National Institute on Drug Abuse

Monitoring the Future
National Results on Adolescent Drug Use

Overview
of Key
Findings

2002

MONITORING THE FUTURE

NATIONAL RESULTS ON ADOLESCENT DRUG USE

Overview of Key Findings, 2002

by

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Introduction

Early results from the Monitoring the Future study's 2002 nationwide survey of 8th, 10th, and 12th grade students are presented 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—which this study has shown to be particularly important in explaining trends in use— are also presented, as are trends in perceived availability of each drug.

Monitoring the Future (MTF), begun in 1975, is a long-term study of American adolescents, college students, and adults through age 40. 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 methods used and an overview of the key results from the 2002 survey. This general synopsis is followed by a section for each individual drug class, providing graphs that show trends in the overall proportions of students at each grade level (a) reporting use, (b) seeing a "great risk" associated with its use, (c) disapproving its use and, finally, (d) saying that they could get the drug "fairly easily" or "very easily." The trends are presented for the interval 1991-2002 for all grades and for 1975-2002 for the 12th graders.

The tables at the end of this report provide the statistics underlying the graphs; in addition they present data on lifetime, 30-day, and (for selected drugs) daily prevalence.[1] They present these prevalence statistics only for the 1991-2002 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 2001-2002 are statistically significant.

A more extensive analysis of the study's findings on secondary school students may be found in a volume to be published later in 2003.[2] The volumes in this series also contain a more complete description of the study's methodology as well as an appendix on how to test the significance of differences between groups or for the same group 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 young adults are not covered in this early *Overview* report because the 2002 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.[3] 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*. 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*.

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[1]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.

[2]The most recent publication in this series is: Johnston, L. D., O'Malley, P. M., and Bachman, J. G. (2002). *Monitoring the Future national survey results on drug use, 1975-2001: Volume I, Secondary school students.* (NIH Publication No. 02-5106). Bethesda, MD: National Institute on Drug Abuse.

[3]The most recent in this series is: Johnston, L. D., O'Malley, P. M., and Bachman, J. G. (2002). *Monitoring the Future national survey results on drug use, 1975-2001: Volume II, College students and adults ages 19-40.* (NIH Publication No. 02-5107). Bethesda, MD: National Institute on Drug Abuse. It may be ordered from the National Clearinghouse for Alcohol and Drug Information; or it may be viewed on the study's Web site at www.monitoringthefuture.org.

Study Design and Methods

At the core of *Monitoring the Future* is a series of large, annual surveys of nationally representative samples of 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.

Sample Sizes

The 2002 sample sizes were 15,100, 14,300, and 12,900 in 8th, 10th, and 12th grades, respectively. In all, about 43,700 students in 394 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 volume 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 sub-sample 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, 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. Another 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

The surveys of 8th, 10th, and 12th grade students in the United States conducted in 2002 generated a more positive picture than has been seen in recent years. Quite a number of illicit drugs showed broad declines, most notably ecstasy for the first time; cigarettte smoking dropped sharply in all grades; and drinking alcohol and getting drunk were down in all grades.

Drugs Decreasing in Use

The declines in use this year were broad with only two of the many classes of drugs showing any sign of further increase in use. Of the illicit drugs, perhaps the most significant change in 2002 was the drop for the first time in recent years in the use of **ecstasy** in all three grades. 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) in the level of risk attributed to ecstasy use. Based on that change, we predicted a turnaround in actual use this year, which in fact came to pass. Perceived risk increased again in 2002 as use began to fall. Because ecstasy was still diffusing to new communities in 2001, we believed that the impact of the rise in perceived risk had not yet become visible. In 2002, despite even further diffusion of the drug to a larger proportion of all schools in the national samples, annual prevalence dropped on the order of 20% in all three grades. Use is down in all three prevalence periods measured (lifetime, annual, and 30-day) at all three grade levels. Disapproval of ecstasy use rose sharply in all three grades in 2002, indicating that peer norms against use of this drug were strengthening. Availability of ecstasy leveled off in 2002, following several years of very sharp increases.

Over the past several 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 prevalence in all three prevalence periods, with the declines in annual prevalence being significant in grades 8 and 10. **Marijuana** also showed some decline in all prevalence periods for all three grades, though only the 10th grade declines in annual and 30-day

prevalence reached statistical significance. Neither perceived risk nor disapproval moved in the way that would normally be expected if use is declining. That suggests that some other factor is causing the downturn, perhaps a reduced motivation to use this drug. There was some decline in perceived availability.

There were significant declines in the proportions of students in 8th and 10th grade who reported using **any illicit drug other than marijuana** in the prior 12 months, and even some nonsignificant decline in 12th grade. Some drugs in this class continued longer term declines. For example, the use of **LSD** declined sharply and significantly in 2002, continuing a decline that began in 1996. Risk and disapproval have generally not been moving in ways that would explain the substantial decline in this drug, suggesting the possibility that some displacement may have occurred from the growing ecstasy use, although that interpretation would not fit the changes observed in 2002 specifically.

Hallucinogens other than LSD (the most common of which is psilocybin mushrooms or "shrooms") showed modest declines in 2002 in all three grade levels in both lifetime and annual prevalence, though none of these reached statistical significance. This again continued a gradual decline that began some years earlier in this class of drugs. Volatile **inhalants** also continued a longer term decline this year, with annual use among 8th graders now down by 40% from the peak rates observed in the mid-1990s. The turnaround in inhalant use and in attitudes about the hazards associated with using it corresponded in time to when the Partnership for a Drug-Free America launched an anti-inhalant ad campaign.

Amphetamine use declined in 2002 in both 8th and 10th grades. This represents the continuation of a decline among 8th graders and the first such decline among 10th graders. Use among 12th graders remains at peak levels for recent years. **Methamphetamine** use continued a longer-term decline among 8th graders but remained relatively stable in the upper grades following some decline in those grades in the two prior years.

Drugs Holding Steady

Several classes of drugs held fairly steady in 2002, including **heroin**, **narcotics other than heroin**, and **cocaine**. (Crack cocaine was steady for the most part, though there was a small, albeit significant increase in 10th grade for annual use.) The use of anabolic **steroids** also held steady, though at historically high levels, following sharp increases in the several years prior.

By 2001 **heroin** had finally fallen below its recent peak levels in all three grades. In 2002 use held steady, including use with and without a needle. The annual prevalence of **narcotics other than heroin**, which is reported only for 12th graders, had nearly doubled between 1992 and 2000, before leveling over the last two years. New questions about specific drugs in this class, **Oxycontin** and **Vicodin**, were reported in 2002 for the first time. The results may be found in the tables reporting annual prevalence at the end of this report.

Cocaine use held steady in 2002 at levels somewhat below recent peaks and far below the levels attained in the mid-1980s.

Drugs Increasing in Use

With the turnaround in ecstasy use this year, there is rather little remaining evidence of increases in illicit drug use among adolescents. The only two classes of drugs showing any sign of further increase—and then among the 12th graders only—were **tranquilizers** and **barbiturates**. The annual prevalence of these two classes of drugs did continue to rise modestly among 12th graders, continuing fairly steady increases that began in the early 1990s.

Implications for Prevention

The wide divergence in the 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 takes only rumor and a few testimonials,

the spread of which has been hastened greatly by the electronic media and the Internet. The latter—the perceived risks—usually take much longer for the evidence (e.g., of 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 have argued that ecstasy was the most recent beneficiary of such a grace period, which lasted until last year, when perceived risk for this drug finally rose sharply.

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

New Drugs Help to Keep the Epidemic Going

Another point well illustrated by this year's results is the continuous flow of new drugs introduced onto the scene or 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 of this 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 coming onto the scene, 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. Efforts by the National Institute on Drug Abuse (NIDA) and others to do just that for ecstasy appear to have paid off.

Where Are We Now?

Clearly the problems of substance abuse remain widespread among American young people. Today over half (53%) 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 (32%) have done so as early as 8th grade—when most students are only 13 or 14 years old. Three out of ten (30%) have used some illicit drug *other* than marijuana by the end of 12th grade, and two of those three (21% of all 12th graders) have done so in just the 12 months prior to the survey.

Cigarettes and Alcohol

The statistics for use of the licit drugs, cigarettes and alcohol, are also a basis for considerable concern. More than half (57%) of American young people have tried **cigarettes** by 12th grade, and more than a quarter (27%) of 12th graders are current smokers. Even as early as 8th grade, three in every ten students (31%) have tried cigarettes, and one in nine (11%) already has become a current smoker. Fortunately, we have seen some real improvement in these smoking statistics over the last five or six years, following a dramatic increase in these rates earlier in the 1990s.

Cigarette use reached its recent peak in 1996 at grades 8 and 10, capping a rapid climb of some 50% from the 1991 levels (when data first were gathered on these grades). Since 1996, current

smoking in these grades has fallen off considerably (by 49% and 42%, respectively), including the further decline in 2002. In 12th grade, peak use occurred a year later (1997), from which there has been a more modest decline of 27%. Overall increases in perceived risk and disapproval of smoking appear to be contributing to this downturn. (See the section on cigarettes for more detail.) It seems likely that some of the attitudinal change that we are seeing for cigarettes is attributable to the adverse publicity suffered by the industry in the 1990s, as well as to the reduction in advertising reaching children and the increase in anti-smoking advertising reaching them. But price likely has been a 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 also risen because a number of state legislatures raised cigarette taxes—sometimes in the hope of deterring youth smoking.

Smokeless tobacco use has also been in decline in recent years. Concentrated among males, like steroid use, it has shown fair proportional declines.

Alcohol use remains extremely widespread among today's teenagers. Nearly four out of every five students (78%) have consumed alcohol (more than just a few sips) by the end of high school; and nearly half (47%) have done so by 8th grade. In fact, more than half (62%) of the 12th graders and a fifth (21%) of the 8th graders in 2002 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—but 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 drugs began to turn around, and in 2002 a drop in drinking and drunkenness began to show up in all grades.

We begin by considering the proportions of American adolescents who use *any* illicit drug, regardless of type. *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."[4] In this section we discuss only the first two; the statistics for the third 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 achieved extraordinary levels of illicit drug use, either by historical comparisons in this country or by international comparisons with other countries. The trends in lifetime use of **any illicit drug** are given in the first panel on the facing page.[5] 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. Today, the proportion is at 53%, after a period of considerable rise in the 1990s. 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

there has been little further decline since 1998 for 12th graders. However, both 8th and 10th graders' annual use did decrease significantly in 2002.

Because marijuana is so 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, showing 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 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.[6]) 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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[4] Footnote 1 to Tables 1 through 3 provides the exact definition of "any illicit drug."

[5] 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.

[6] 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, which slightly raised the reported prevalence of use.

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

% who used any illicit drug in lifetime
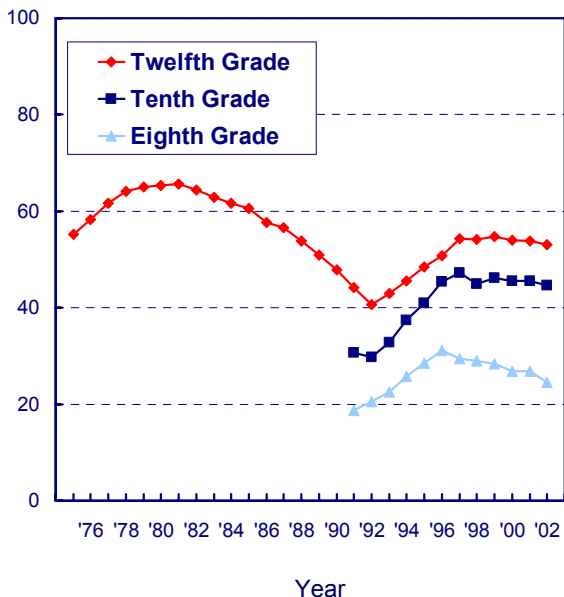
% who used any illicit drug in last 12 months
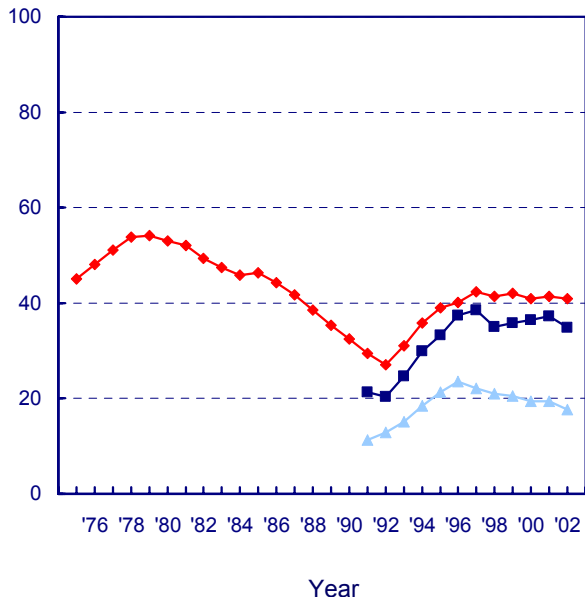
% who used any illicit drug other than marijuana in lifetime*
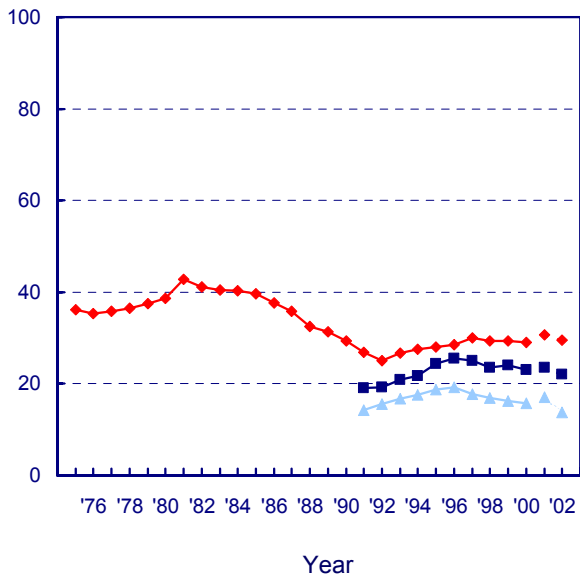
% who used any illicit drug other than marijuana in last 12 months*
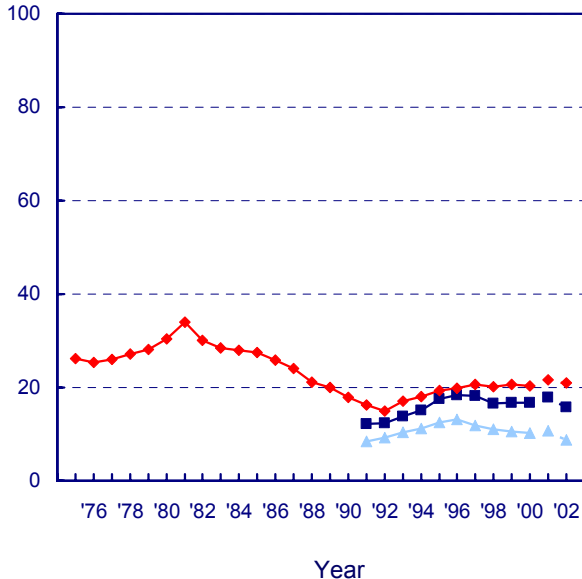
*Beginning in 2001, revised sets of questions on other hallucinogen and tranquilizer use were introduced. Data for "any illicit other than marijuana" are affected by these changes. The dotted lines connect percentages that are based on data from the revised questions.

Marijuana has been the most widely used illicit drug for the 27 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 use 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. There has been some very modest decline since those peak levels, including a continuing gradual decline among 8th graders, a significant decrease among 10th graders in 2002, and a very slight decline in 12th grade.

