	72.5	—	—	—	—	—	—	—	—	—	—	—
	<i>Approx. N = 14700 14800 15300 15900 17000 15700 15600 15000 13600 14300 14000 14300 15800 16400</i>														

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.

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

<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**

Cont'd

<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>														
	12th Graders														
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
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
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
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
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
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
Try PCP once or twice	—	—	—	—	—	—	—	—	—	—	—	—	55.6	58.8	56.6
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
Take cocaine occasionally	—	—	—	—	—	—	—	—	—	—	—	54.2	66.8	69.2	71.8
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
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	57.0	62.1	62.9
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	70.4	73.2	75.3
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.8	85.6
Try cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	45.3	51.7	53.8
Take cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	56.8	61.9	65.8
Take cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	81.4	82.9	83.9
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
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
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
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
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
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
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
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
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
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
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
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
Use smokeless tobacco regularly	—	—	—	—	—	—	—	—	—	—	—	25.8	30.0	33.2	32.9
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63.8
<i>Approx. N =</i>	<i>2804</i>	<i>2918</i>	<i>3052</i>	<i>3770</i>	<i>3250</i>	<i>3234</i>	<i>3604</i>	<i>3557</i>	<i>3305</i>	<i>3262</i>	<i>3250</i>	<i>3020</i>	<i>3315</i>	<i>3276</i>	<i>2796</i>

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 inconsistency between the change estimate and the prevalence of use estimates is due to rounding error.

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

**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>															'03-'04 change
	<u>12th Graders</u>															
	<u>1990</u>	<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>	
Try marijuana once or twice	23.1	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	-0.2
Smoke marijuana occasionally	36.9	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	-1.3
Smoke marijuana regularly	77.8	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	-0.3
Try LSD once or twice	44.7	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	0.0
Take LSD regularly	84.5	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	-2.1
Try PCP once or twice	55.2	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	+1.9
Try MDMA (ecstasy) once or twice	—	—	—	—	—	—	—	33.8	34.5	35.0	37.9	45.7	52.2	56.3	57.7	+1.4
Try cocaine once or twice	59.4	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	-0.3
Take cocaine occasionally	73.9	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	-2.0
Take cocaine regularly	91.1	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	-0.8
Try crack once or twice	64.3	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	+0.5
Take crack occasionally	80.4	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	+0.5
Take crack regularly	91.6	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	+0.3
Try cocaine powder once or twice	53.9	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	-0.9
Take cocaine powder occasionally	71.1	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	+0.2
Take cocaine powder regularly	90.2	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	-0.6
Try heroin once or twice	55.4	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	-1.4
Take heroin occasionally	76.6	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	-2.7
Take heroin regularly	90.2	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	-2.5 s
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	+2.2
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	+3.0 s
Try amphetamines once or twice	32.2	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	-1.1
Take amphetamines regularly	71.2	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	-1.7
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	+1.2
Try barbiturates once or twice <sup>b</sup>	32.4	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	—
Take barbiturates regularly <sup>b</sup>	70.2	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	—
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	8.3	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	+0.2
Take one or two drinks nearly every day	31.3	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	+2.9 s
Take four or five drinks nearly every day	70.9	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	+1.5
Have five or more drinks once or twice each weekend	47.1	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	+0.1
Smoke one or more packs of cigarettes per day	68.2	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	+1.9
Use smokeless tobacco regularly	34.2	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	+1.7
Take steroids	69.9	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	+0.8
	<i>Approx. N =</i>	2553	2549	2684	2759	2591	2603	2449	2579	2564	2306	2130	2173	2198	2466	2491

<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**

Do you disapprove of people who . . .	Percentage who "disapprove" or "strongly disapprove" <sup>a</sup>														'03-'04 change
	1991	1992	1993	1994	1995	1996	8th Graders		1999	2000	2001	2002	2003	2004	
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	+2.1 s
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	+1.7 s
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	+1.0
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	-0.1
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	+0.4
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	-2.9
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	-3.0 s
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	69.0	74.3	77.7	76.3	-1.5
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	73.6	78.6	81.3	79.4	-1.9
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	+1.0
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	+0.5
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	+1.2
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	+0.5
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	-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	-0.5
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	+1.4
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	+1.5
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	+0.4
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	+1.2
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	+0.3
Take steroids <sup>f</sup>	89.8	90.3	89.9	87.9	—	—	—	—	—	—	—	—	—	—	—
	<i>Approx. N =</i> 17400 18500 18400 17400 17600 18000 18800 18100 16700 16700 16200 15100 16500 17000														

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.

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

<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**

<i>Do you disapprove of people who . . .</i>	Percentage who "disapprove" or "strongly disapprove" <sup>a</sup>														'03-'04 change
	<u>10th Graders</u>														
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
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	+2.2
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	+2.4 s
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	+2.5 ss
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	+0.8
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	+1.3 s
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	-2.0
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	-1.7
Try MDMA (ecstasy) once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	72.6	77.4	81.0	83.7	+2.7 s
Take MDMA (ecstasy) occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	81.0	84.6	86.3	88.0	+1.8
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	+1.0
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	+0.8
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	+0.9
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	+0.8
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	+0.8
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	+1.2
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	+0.8
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	+0.9
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	+0.1
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	+1.3
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	+0.9
Take steroids <sup>f</sup>	90.0	91.0	91.2	90.8	—	—	—	—	—	—	—	—	—	—	—
	<i>Approx. N =</i> 14800 14800 15300 15900 17000 15700 15600 15000 13600 14300 14000 14300 15800 16400														

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.