Perceived Risk

The amount of risk associated with using marijuana fell during the earlier period of increased use and again during the more recent resurgence of 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, perceived risk proved a leading indicator of change

in use. However, in the last one or two years it has *declined* some in all grades as 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, respectively, who said they disapproved of trying marijuana once or twice fell by 17, 21, and 19 percentage points over those intervals of decline. Since then there has been some modest increase in disapproval among 8th graders but not much among 12th graders. Disapproval for 10th graders increased significantly in 2002.

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 2002 nearly half of all 8th graders (47%) and more than three-quarters of all 10th graders (76%) reported it as being accessible. This compares to 89% 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 shown some falloff since, particularly in 8th grade. Availability peaked a bit later for 12th graders. There was some decline in availability in 2002 in all three grades.

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

Use
% who used in last 12 months

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade
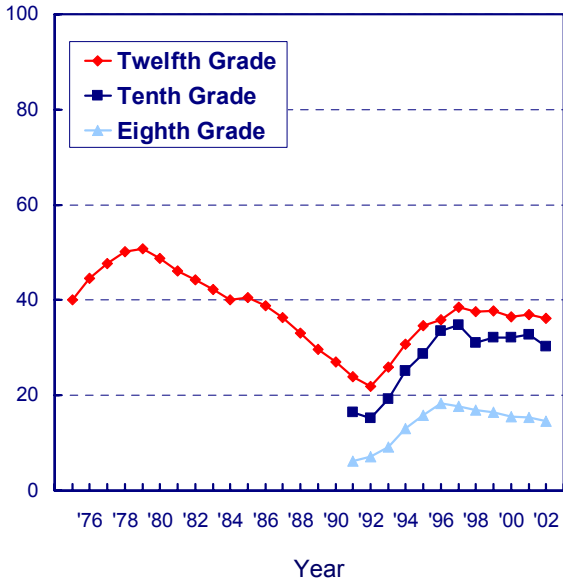
Risk
% seeing "great risk" in using regularly
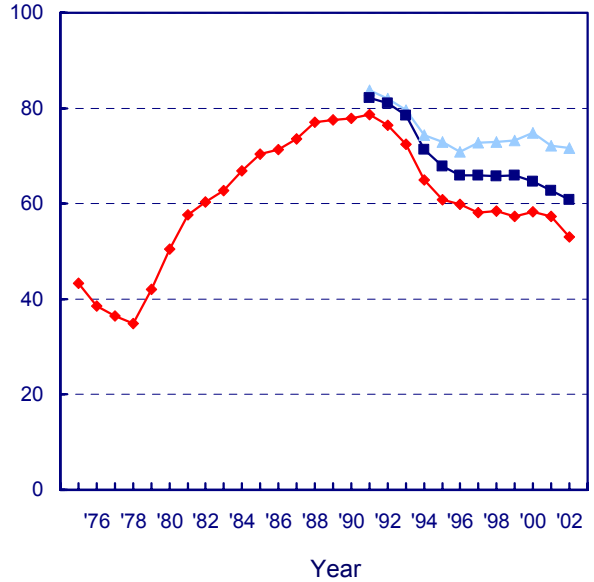
Disapproval
% disapproving of using regularly

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

9
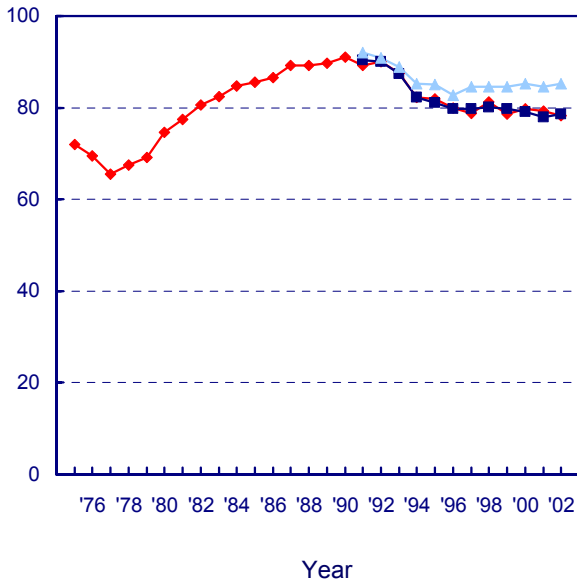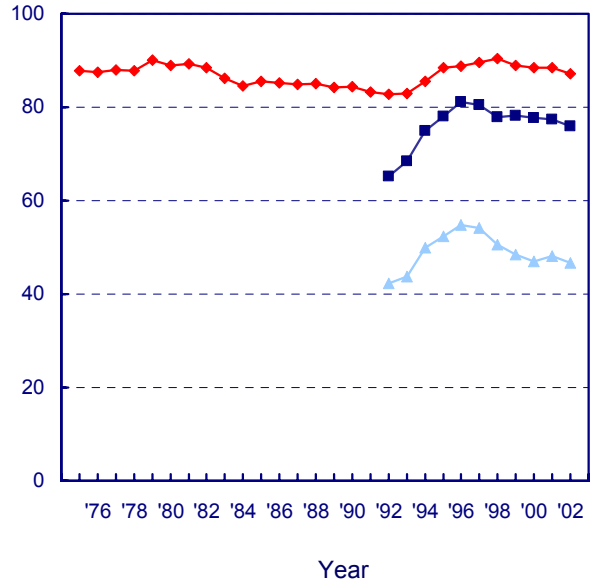
Inhalants

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 such things as airplane 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 youngsters 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 no doubt 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 the time data were first gathered on them, 1991, through 1995 and also rose among 12th graders from 1992 to 1995. All grades exhibited a fairly steady decline in use through 2002, though that decline appeared to end in 2002 among 12th graders.

Perceived Risk

Only 8th and 10th graders have been asked questions about the degree of risk they associate with inhalant use. Relatively low proportions of them think that there is a "great risk" in using an inhalant once or twice, although there was an upward shift in this belief between 1995 and 1996, and again in 2001 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 turnaround in use after that point.

Disapproval

Quite high proportions of students say they would disapprove of even trying an inhalant. There has been a very gradual upward drift in this attitude since 1995.

Availability

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

Inhalants: Trends in Annual Use, Risk, and Disapproval
Eighth, Tenth, and Twelfth Graders
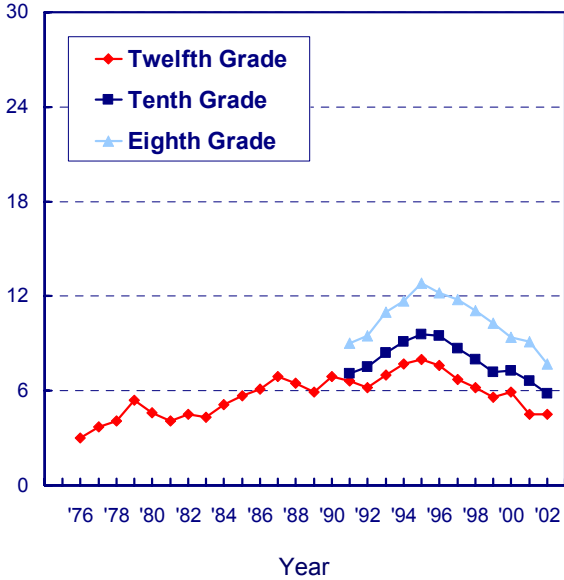
Use
% who used in last 12 months

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade

X-axis: Year ('76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02)
Y-axis: 0 to 30

Risk
% seeing "great risk" in using once or twice

X-axis: Year ('76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02)
Y-axis: 0 to 100

Disapproval
% disapproving of using once or twice

X-axis: Year ('76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02)
Y-axis: 0 to 100

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

(no data)

X-axis: Year ('76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02)
Y-axis: 0 to 100

11
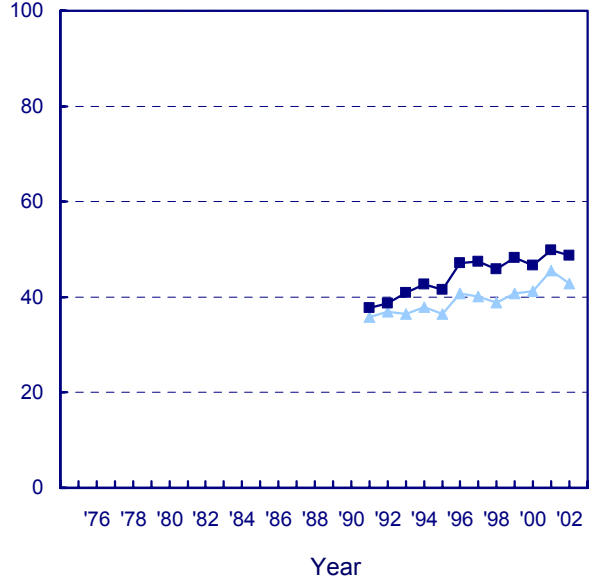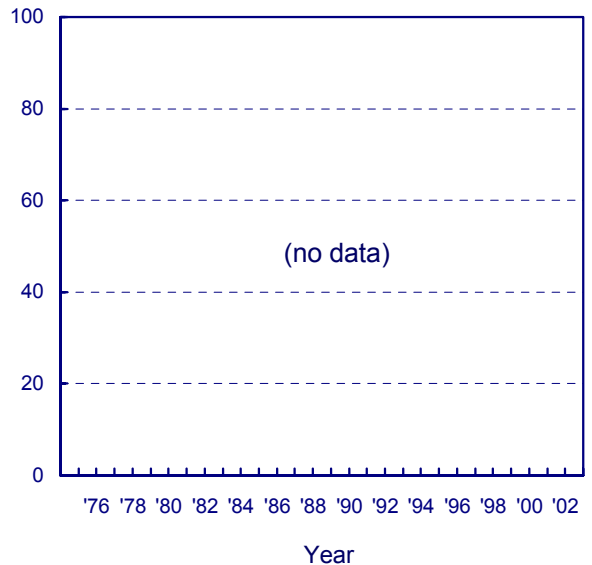
LSD is the most widely used drug within the larger class of drugs known as hallucinogens. Statistics on overall hallucinogen use, and on the use of hallucinogens other than LSD, may be found in the tables at the end of this report.

Trends in Use

The annual prevalence of LSD use has remained below 10% for the last 27 years. Use had 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, use rose in all three grades between 1991 and 1996. After significant declines in all three grades, annual prevalence is now at the lowest point since data collection began (in 1991 for 8th and 10th graders and in 1975 for 12th graders). All grades showed declines in 2002, with a particularly sharp decline in 12th grade.

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 began a substantial decline after 1991, dropping 12 percentage points by 1997, before leveling and then dropping slightly after 1998. From the time that perceived risk was first measured among 8th and 10th graders, in 1993, through 1998, perceived risk fell in both of these grades, as well. 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. The possibility that another drug might have been displacing LSD seems promising, 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 in 2002 and could not account for any displacement that year.

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. Since 1999, disapproval of LSD use has declined some in all three grades, although there was a significant increase in 2002 among 12th graders.

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 falloff in availability in all three grades, particularly 12th grade—quite possibly because fewer students have LSD-using friends through whom they could gain access. In 2002 the decrease in availability was significant in all three grades.

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

Use
% who used in last 12 months

- Twelfth Grade
- Tenth Grade
- Eighth Grade

Year

Risk
% seeing "great risk" in using once or twice

Year

Disapproval
% disapproving of using once or twice

Year

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

Year

13
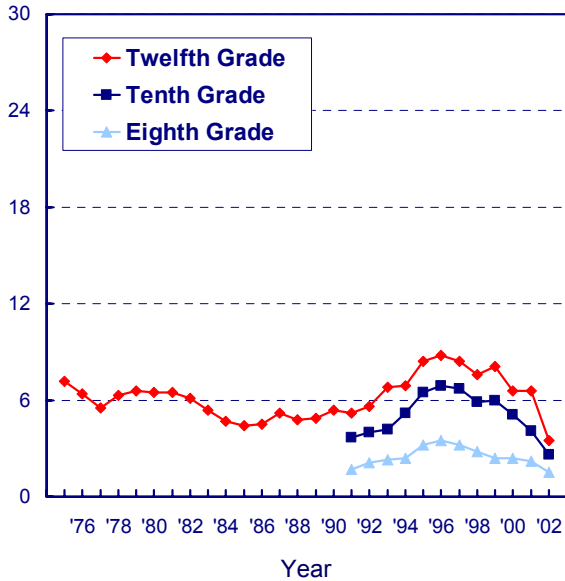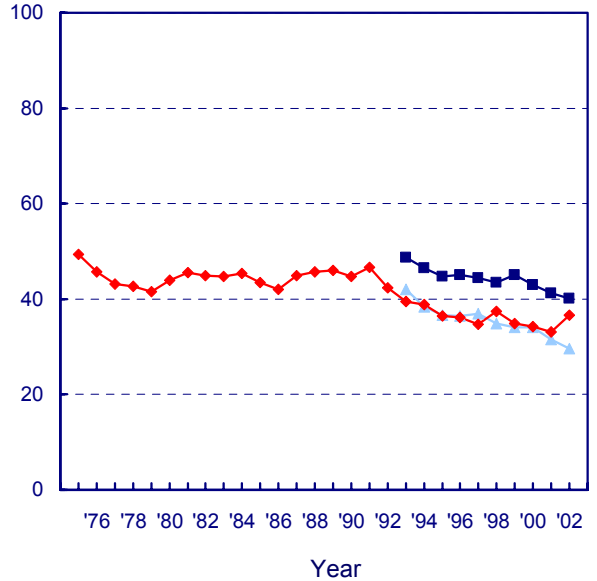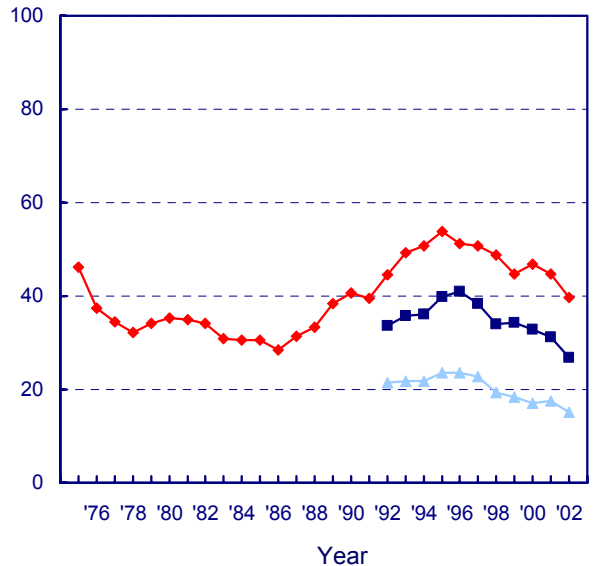
Cocaine

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 crack is discussed 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 4.8% by 2001, about where it remained in 2002. 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 all grades but the decline halted in 2002 for 10th and 12th graders.

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, no matter how healthy the individual, was dangerous. Perceived risk continued to rise through 1990, as the fall in use continued. Perceived risk began to decline after 1991, and use began a long rise a year later. 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 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, increased further to 59% by 1989 (in a period of rapidly *declining* use), fell back to about 49% by 1993, and rose to 51% in 1998 before dropping back again to 45% in 2002. Note that the pattern of change does not map all that well onto the patterns of change in actual use, suggesting that changes in overall availability may not have been a major determinant of use—particularly of 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

Legend:
- Twelfth Grade
- Tenth Grade
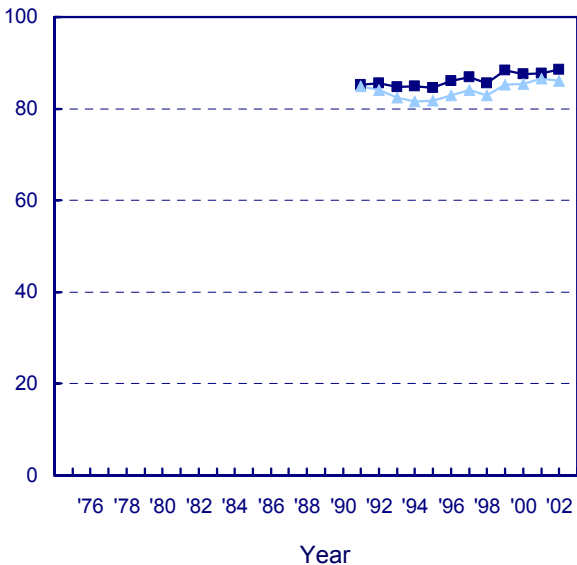- Eighth Grade

Year

Risk
% seeing "great risk" in using once or twice

Year

Disapproval
% disapproving of using once or twice

Year

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

Year

15
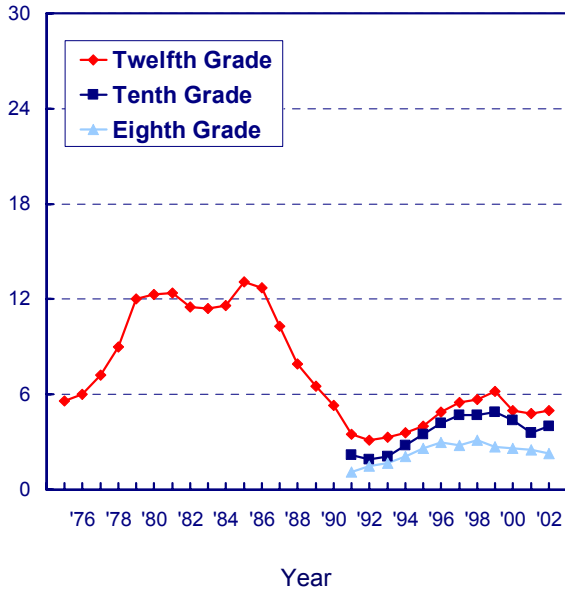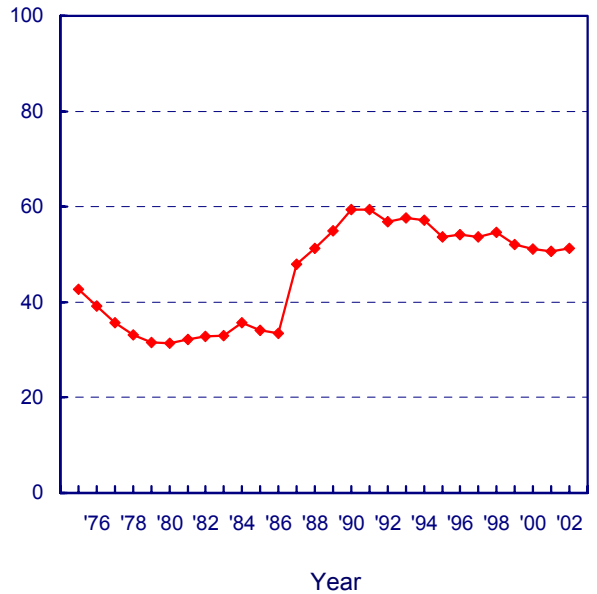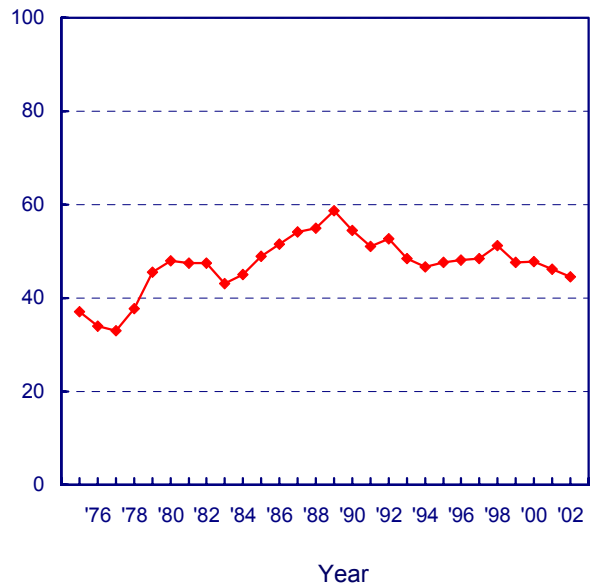
Crack Cocaine

Several indirect indicators in the study suggested that crack use grew rapidly in the period 1983-1986, starting 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 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. In 1999, crack use finally started to drop in 8th and 10th grades although there was a significant increase in use in 2002 among 10th graders. The recent peak in 12th grade was reached in 1999 (2.7%), but there was a significant drop to 2.1% by 2001.

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 remained relatively stable across the interval for which data are available, as the fourth panel on the facing page illustrates. In 1987 some 41% of 12th graders said it would be fairly easy for them to get crack if they wanted some, and there has been little change since. Eighth and tenth graders, however, did report some modest increase in availability in the early 1990s, followed by a slow, steady decrease after 1995 in 8th grade and a sharper drop after 1999 in 10th.

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 charts on the facing page begin their trend lines when these distinctions were introduced for the different types of measures. Charts 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, 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 12 months

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade
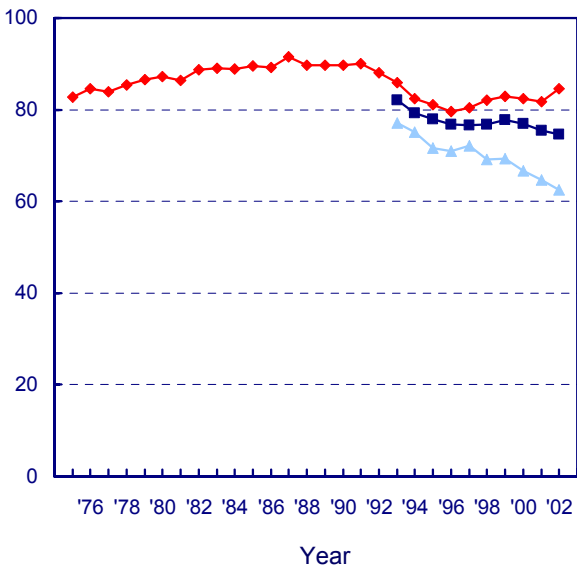
Year

Risk
% seeing "great risk" in using once or twice

Year

Disapproval
% disapproving of using once or twice

Year

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

Year

17
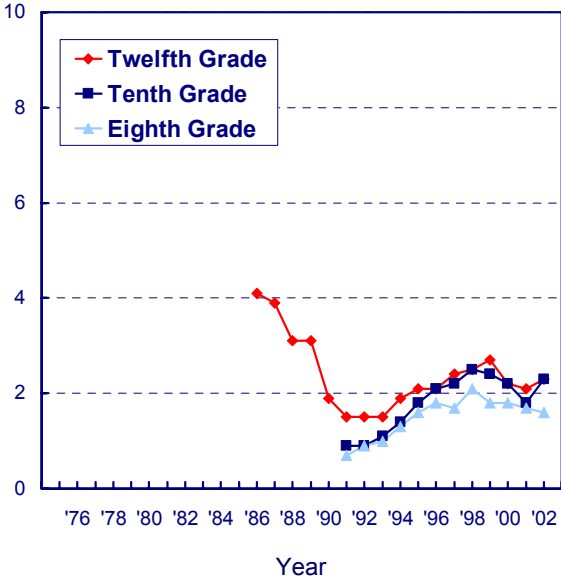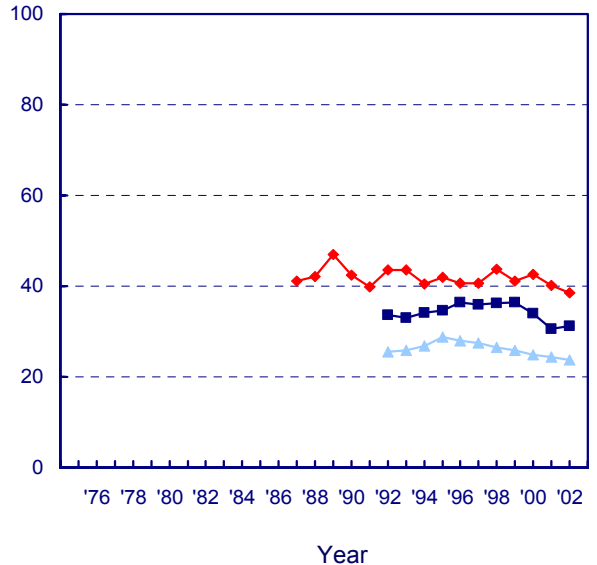
Amphetamines

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

Trends in Use

The use of amphetamines rose in the last half of the 1970s, reaching a peak in 1981—two years after marijuana use peaked. We believe that the usage rate reached in 1981 (annual prevalence of 26%) may have been an exaggeration of true amphetamine use, because "look-alikes" were in common use at that time. After 1981 a long and steady decline in use by 12th graders began and 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 the 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 significantly in 8th grade, modestly in 10th before leveling, and not at all in 12th.

Perceived Risk

Only 12th graders are asked questions about the amount of risk they associate with amphetamine use or about their disapproval of that behavior. 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. Since 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.

Disapproval

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.

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, followed by some decline in the mid-1990s and stability after 1997. (The 8th graders did show a significant decline in 2002.)

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

Use
% who used in last 12 months

Legend:
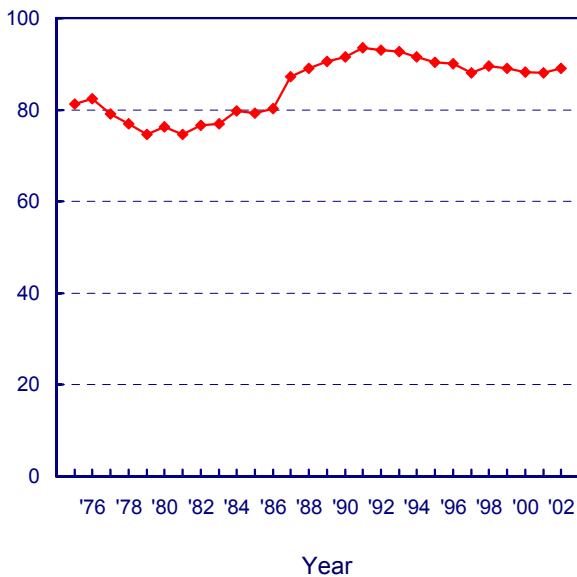- Twelfth Grade
- Tenth Grade
- Eighth Grade

Year

Risk
% seeing "great risk" in using once or twice

Year

Disapproval
% disapproving of using once or twice

Year

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

Year

19
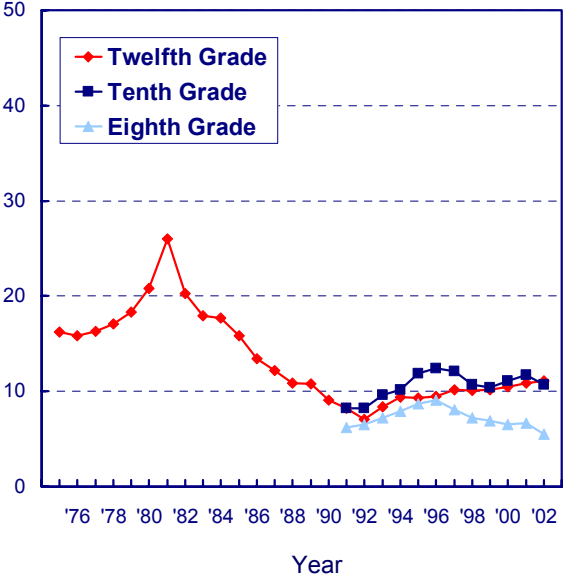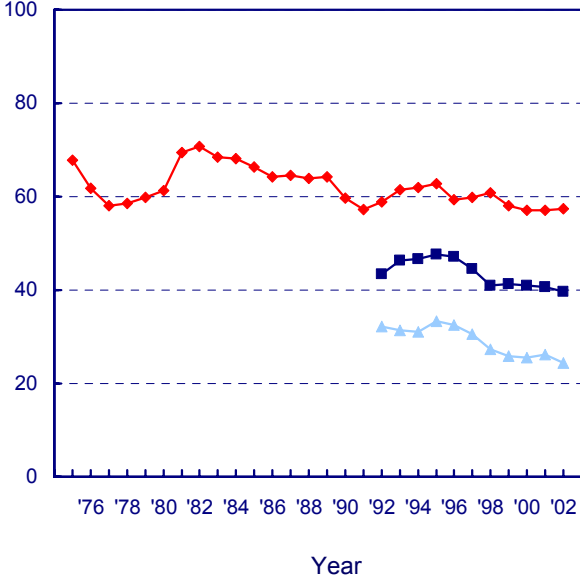
Methamphetamine and Ice

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

Trends in Use

For most of the life of the study the only question about methamphetamine use has been contained in a single 12th grade questionnaire form. Respondents who indicated using *any* type of amphetamines in the prior 12 months were asked in a sequel question to check on a pre-specified 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 to 1.5% in 2001. It was 1.3% in 2002. In other words, it followed a cross-time trajectory very similar to that for amphetamines as a whole.

That questionnaire form also had "crystal meth" added in 1989 as another answer category that could be checked. It showed a level rate of use from 1989 to 1993 (at around 1.1%), followed by a period of increase to 2.5% by 1998 and then a decline to 1.9% in 2000. In 2001 it stood at 2.1%, where it remains in 2002.

In 1990, in the 12th grade questionnaires only, we introduced our usual set of three questions, and 1.3% of 12th graders indicated any crystal methamphetamine ("ice") use in the prior year, a figure which climbed to 3.0% by 1998, followed by a decline to 2.2% by 2000. It was 2.5% in 2001 and 3.0% in 2002. (Note that these prevalence rates for crystal methamphetamine are reasonably close to those derived from the other question procedure, just described.) 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 crystal meth and methamphetamine 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 components of the amphetamines). We think it unlikely that the *shape* of the trend curve was distorted, however.