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

<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**

Cont'd

<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														
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
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
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
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
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
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
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
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
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
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
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
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
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
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
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
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
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
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
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
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
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Approx. N =</i>	2677	2957	3085	3686	3221	3261	3610	3651	3341	3254	3265	3113	3302	3311	2799

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.

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

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

Do you disapprove of people (who are 18 or older) doing each of the following? <sup>a</sup>	Percentage "disapproving" <sup>b</sup>															'03-'04 change
	12th Graders															
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Try marijuana once or twice	67.8	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	-0.7
Smoke marijuana occasionally	80.5	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	+1.2
Smoke marijuana regularly	91.0	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	+2.1
Try LSD once or twice	89.8	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	+2.4 s
Take LSD regularly	96.3	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	+0.2
Try MDMA (ecstasy) once or twice	—	—	—	—	—	—	—	82.2	82.5	82.1	81.0	79.5	83.6	84.7	87.7	+3.0 s
Try cocaine once or twice	91.5	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	-0.8
Take cocaine regularly	96.7	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	-0.4
Try crack once or twice	92.3	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	+0.2
Take crack occasionally	94.3	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	+1.3
Take crack regularly	94.9	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	+1.8
Try cocaine powder once or twice	87.9	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	-1.4
Take cocaine powder occasionally	92.1	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	+1.1
Take cocaine powder regularly	93.7	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	+1.9
Try heroin once or twice	95.1	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	+0.1
Take heroin occasionally	96.7	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	+0.4
Take heroin regularly	97.5	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	+0.1
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	+0.9
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	+0.9
Try amphetamines once or twice	85.3	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	-1.7
Take amphetamines regularly	95.5	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	0.0
Try barbiturates once or twice <sup>c</sup>	90.5	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	—
Take barbiturates regularly <sup>c</sup>	96.4	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	—
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	29.4	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	-1.2
Take one or two drinks nearly every day	77.9	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	+0.6
Take four or five drinks nearly every day	91.9	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	+1.5
Have five or more drinks once or twice each weekend	68.9	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	+1.5
Smoke one or more packs of cigarettes per day	72.8	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	+1.5
Take steroids	90.8	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	+1.9
	<i>Approx. N =</i>	2566	2547	2645	2723	2588	2603	2399	2601	2545	2310	2150	2144	2160	2442	2455

<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>													'03-'04 change
	<u>8th Graders</u>													
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
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	-3.8 sss
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	-1.7 s
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	-2.3 s
MDMA (ecstasy) <sup>b</sup>	—	—	—	—	—	—	—	—	—	23.8	22.8	21.6	16.6	-5.0 sss
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	-1.9 s
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	-2.1 ss
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	-1.5 s
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	-2.6 ss
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	-2.5 ss
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	-2.2 s
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	-1.4
Tranquilizers	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	-1.5 s
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	-2.1 ss
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	-2.8 sss
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	-2.1 ss
	<i>Approx. N = 8355 16775 16119 15496 16318 16482 16208 15397 15180 14804 13972 15583 15944</i>													

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.

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

<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**

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>													'03-'04 change
	10th Graders													
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
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	-0.5
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	-1.5
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	-1.4
MDMA (ecstasy) <sup>b</sup>	—	—	—	—	—	—	—	—	—	41.4	41.0	36.3	31.2	-5.1 sss
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	+1.1
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	+1.5
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	-0.1
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	-0.4
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	-0.4
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	+0.5
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	+1.2
Tranquilizers	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	0.0
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	+0.9
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	+0.7
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	-1.0
	Approx. N = 7014 14652 15192 16209 14887 14856 14423 13112 13690 13518 13694 15255 15806													

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.

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

<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>															
	<u>12th Graders</u>															
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	
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	
Amyl/butyl nitrites	—	—	—	—	—	—	—	—	—	—	—	—	23.9	25.9	26.8	
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	
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	
PCP	—	—	—	—	—	—	—	—	—	—	—	—	22.8	24.9	28.9	
MDMA (ecstasy)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.7	
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	
Crack	—	—	—	—	—	—	—	—	—	—	—	—	41.1	42.1	47.0	
Cocaine powder	—	—	—	—	—	—	—	—	—	—	—	—	52.9	50.3	53.7	
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	
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	
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	
Crystal meth. (ice)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	
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	
Alcohol	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Approx. N =	2627	2865	3065	3598	3172	3240	3578	3602	3385	3269	3274	3077	3271	3231	2806



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.

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

<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**

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>															'03-'04 change
	12th Graders															
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
Marijuana	84.4	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	-1.3
Amyl/butyl nitrites	24.4	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	+0.4
LSD	40.7	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	-0.6
Some other psychedelic/hallucinogen <sup>b</sup>	28.3	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	+2.1
PCP	27.7	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	+2.3
MDMA (ecstasy)	22.0	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	-9.6 sss
Cocaine	54.5	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	+4.5 s
Crack	42.4	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	+3.9 s
Cocaine powder	49.0	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	+4.3 s
Heroin	31.9	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	+1.7
Some other narcotic (including methadone)	38.1	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	+0.8
Amphetamines	59.7	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	+0.4
Crystal meth. (ice)	24.1	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	+0.6
Barbiturates <sup>c</sup>	45.9	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	—
Tranquillizers	44.7	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	+0.3
Alcohol	—	—	—	—	—	—	—	—	—	95.0	94.8	94.3	94.7	94.2	94.2	0.0
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	+1.8
	Approx. N =	2549	2476	2586	2670	2526	2552	2340	2517	2520	2215	2095	2120	2138	2391	2169

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.

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

<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.

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