The newer questions show fairly high levels of methamphetamine use: annual prevalence rates in 2002 of 2.2%, 3.9%, and 3.6% for 8th, 10th, and 12th grades, respectively. Still, these levels are down some from 1999 in all three grade levels (not statistically significant) as can be seen in 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, Disapproval, and Availability
Eighth, Tenth, 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

(no data)

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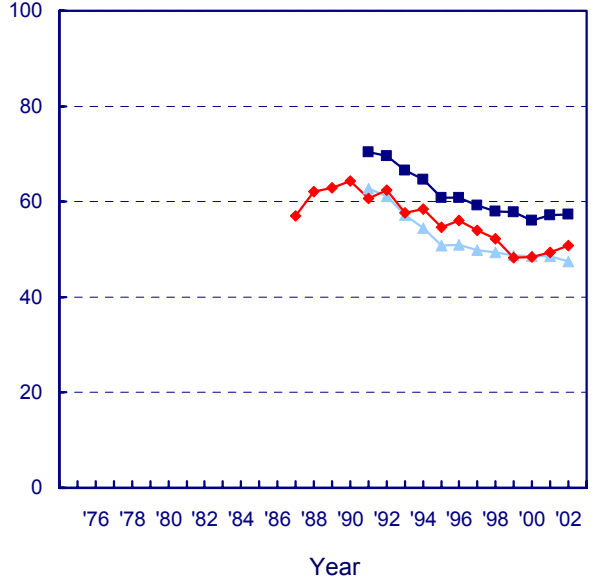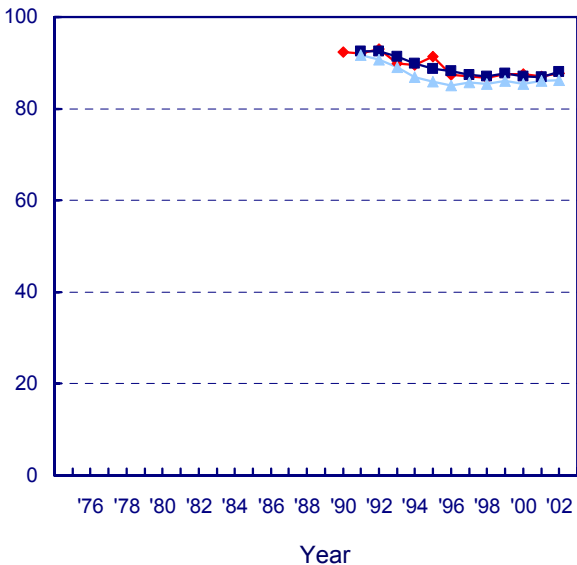### % saying "fairly easy" or "very easy" to get

21
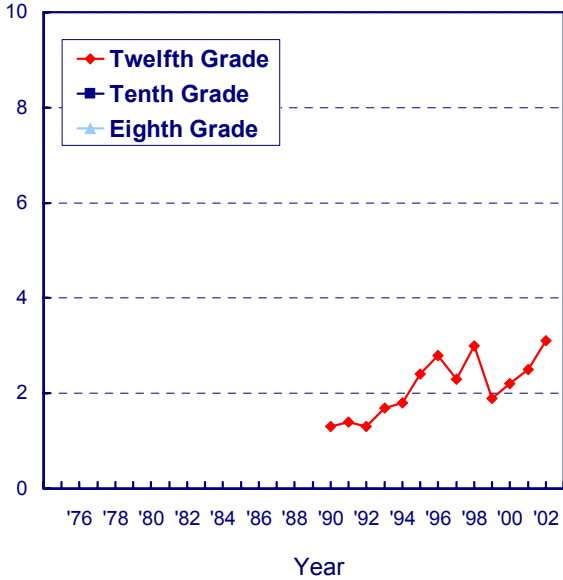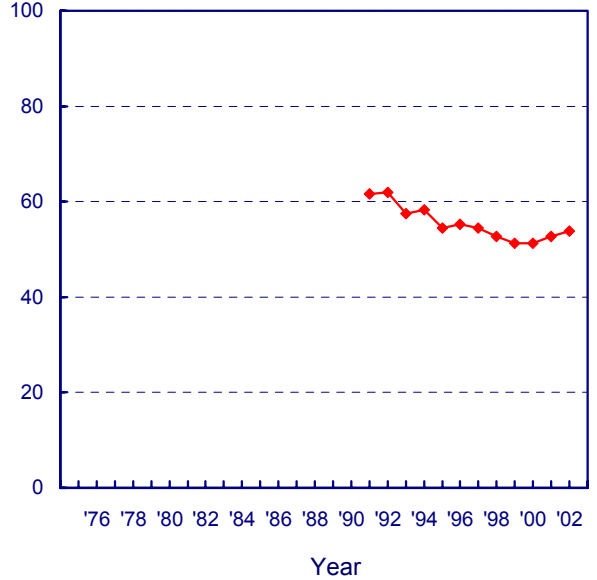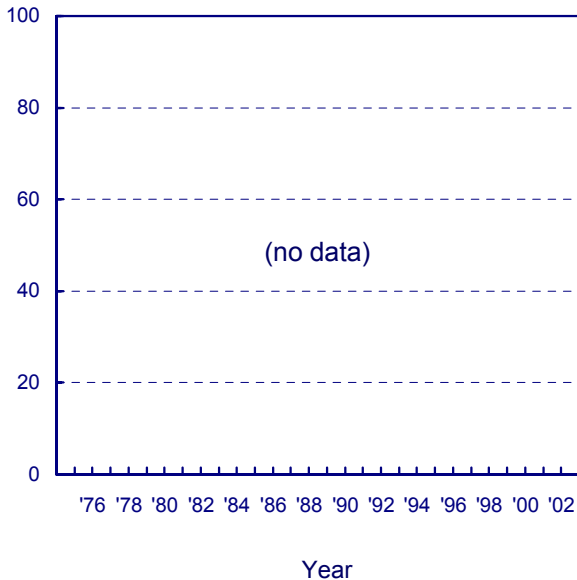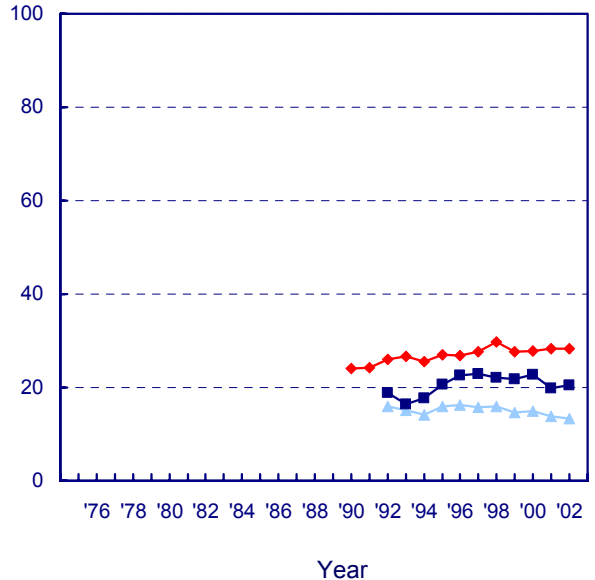
Heroin

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 use without injection 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; but in 2001 annual prevalence declined significantly to 0.9% in both 10th and 12th grades. No significant change was observed in 2002.

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. All of the decrease among 10th and 12th

graders in 2001 was 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 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 35%. At the lower grade levels, reported availability has been lower and has declined some since the mid-1990s. In 2002 heroin availability declined in all grades, although none of these one-year declines reached significance.

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

Use
% who used in last 12 months

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade

Year

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

Year

Disapproval
% disapproving of using once or twice*

Year

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

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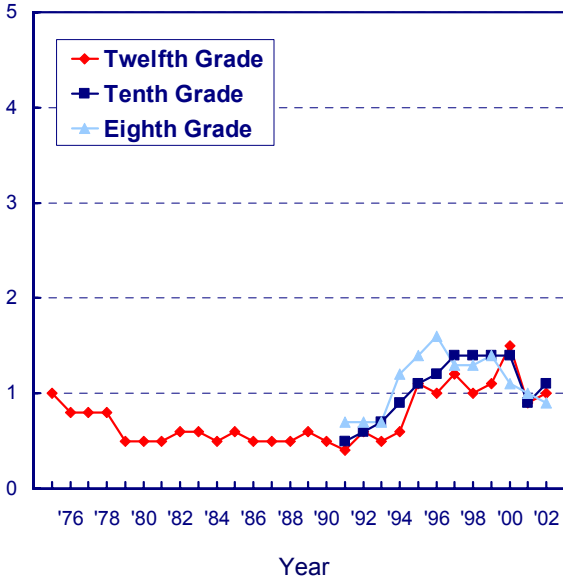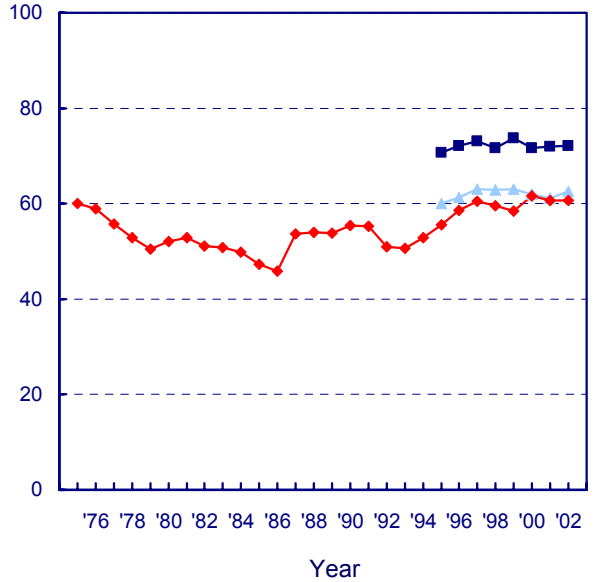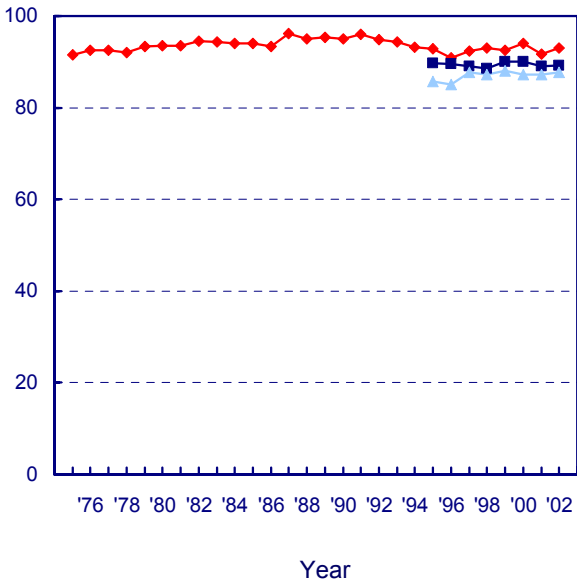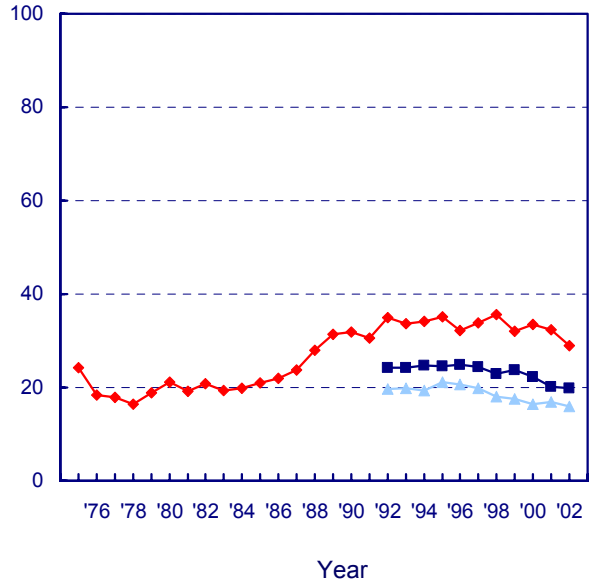
*Prior to 1995, the question asked about heroin use in general. Since 1995, the question has asked about heroin use without a needle.

23

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. Use also has been rising steadily among 10th graders but their use declined some in 2002. Use peaked among 8th graders in 1996 and remains at about the same level in 2002.[7]

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 fell from 72% in 1975 to 33% in 1999, before leveling. Most of that decline occurred before the 1990s, although there was some further drop in the 1990s at all three grade levels, despite the fact that use rose some.

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[7]It should be noted that Xanax was added to the usage question as an example of a tranquilizer in half of the questionnaire forms in 2001 and in all forms in 2002. A comparison of the two half-samples in 2001 showed that the addition of this example increased reported use some over what it was without that example. Therefore, the data in the tables prior to 2001 are not strictly comparable to those presented for 2001 onward.

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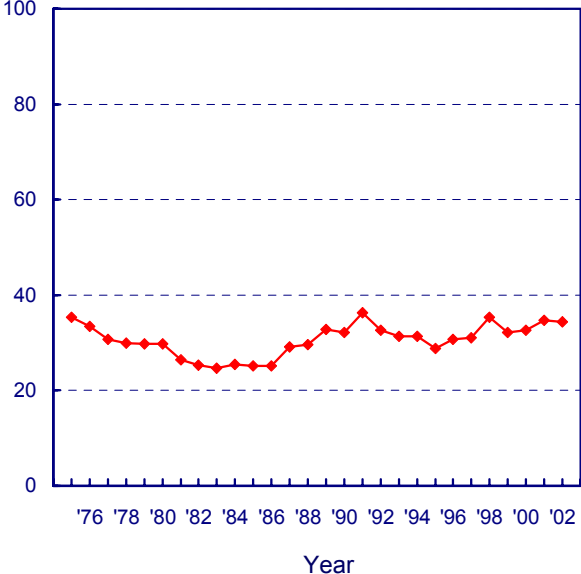## Eighth, Tenth, Twelfth Graders

Use
% who used in last 12 months*
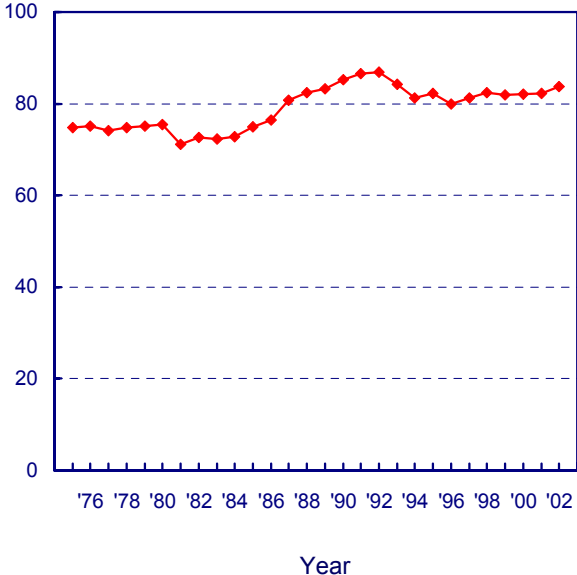

Risk
% seeing "great risk" in using once or twice

(No data)

Disapproval
% disapproving of using once or twice

(No data)
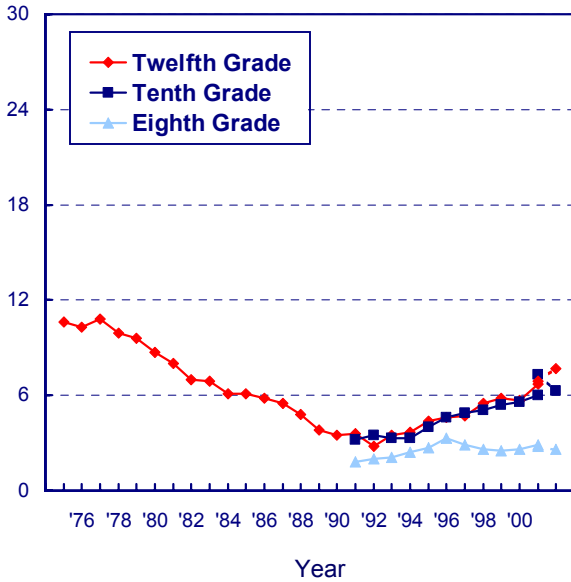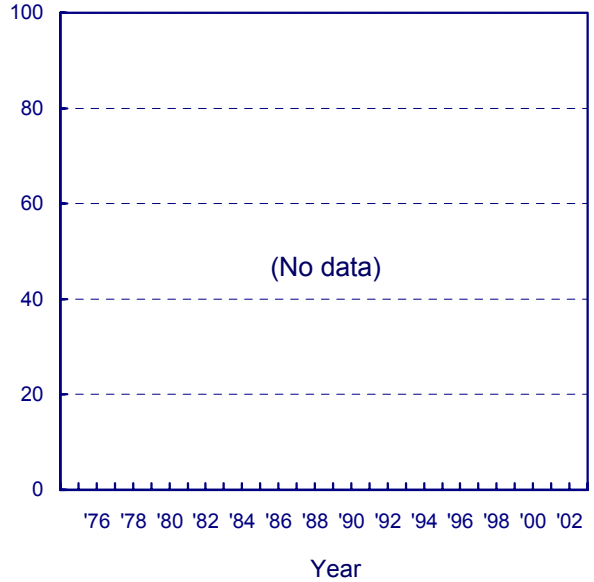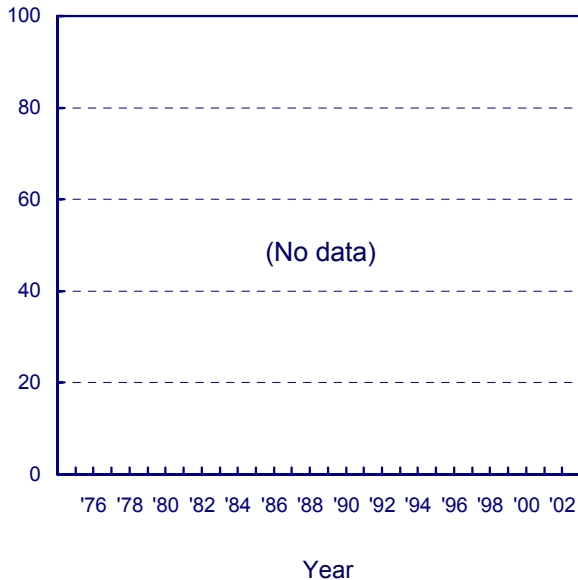
Availability
% saying "fairly easy" or "very easy" to get
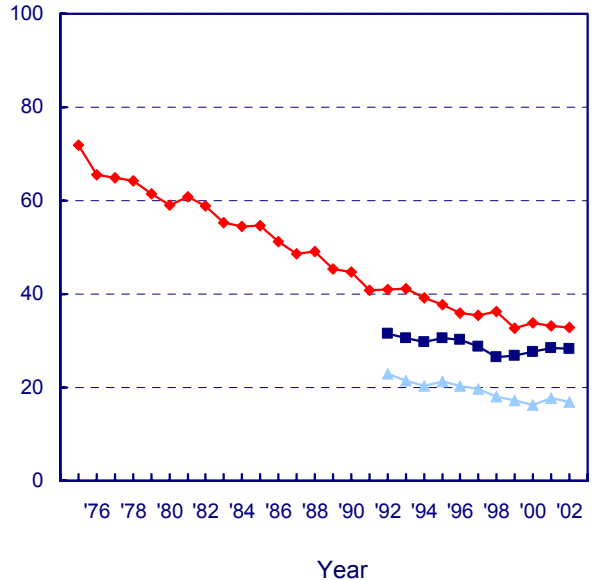
*Beginning in 2001, a revised set of questions on tranquilizer use was introduced, in which "Xanax" replaced "Miltown" in the list of examples. The dotted lines connect percentages that are based on data from the revised questions.

25

Sedatives (Barbiturates)

Like tranquilizers, barbiturate sedatives are prescription-controlled psychotherapeutic drugs that are central nervous system depressants. They are used to assist sleep and to relieve anxiety. Respondents are asked about their use of barbiturate sedatives but may be including other classes of sedatives in their answers. They are 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) by 12th graders fell in popularity rather steadily 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 have shown a gradual resurgence since 1992, reaching 6.7% by 2002.

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 0.9% by 2002.

Perceived Risk

Trying sedatives (barbiturates) was never seen by most students as being 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 then dropped back some through 1995, as use was increasing, and has remained relatively stable since then.

Disapproval

Like many of the illicit drugs other than marijuana, sedatives (barbiturates) have received the disapproval of the great majority of all 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 remains about there in 2002.

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, Twelfth Graders

Use
% who used in last 12 months

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade

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

27
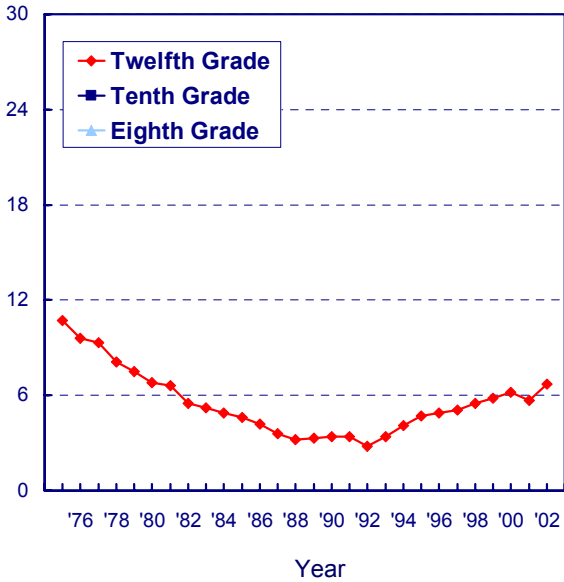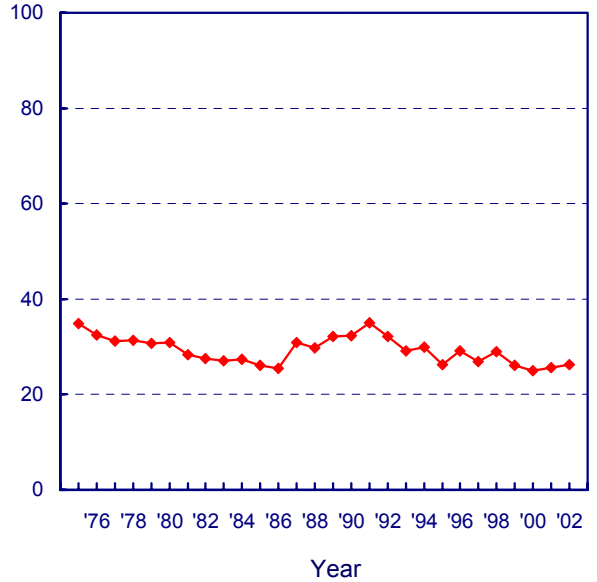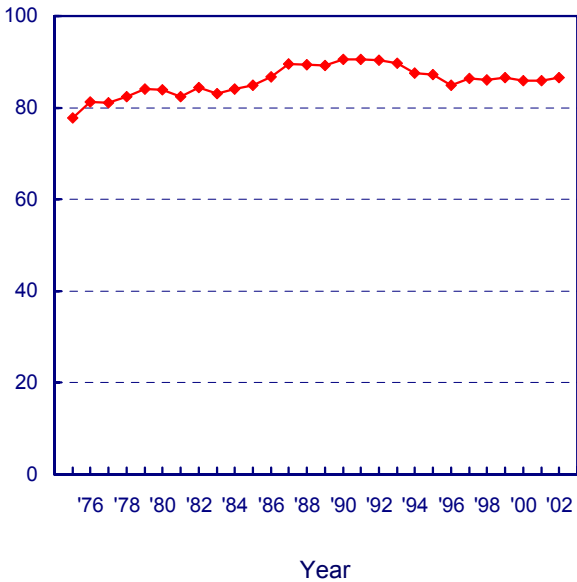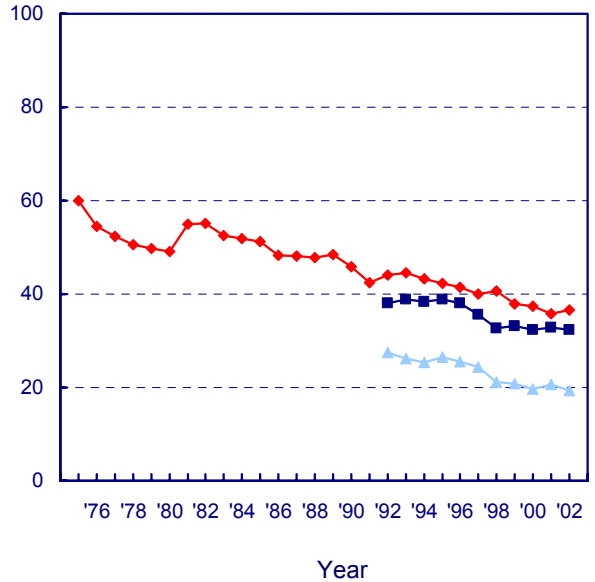
"Club Drugs"—Ecstasy and Rohypnol

There are a number of "club drugs," so labeled because they have been popular at night clubs and "raves." They include LSD, MDMA ("ecstasy"), Rohypnol, methamphetamine, Ketamine ("special K"), and GHB. We deal here primarily with ecstasy, Rohypnol, 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 2002 was 0.8%, 1.4%, and 1.5% in grades 8, 10, and 12. The annual prevalence of **Ketamine** use was 1.3%, 2.2%, and 2.6%. Both have shown little change since they were first measured in 2000 (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. At 8th grade, use 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 1991 in the questionnaires answered by college students and young adults. Their results showed ecstasy use beginning to rise above trace levels in 1995, and continuing to rise at least through 2001 for young adults.) Annual prevalence in 10th and 12th grades in 1996 was 4.6%—actually considerably higher than among

college students and young adults at that point—but 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, although only the 10th grade decreases were significant.[8] The first panel shows that the increase decelerated in 2001 and then reversed in 2002.

Perceived Risk and Disapproval

The charts 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 again rose, by 7 percentage points. This very sharp rise likely explains both the deceleration and the turnaround in use. Disapproval of ecstasy use had been declining slightly since 1998 but increased significantly in all three grades in 2002.

Availability

The charts also show a dramatic rise in 12th graders' perceived availability since 1991—particularly in the years 2000 and 2001. The rise halted in 2002. Special analyses show that this drug was still diffusing to communities in 2001, possibly explaining why use continued to rise that year despite the sharp increase in perceived risk. Despite the fact that diffusion continued into 2002, use declined, almost surely due to the sharp increase in perceived risk.

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[8]The 2000-2001 increases in use were not statistically significant for individual grades but were significant across the three grades combined. Thirty-day prevalence showed a less consistent pattern of change in 2001, reflecting a turnaround in use in 12th grade, which continued in 2002. The 2001-2002 decreases in use were significant for 10th grade only but were significant across the three grades combined.

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

Use
% who used in last 12 months

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade

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

29
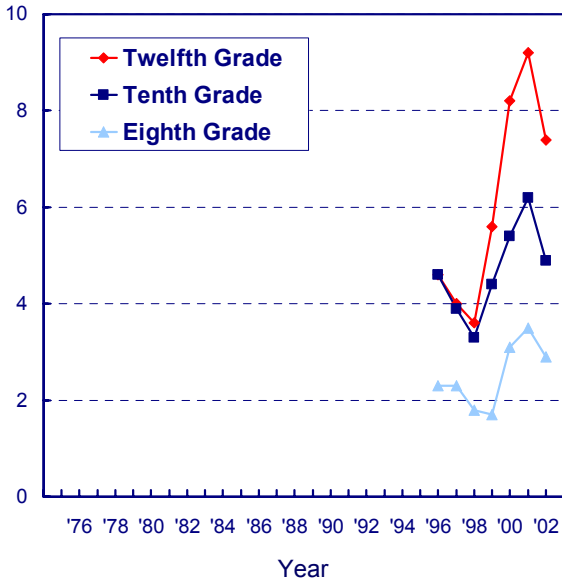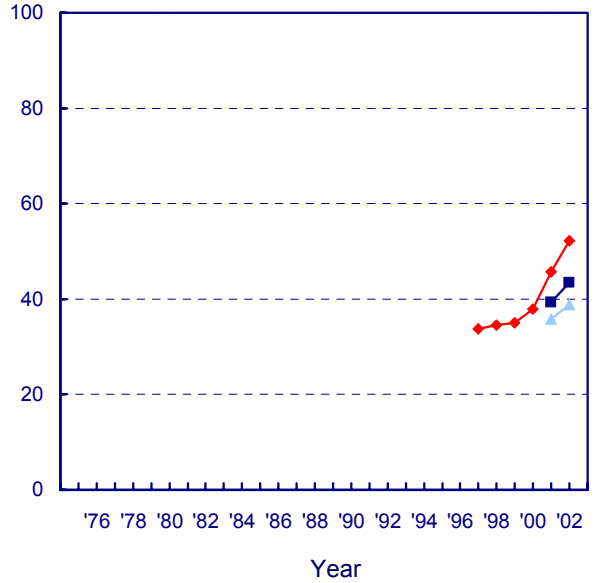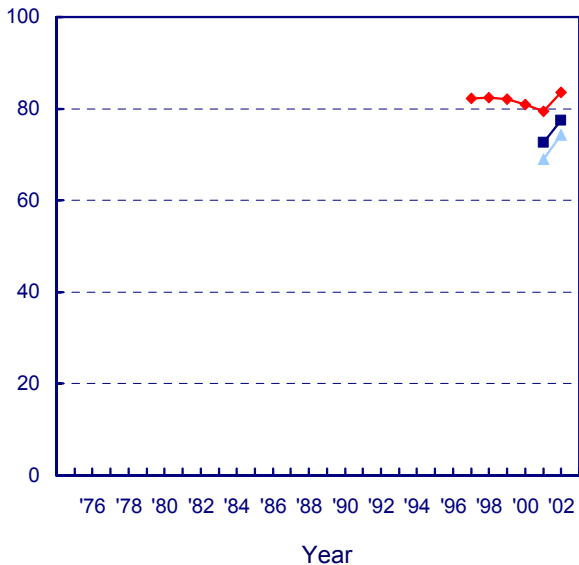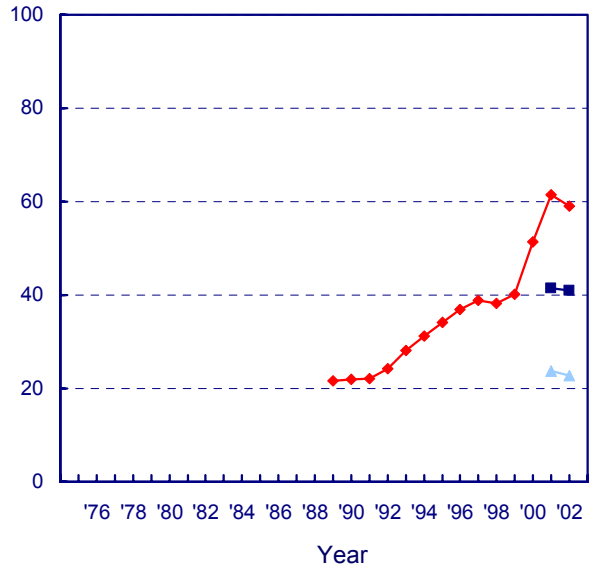
Alcohol

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. In 2002 the proportions of 8th, 10th, and 12th graders who admitted drinking an alcoholic beverage in the 30-day period prior to the survey were 20%, 35%, and 49%, respectively. There are quite a number of usage measures of relevance for alcohol, 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 couple of 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 1998 (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 it dropped appreciably in all three grades (as did self-reported drunkenness).

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

While 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), there was, in fact, a fair-sized increase in this measure 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 42%. With the exception of 2002, these changes track fairly well the changes in actual binge drinking. We believe that the public service advertising campaigns in the 1980s against drunk driving, in general, as well as those that urged use of designated drivers when drinking, may have contributed to the increase in perceived risk of binge drinking. 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 increasingly such drinking (and very likely the drunk-driving behavior often associated with it) became 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. In 2002 disapproval rose as use declined.

Availability

Perceived availability of alcohol, which until 1999 was asked only of 8th and 10th graders, has been very high and mostly steady in the 1990s, although there has been significant decline in 8th grade (particularly) and 10th grade since 1996. For 12th grade, availability has remained at a very high level (about 95%).

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**

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade
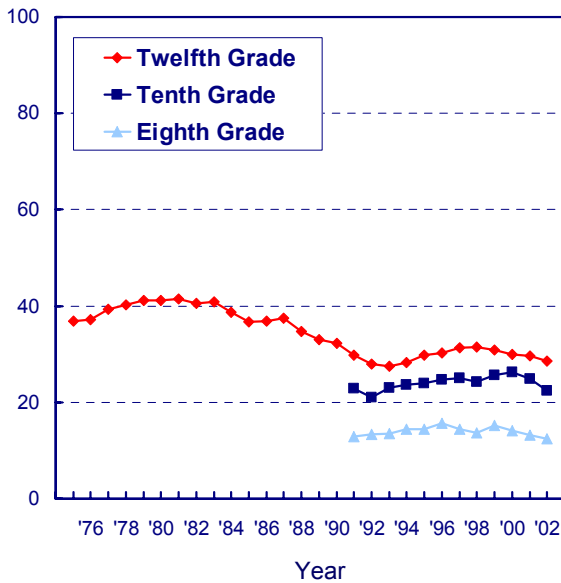
Risk
**% seeing "great risk" in having 5+ drinks in a row
once or twice each weekend**
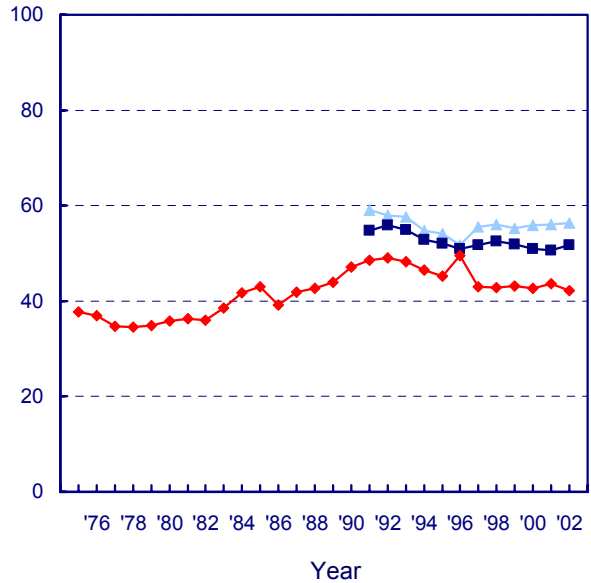
Disapproval
**% disapproving of having 5+ drinks in a row
once or twice each weekend**
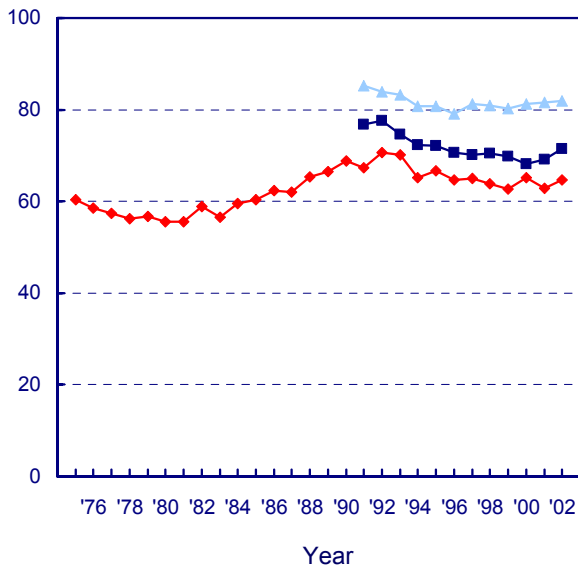
Availability
**% saying "fairly easy" or "very easy"
to get alcohol**

31
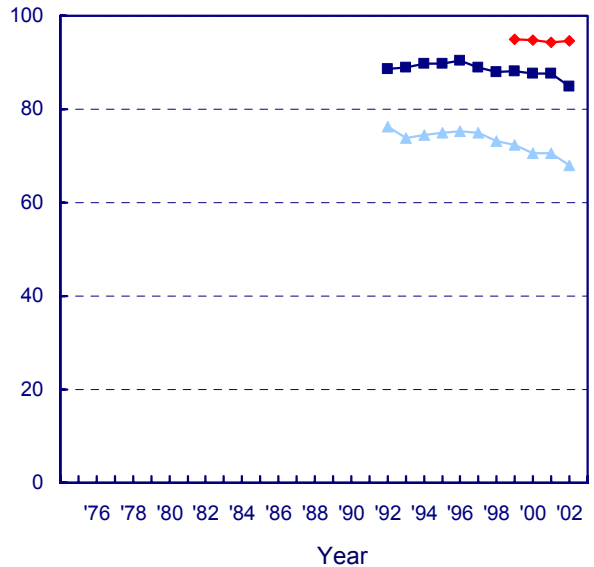
The greatest preventable cause of disease and mortality in the United States is cigarette smoking. At current rates of smoking, this statement surely remains true for these newer cohorts of young people.

Trends in Use

Differences in smoking rates between different birth cohorts (or, in this case, high 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 different grade levels, as earlier changes in adolescent smoking 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 in 2002. Since those peak levels in the mid-1990s, the 30-day prevalence of smoking has declined by 49% in 8th grade, 42% in 10th, and 27% in 12th. (In 2000 a single question was introduced to measure the annual prevalence of "**bidis**," a type of flavored cigarette imported from India. By 2002 *annual* rates for 8th, 10th, and 12th graders were down considerably, to 2.7%, 3.1%, and 5.9%.)

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 efficiently offset the effects 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). 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, a slight 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 has been a steady increase in disapproval in all grades. A number of other attitudes related to smoking have been becoming more negative, as well.

Availability

Availability of cigarettes is reported as very high by 8th and 10th graders. (We do not ask the question of 12th graders, for whom we assumed accessibility to be nearly universal.) Since 1996 availability has been declining, more sharply among the 8th graders. In 2002, availability decreased significantly for both 8th and 10th grades.

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

Use

% who used in past 30 days

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade
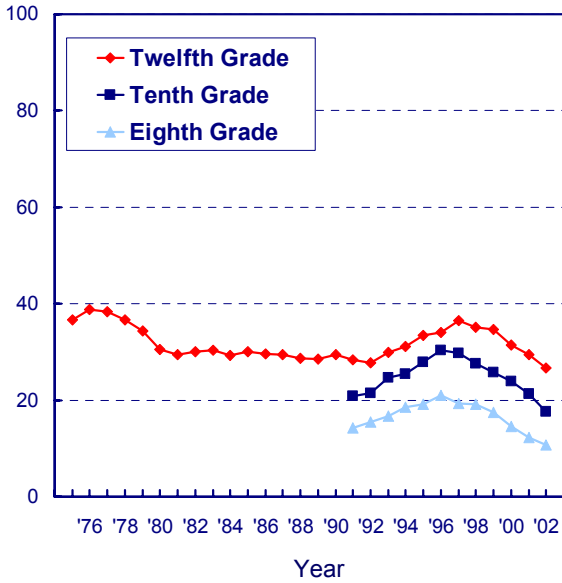
Risk

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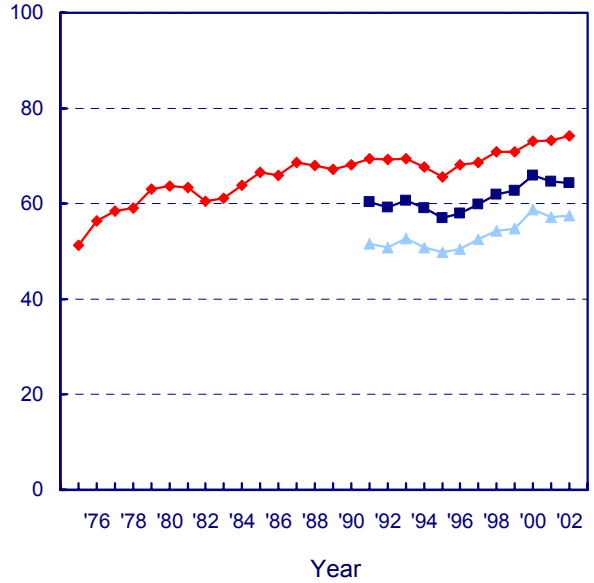
Disapproval

% disapproving of smoking a pack or more per day

Availability

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

33
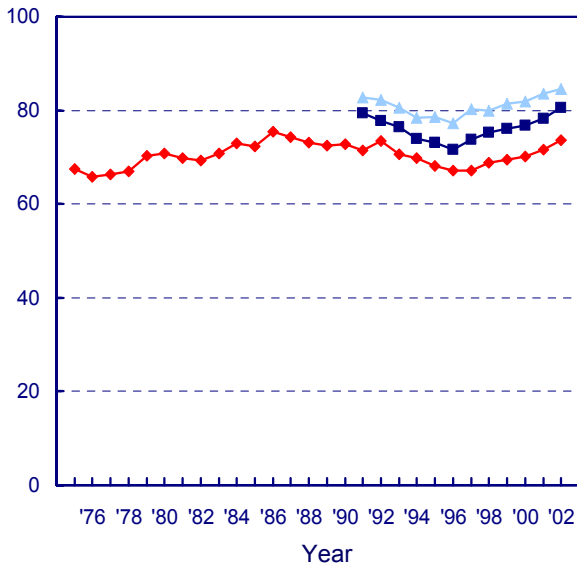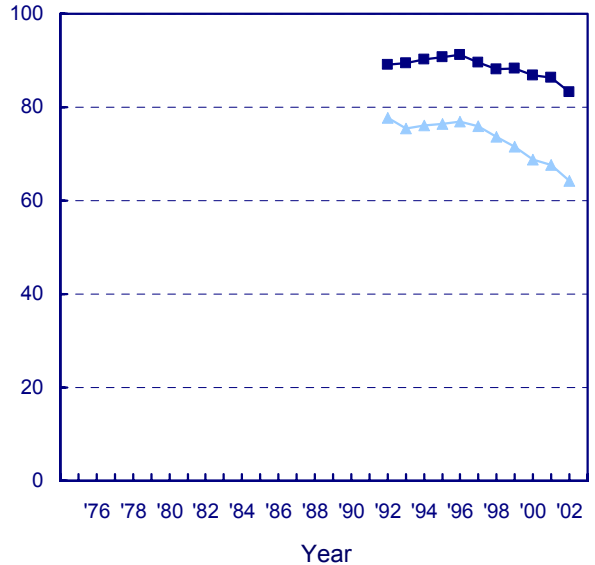
Smokeless Tobacco

Smokeless tobacco comes in two forms: "snuff" and "chew." Snuff is finely ground tobacco usually sold in tins, either loose or in packets. It is held in the mouth between the lip or cheek and gums. Chew is a leafy form of tobacco, usually sold in pouches. It too is held in the mouth and may, as the name suggests, be chewed. In both cases, nicotine is absorbed by the mucous membranes of the mouth. Because smokeless tobacco stimulates saliva production, it is sometimes referred to as "spit" tobacco.

Trends in Use

The use of smokeless tobacco by teens has been decreasing gradually from recent peak levels in the mid-1990s, and the overall declines have been substantial. Among 8th graders 30-day prevalence is down from a 1994 peak of 7.7% to 3.3% in 2002; 10th graders' use is down from a 1994 peak of 10.5% to 6.1% in 2002; and 12th graders' use is down from a 1995 peak of 12.2% to 6.5% in 2002. These reflect relative declines from peak levels of 57%, 42%, and 47%, respectively. 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.

Thirty-day prevalence of *daily* use of smokeless tobacco also has fallen gradually, but appreciably, in recent years. The daily usage rates in 2002 are 0.8%, 1.7%, and 2.0% in grades 8, 10, and 12. These are down by about a half from the peak levels recorded in the early 1990s, with the greatest proportional decline in 8th grade and the least in 10th.

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 2002 are 5.4%, 9.9%, and 12.2% in grades 8, 10, and 12, respectively, *versus* 1.3%, 2.1%, and 1.2% among females. The respective current *daily* use rates for males are 1.5%, 3.0%, and 3.0% compared to 0.2%, 0.2%, and 0.2% for females. In 2002, 8th and 10th grade males' use declined significantly. There are some other important demographic differences as well. Use tends to be much higher in the South and North Central regions of the country than in the Northeast and West. It also tends to be more concentrated in nonmetropolitan areas than metropolitan ones and to be negatively correlated with the education level of the parents. Use also tends to be much 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 39% in 2002; and among 10th graders, from 38% to 47%. Among 12th graders, perceived risk went from 33% in 1995 to 45% in 2001 but dropped some to 43% in 2002. 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 were 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 79% 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, Disapproval, and Availability
Eighth, Tenth, and Twelfth Graders

Use
% who used in past 30 days

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade

Year

Risk
% seeing "great risk" in using regularly

Year

Disapproval
% disapproving of using regularly

Year

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

(no data)

Year

35
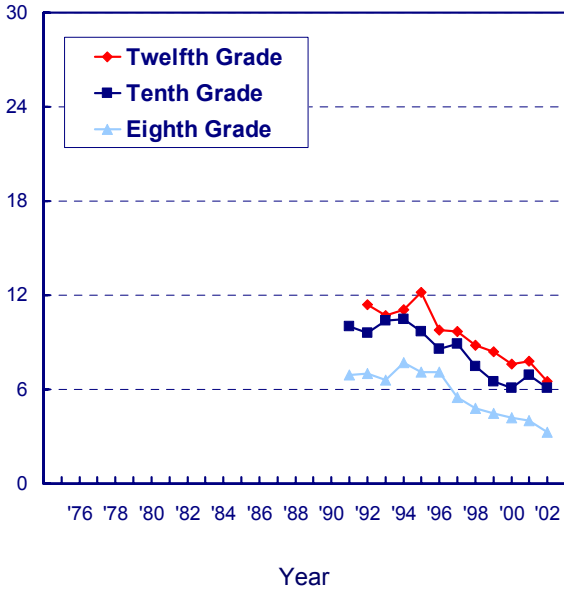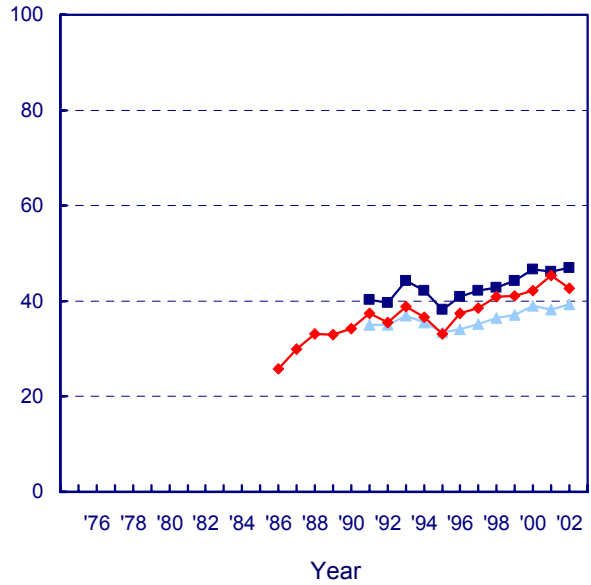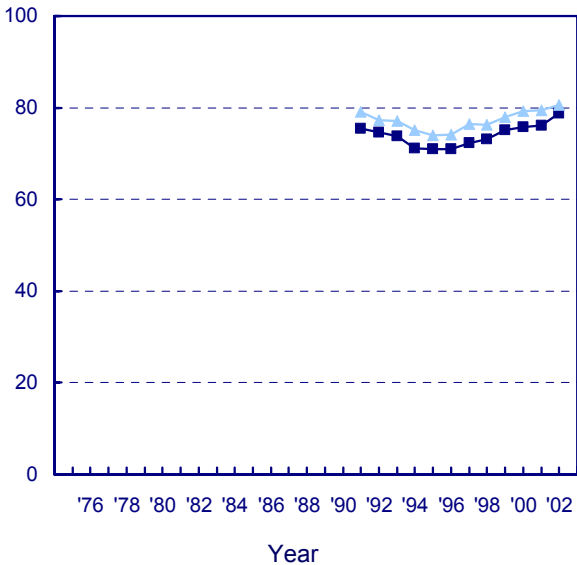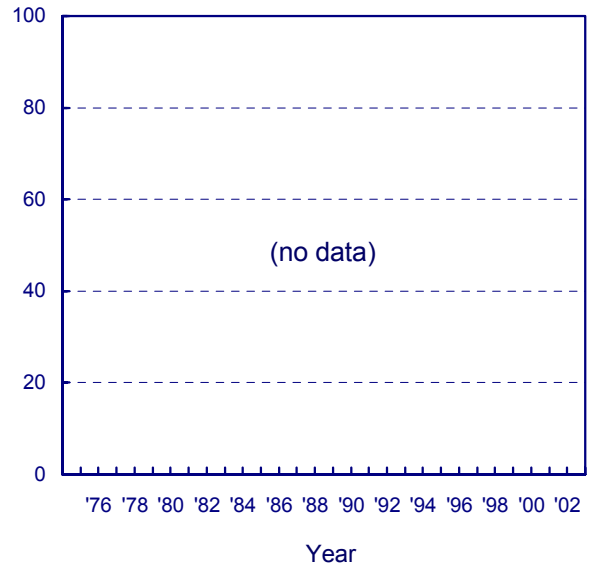
Steroids

Unlike all of the 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 the other drugs studied here, though, in that they are controlled substances for which there is an illicit market and which can have adverse consequences for the user. 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, in 2002 the annual prevalence rates were one-half to three times as high among males as among females. Boys' annual prevalence rates were 1.8%, 3.2%, and 3.8% in grades 8, 10, and 12, compared with 1.2%, 1.2%, and 1.3% for girls.

Between 1991 and 1997 the *overall* annual prevalence rate was quite stable in 8th grade, ranging between 0.9% and 1.2%; and in 10th grade it was similarly stable, ranging between 1.0% 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). In other words, the rates among boys increased by about 50% in a single year.

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, quite possibly reflecting the effect of the younger, heavier-using cohorts getting older. There was no further change in 2002 at any of the three grade levels.

Perceived Risk

Perceived risk and disapproval were asked of 8th and 10th graders for only a few years, before the space was allocated to other questions. 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 and another 4 percentage-point drop in 2000. This sharp a change is quite unusual and highly significant, suggesting that some particular event (or events) in 1998 changed beliefs about the dangers of steroids. (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 2002, perceived risk was at its lowest ever measured level, 57.1%.

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; there was no significant change in 2002.

Availability

Perceived availability is quite high for steroids and considerably higher at the upper grades than in the lower ones. However, it should be noted that some over-the-counter substances, like androstenedione, are legally available to all age groups and are sold in health food stores, drugstores, and even supermarkets.

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

Use
% who used in last 12 months

Legend:
- Twelfth Grade
- Tenth Grade
- Eighth Grade

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

37
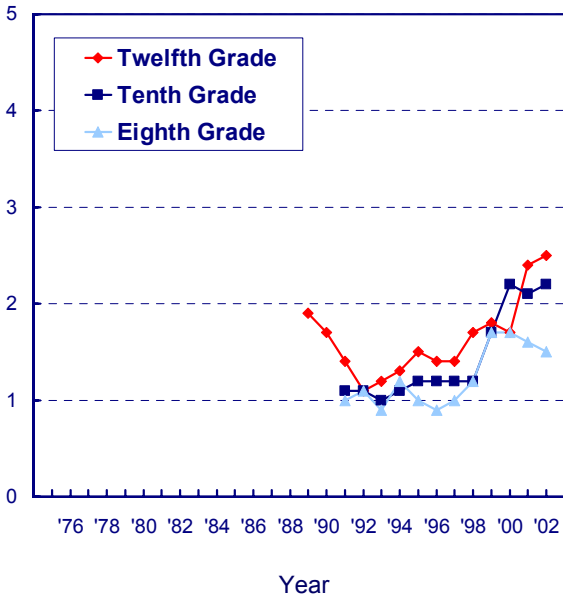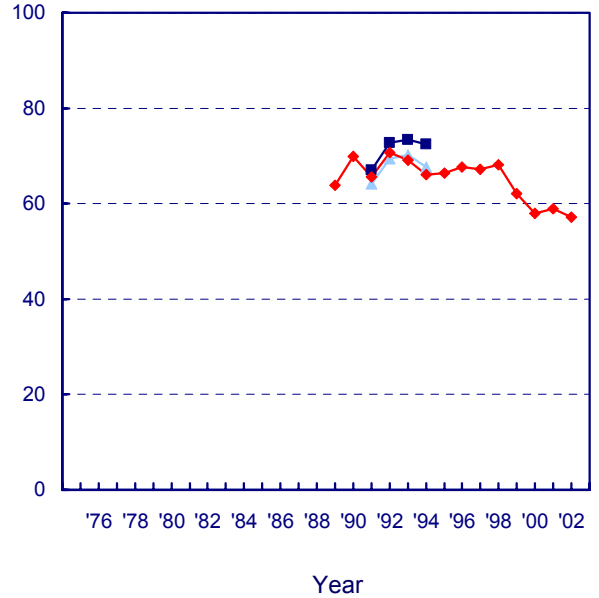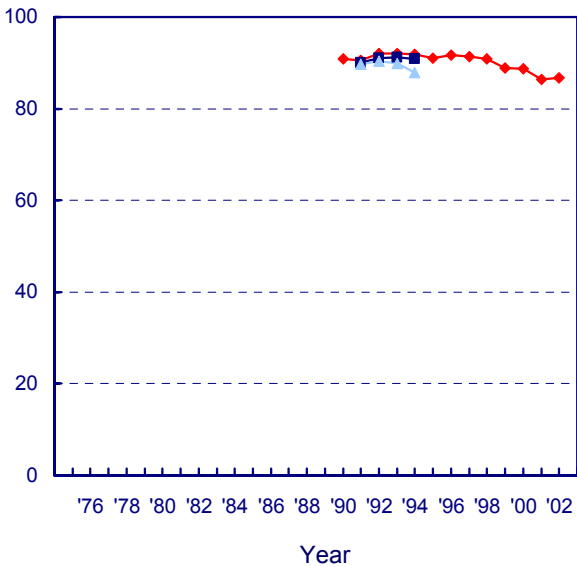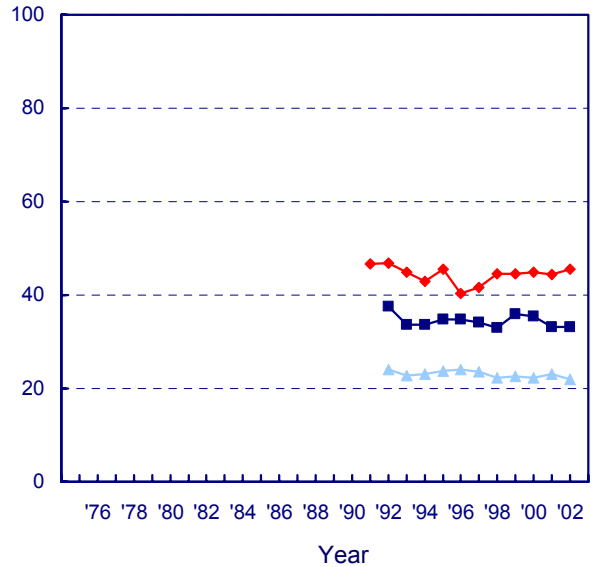
Subgroup Differences

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 2002 and the one forthcoming in 2003—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, socio-economic level (as measured by the educational level of the parents), and race/ethnicity. *Monitoring the Future Occasional Paper 57*, available on the study's Web site (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 do 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. 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 higher prevalence periods.

College Plans

Those students who are *not* college-bound (a decreasing proportion of the total youth population) are considerably more likely 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 other two regions had, those differences have narrowed some in recent years. Cigarette smoking rates have consistently been lowest in the West. 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 are not 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 youngsters 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 with a needle, and ice—and their level of heroin, cocaine, methamphetamine and steroid use is 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 the fact that Hispanic youngsters have considerably higher school dropout rates. Thus, more of the "drug-prone" segment of that ethnic group may leave school before 12th grade than in the other two racial/ethnic groups. Another explanation could be that Hispanics are more precocious in their initiation of these sorts of behaviors.

TABLE 1

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

(Entries are percentages)

Lifetime

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Any Illicit Drug[a]													
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	-2.3s
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	-1.1
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	-0.9
Any Illicit Drug Other Than Marijuana[a,b]													
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	-3.3sss
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	-1.5
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	-1.2
Any Illicit Drug Including Inhalants[a,c]													
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	-2.9ss
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	-1.1
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	-1.4
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	-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	-1.4
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	-1.1
Inhalants[c,d]													
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	-1.9s
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	-1.6s
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	-1.4
Nitrites[e]													
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	-0.4
Hallucinogens[b,d]													
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	-1.0
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	-1.0
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	-2.7s
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	-1.0s
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	-1.4s
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	-2.5ss
Hallucinogens Other Than LSD[b]													
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	-0.6
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	-0.3
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	-1.2
PCP[e]													
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	-0.5

(Table continued on next page)

TABLE 1 (cont.)

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

<div align="center">Lifetime</div>

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
MDMA (Ecstasy)[e,f]													
8th Grade	—	—	—	—	—	3.4	3.2	2.7	2.7	4.3	5.2	4.3	-0.9
10th Grade	—	—	—	—	—	5.6	5.7	5.1	6.0	7.3	8.0	6.6	-1.4
12th Grade	—	—	—	—	—	6.1	6.9	5.8	8.0	11.0	11.7	10.5	-1.2
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	-0.7
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	+0.5
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	-0.4
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	-0.4
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	+0.5
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	+0.1
Other Cocaine[g]													
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	-0.5
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	+0.2
12th Grade	7.0	5.3	5.4	5.2	5.1	6.4	8.2	8.4	8.8	7.7	7.4	7.0	-0.4
Heroin[h]													
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	-0.1
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	+0.2
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	-0.1
With a needle[i]													
8th Grade	—	—	—	—	1.5	1.6	1.3	1.4	1.6	1.1	1.2	1.0	-0.1
10th Grade	—	—	—	—	1.0	1.1	1.1	1.2	1.3	1.0	0.8	1.0	+0.2
12th Grade	—	—	—	—	0.7	0.8	0.9	0.8	0.9	0.8	0.7	0.8	+0.1
Without a needle[i]													
8th Grade	—	—	—	—	1.5	1.6	1.4	1.5	1.4	1.3	1.1	1.0	-0.1
10th Grade	—	—	—	—	1.1	1.7	1.7	1.7	1.6	1.7	1.3	1.3	+0.1
12th Grade	—	—	—	—	1.4	1.7	2.1	1.6	1.8	2.4	1.5	1.6	+0.1
Other Narcotics[j]													
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	10.1	+0.2[k]
Amphetamines[j]													
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	-1.5s
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	-1.1
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	+0.5
Methamphetamine[l,m]													
8th Grade	—	—	—	—	—	—	—	—	4.5	4.2	4.4	3.5	-0.9
10th Grade	—	—	—	—	—	—	—	—	7.3	6.9	6.4	6.1	-0.3
12th Grade	—	—	—	—	—	—	—	—	8.2	7.9	6.9	6.7	-0.2

TABLE 1 (cont.)

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

<u>Lifetime</u>

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Ice[m]													
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	+0.6
Barbiturates (Sedatives)[j]													
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	+0.9
Tranquilizers[b,j]													
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	-0.7
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	-0.3
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	+1.2
Rohypnol[e,n]													
8th Grade	—	—	—	—	—	1.5	1.1	1.4	1.3	1.0	1.1	0.8	-0.3
10th Grade	—	—	—	—	—	1.5	1.7	2.0	1.8	1.3	1.5	1.3	-0.2
12th Grade	—	—	—	—	—	1.2	1.8	3.0	2.0	1.5	1.7	—	—
Alcohol[o]													
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	-3.5ss
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	-3.2ss
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	-1.3
Been Drunk[m]													
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	-2.1s
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	-4.2sss
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	-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	-5.1sss
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	-5.4sss
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	-3.9ss
Smokeless Tobacco[e,p]													
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	-0.5
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	-2.6s
12th Grade	—	32.4	31.0	30.7	30.9	29.8	25.3	26.2	23.4	23.1	19.7	18.3	-1.4
Steroids[m]													
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	-0.3
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	0.0
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	+0.3

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. See relevant figure to assess the impact of the wording changes. 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.

Footnotes for Table 1 to Table 3

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

'‡' indicates some change in the question. See relevant footnote for that drug. See relevant figure to assess the impact of the wording changes.

[a]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, barbiturates, or tranquilizers not under a doctor's orders. For 8th and 10th graders: 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).

[b]In 2001 the question text was changed on half of the questionnaire forms for each grade. "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. 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 2002 data are based on all forms. Data for "any illicit drug other than marijuana" and "hallucinogens" are also affected by these changes and have been handled in a parallel manner.

[c]For 12th graders only: Data based on five of six forms in 1991-98; N is five-sixths of N indicated. Beginning in 1999, data based on three of six forms; N is three-sixths of N indicated.

[d]Inhalants are unadjusted for underreporting of amyl and butyl nitrites; hallucinogens are unadjusted for underreporting of PCP.

[e]For 12th graders only: Data based on one form; N is one-sixth of N indicated. Data for MDMA based on two forms in 2002; N is two-sixths of N indicated. Data for Rohypnol for 2001 and 2002 are not comparable due to changes in the questionnaire forms.

[f]For 8th and 10th graders only: Data based on one form in 1996; N is one-half of N indicated. Beginning in 1997, data based on one-third of N indicated due to changes on the questionnaire forms. Data for MDMA based on two forms in 2002; N is one-half of N indicated.

[g]For 12th graders only: Data based on four of six forms; N is four-sixths of N indicated.

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

[i]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 three-sixths of N indicated.

[j]Only drug use not under a doctor's orders is included here.

[k]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, Percocet, and Dilaudid. The 2001 data presented here are based on all forms. The 2002 estimates are based on the difference between the data from the 2001 and 2002 unchanged forms added to the 2001 prevalence of use rate. The change score given in the right-hand column is the difference between the data from the unchanged forms only in both 2001 and 2002.

[l]For 8th and 10th graders only: Data based on one of four forms; N is one-third of N indicated.

[m]For 12th graders only: Data based on two of six forms; N is two-sixths of N indicated.

[n]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. In 1999–2001, data based on two of four forms; N is one-third of N indicated. In 2002, data based on one form; N is one-sixth of N indicated.

[o]In 1993, the question text was changed slightly in half of the forms to indicate that a "drink" meant "more than a few sips." The 1993 data are based on the changed forms only; N is one-half of N indicated. In 1994 the remaining forms were changed to the new wording. Beginning in 1994, the data are based on all forms.

[p]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.

[q]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 three-sixths of N indicated. Data for GHB based on one form in 2002; N is one-sixth of N indicated.

[r]Daily use is defined as use on twenty or more occasions in the past thirty days except for cigarettes and smokeless tobacco, for which actual daily use is measured, and for 5+ drinks, for which the prevalence or having five or more drinks in a row in the last two weeks is measured.

TABLE 2

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

| | Annual | | | | | | | | | | | | | 30-Day | | | | | | | | | | | |
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Any Illicit Drug[a]																										
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	-1.7s	5.7	6.8	8.4	10.9	12.4	14.6	12.9	12.1	12.2	11.9	11.7	10.4	-1.2
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	-2.4s	11.6	11.0	14.0	18.5	20.2	23.2	23.0	21.5	22.1	22.5	22.7	20.8	-1.9s
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	-0.5	16.4	14.4	18.3	21.9	23.8	24.6	26.2	25.6	25.9	24.9	25.7	25.4	-0.4
Any Illicit Drug Other Than Marijuana[a,b]																										
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	-2.0ss	3.8	4.7	5.3	5.6	6.5	6.9	6.0	5.5	5.5	5.6	‡5.5	4.7	-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	-2.1s	5.5	5.7	6.5	7.1	8.9	8.9	8.8	8.6	8.6	8.5	‡8.7	8.1	-0.6
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	-0.7	7.1	6.3	7.9	8.8	10.0	9.5	10.7	10.7	10.4	10.4	‡11.0	11.3	+0.3
Any Illicit Drug Including Inhalants[a,c]																										
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	-2.5ss	8.8	10.0	12.0	14.3	16.1	17.5	16.0	14.9	15.1	14.4	14.0	12.6	-1.4s
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	-2.6s	13.1	12.6	15.5	20.0	21.6	24.5	24.1	22.5	23.1	23.6	23.6	21.7	-1.9s
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	-0.5	17.8	15.5	19.3	23.0	24.8	25.5	26.9	26.6	26.4	26.4	26.5	25.9	-0.5
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	-0.8	3.2	3.7	5.1	7.8	9.1	11.3	10.2	9.7	9.7	9.1	9.2	8.3	-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	-2.4s	8.7	8.1	10.9	15.8	17.2	20.4	20.5	18.7	19.4	19.7	19.8	17.8	-1.9s
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	-0.8	13.8	11.9	15.5	19.0	21.2	21.9	23.7	22.8	23.1	21.6	22.4	21.5	-0.9
Inhalants[c,d]																										
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	-1.4ss	4.4	4.7	5.4	5.6	6.1	5.8	5.6	4.8	5.0	4.5	4.0	3.8	-0.2
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	-0.9	2.7	2.7	3.3	3.6	3.5	3.3	3.0	2.9	2.6	2.6	2.4	2.4	-0.1
12th Grade	6.6	6.2	7.0	7.7	8.0	7.6	6.7	6.2	5.6	5.9	4.5	4.5	0.0	2.4	2.3	2.5	2.7	3.2	2.5	2.5	2.3	2.0	2.2	1.7	1.5	-0.2
Nitrites[e]																										
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	+0.5	0.4	0.3	0.6	0.4	0.4	0.7	0.7	1.0	0.4	0.3	0.5	0.6	+0.1
Hallucinogens[b,d]																										
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	-0.8	0.8	1.1	1.2	1.3	1.7	1.9	1.8	1.4	1.3	1.2	‡1.6	1.2	-0.4
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	-1.5s	1.6	1.8	1.9	2.4	3.3	2.8	3.3	3.2	2.9	2.3	‡2.1	1.6	-0.4
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	-2.5sss	2.2	2.1	2.7	3.1	4.4	3.5	3.9	3.8	3.5	2.6	‡3.3	2.3	-1.0ss
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	-0.7s	0.6	0.9	1.0	1.1	1.4	1.5	1.5	1.1	1.1	1.0	1.0	0.7	-0.3
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	-1.6sss	1.5	1.6	1.6	2.0	3.0	2.4	2.8	2.7	2.3	1.6	1.5	0.7	-0.8sss
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	-3.1sss	1.9	2.0	2.4	2.6	4.0	2.5	3.1	3.2	2.7	1.6	2.3	0.7	-1.6sss
Hallucinogens Other Than LSD[b]																										
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	-0.3	0.3	0.4	0.5	0.7	0.8	0.9	0.7	0.7	0.6	0.6	‡1.1	1.0	-0.2
10th Grade	1.3	1.4	1.9	2.4	2.8	3.3	3.3	3.4	3.2	3.1	‡4.3	4.0	-0.4	0.4	0.5	0.7	1.0	1.0	1.0	1.2	1.4	1.2	1.2	‡1.4	1.4	0.0
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	-0.4	0.7	0.5	0.8	1.2	1.3	1.6	1.7	1.6	1.6	1.7	‡1.9	2.0	+0.1

TABLE 2 (cont.)

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

	Annual													30-Day												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
PCP[e]																										
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	-0.7	0.5	0.6	1.0	0.7	0.6	1.3	0.7	1.0	0.8	0.9	0.5	0.4	-0.1
MDMA (Ecstasy)[e,f]																										
8th Grade	—	—	—	—	—	2.3	2.3	1.8	1.7	3.1	3.5	2.9	-0.6	—	—	—	—	—	1.0	1.0	0.9	0.8	1.4	1.8	1.4	-0.5
10th Grade	—	—	—	—	—	4.6	3.9	3.3	4.4	5.4	6.2	4.9	-1.3s	—	—	—	—	—	1.8	1.3	1.3	1.8	2.6	2.6	1.8	-0.8s
12th Grade	—	—	—	—	—	4.6	4.0	3.6	5.6	8.2	9.2	7.4	-1.8	—	—	—	—	—	2.0	1.6	1.5	2.5	3.6	2.8	2.4	-0.4
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	-0.3	0.5	0.7	0.7	1.0	1.2	1.3	1.1	1.4	1.3	1.2	1.2	1.1	-0.1
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	+0.5	0.7	0.7	0.9	1.2	1.7	1.7	2.0	2.1	1.8	1.8	1.3	1.6	+0.3
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	+0.2	1.4	1.3	1.3	1.5	1.8	2.0	2.3	2.4	2.6	2.1	2.1	2.3	+0.2
Crack																										
8th Grade	0.7	0.9	1.0	1.3	1.6	1.8	1.7	2.1	1.8	1.8	1.7	1.6	-0.1	0.3	0.5	0.4	0.7	0.7	0.8	0.7	0.9	0.8	0.8	0.8	0.8	0.0
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	+0.5s	0.3	0.4	0.5	0.6	0.9	0.8	0.9	1.1	0.8	0.9	0.7	1.0	+0.2
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	+0.2	0.7	0.6	0.7	0.8	1.0	1.0	0.9	1.0	1.1	1.0	1.1	1.2	+0.1
Other Cocaine[g]																										
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	-0.1	0.5	0.5	0.6	0.9	1.0	1.0	0.8	1.0	1.1	0.9	0.9	0.8	-0.2
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	+0.4	0.6	0.6	0.7	1.0	1.4	1.3	1.6	1.8	1.6	1.6	1.2	1.3	+0.2
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	0.0	1.2	1.0	1.2	1.3	1.3	1.6	2.0	2.0	2.5	1.7	1.8	1.9	+0.1
Heroin[h]																										
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	-0.1	0.3	0.4	0.4	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.6	0.5	-0.1
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	+0.1	0.2	0.2	0.3	0.4	0.6	0.5	0.6	0.7	0.7	0.5	0.3	0.5	+0.2
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	+0.1	0.2	0.3	0.2	0.3	0.6	0.5	0.5	0.5	0.5	0.7	0.4	0.5	+0.1
With a needle[i]																										
8th Grade	—	—	—	—	0.9	1.0	0.8	0.8	0.9	0.6	0.7	0.6	-0.1	—	—	—	—	0.4	0.5	0.4	0.5	0.4	0.3	0.4	0.3	-0.1
10th Grade	—	—	—	—	0.6	0.7	0.7	0.8	0.6	0.5	0.4	0.6	+0.1	—	—	—	—	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.3	+0.1
12th Grade	—	—	—	—	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	+0.1	—	—	—	—	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	+0.1
Without a needle[i]																										
8th Grade	—	—	—	—	0.8	1.0	0.8	0.8	0.9	0.7	0.6	0.6	0.0	—	—	—	—	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	-0.1
10th Grade	—	—	—	—	0.8	0.9	1.1	1.0	1.1	1.1	0.7	0.8	+0.1	—	—	—	—	0.3	0.3	0.4	0.5	0.5	0.4	0.2	0.4	+0.1
12th Grade	—	—	—	—	1.0	1.0	1.2	0.8	1.0	1.6	0.8	0.8	0.0	—	—	—	—	0.6	0.4	0.6	0.4	0.4	0.7	0.3	0.5	+0.1
Other Narcotics[j]																										
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	7.0	+0.2[k]	1.1	1.2	1.3	1.5	1.8	2.0	2.3	2.4	2.6	2.9	3.0	3.1	+0.2[k]
Oxycontin[l,m]																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	1.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	4.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(Table continued on next page)

TABLE 2 (cont.)

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

	Annual													30-Day												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Vicodin[l,m]																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	2.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	6.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	9.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Amphetamines[j]																										
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	-1.2s	2.6	3.3	3.6	3.6	4.2	4.6	3.8	3.3	3.4	3.4	3.2	2.8	-0.4
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	-1.0	3.3	3.6	4.3	4.5	5.3	5.5	5.1	5.1	5.0	5.4	5.6	5.2	-0.4
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	+0.2	3.2	2.8	3.7	4.0	4.0	4.1	4.8	4.6	4.5	5.0	5.6	5.5	-0.2
Ritalin[l,m]																										
8th Grade	—	—	—	—	—	—	—	—	—	—	2.9	2.8	-0.1	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	4.8	4.8	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	5.1	4.0	-1.1	—	—	—	—	—	—	—	—	—	—	—	—	—
Methamphetamine[l,m]																										
8th Grade	—	—	—	—	—	—	—	—	3.2	2.5	2.8	2.2	-0.6	—	—	—	—	—	—	—	—	1.1	0.8	1.3	1.1	-0.2
10th Grade	—	—	—	—	—	—	—	—	4.6	4.0	3.7	3.9	+0.2	—	—	—	—	—	—	—	—	1.8	2.0	1.5	1.8	+0.4
12th Grade	—	—	—	—	—	—	—	—	4.7	4.3	3.9	3.6	-0.3	—	—	—	—	—	—	—	—	1.7	1.9	1.5	1.7	+0.1
Ice[m]																										
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	+0.6	0.6	0.5	0.6	0.7	1.1	1.1	0.8	1.2	0.8	1.0	1.1	1.2	+0.1
Barbiturates (Sedatives)[j]																										
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	+1.0s	1.4	1.1	1.3	1.7	2.2	2.1	2.1	2.6	2.6	3.0	2.8	3.2	+0.4
Tranquilizers[b,j]																										
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	-0.3	0.8	0.8	0.9	1.1	1.2	1.5	1.2	1.2	1.1	1.4 ‡ 1.2	1.2	0.0		
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	-1.0	1.2	1.5	1.1	1.5	1.7	1.7	2.2	2.2	2.2	2.5 ‡ 2.9	2.9	0.0		
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	+0.8	1.4	1.0	1.2	1.4	1.8	2.0	1.8	2.4	2.5	2.6 ‡ 2.9	3.3	+0.4		
Rohypnol[e,n]																										
8th Grade	—	—	—	—	—	1.0	0.8	0.8	0.5	0.5	0.7	0.3	-0.4	—	—	—	—	—	0.5	0.3	0.4	0.3	0.3	0.4	0.2	-0.2
10th Grade	—	—	—	—	—	1.1	1.3	1.2	1.0	0.8	1.0	0.7	-0.3	—	—	—	—	—	0.5	0.5	0.4	0.5	0.4	0.2	0.4	+0.2
12th Grade	—	—	—	—	—	1.1	1.2	1.4	1.0	0.8	0.9	1.6	—[e]	—	—	—	—	—	0.5	0.3	0.3	0.3	0.4	0.3	—	—
GHB[l,q]																										
8th Grade	—	—	—	—	—	—	—	—	—	1.2	1.1	0.8	-0.2	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	1.1	1.0	1.4	+0.4	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	1.9	1.6	1.5	-0.1	—	—	—	—	—	—	—	—	—	—	—	—	—
Ketamine[l,q]																										
8th Grade	—	—	—	—	—	—	—	—	—	1.6	1.3	1.3	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	2.1	2.1	2.2	+0.1	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	2.5	2.5	2.6	+0.1	—	—	—	—	—	—	—	—	—	—	—	—	—

(Table continued on next page)

TABLE 2 (cont.)

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

	Annual													30-Day												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Alcohol[o]																										
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	-3.2ss	25.1	26.1	‡24.3	25.5	24.6	26.2	24.5	23.0	24.0	22.4	21.5	19.6	-1.9s
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	-3.5ss	42.8	39.9	‡38.2	39.2	38.8	40.4	40.1	38.8	40.0	41.0	39.0	35.4	-3.6ss
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	-1.8	54.0	51.3	‡48.6	50.1	51.3	50.8	52.7	52.0	51.0	50.0	49.8	48.6	-1.2
Been Drunk[m]																										
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	-1.6s	7.6	7.5	7.8	8.7	8.3	9.6	8.2	8.4	9.4	8.3	7.7	6.7	-1.0
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	-4.5sss	20.5	18.1	19.8	20.3	20.8	21.3	22.4	21.1	22.5	23.5	21.9	18.3	-3.6sss
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	-2.8	31.6	29.9	28.9	30.8	33.2	31.3	34.2	32.9	32.9	32.3	32.7	30.3	-2.4
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	-1.5s
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	-3.6sss
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	-2.8s
Bidis[l,m]																										
8th Grade	—	—	—	—	—	—	—	—	—	3.9	2.7	2.7	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	6.4	4.9	3.1	-1.8ss	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	9.2	7.0	5.9	-1.2	—	—	—	—	—	—	—	—	—	—	—	—	—
Kreteks[l,m]																										
8th Grade	—	—	—	—	—	—	—	—	—	—	2.6	2.6	-0.1	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	6.0	4.9	-1.2	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	10.1	8.4	-1.7	—	—	—	—	—	—	—	—	—	—	—	—	—
Smokeless Tobacco[e,p]																										
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	-0.8
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	10.0	9.6	10.4	10.5	9.7	8.6	8.9	7.5	6.5	6.1	6.9	6.1	-0.8
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	10.7	11.1	12.2	9.8	9.7	8.8	8.4	7.6	7.8	6.5	-1.4
Steroids[m]																										
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	-0.1	0.4	0.5	0.5	0.5	0.6	0.4	0.5	0.5	0.7	0.8	0.7	0.8	0.0
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	+0.1	0.6	0.6	0.5	0.6	0.6	0.5	0.7	0.6	0.9	1.0	0.9	1.0	+0.1
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	+0.1	0.8	0.6	0.7	0.9	0.7	0.7	1.0	1.1	0.9	0.8	1.3	1.4	+0.1

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. See relevant figure to assess the impact of the wording changes.
See Table 1 for relevant footnotes.
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 3

Trends in 30-Day Prevalence of <u>Daily</u> Use of Various Drugs for Eighth, Tenth, and Twelfth Graders

<u>Daily</u>

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Marijuana/Hashish, daily[r]													
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	-0.1
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	-0.6s
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	+0.1
Alcohol[o,r]													
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	-0.2
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	-0.1
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	-0.1
Been Drunk, daily[m,r]													
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	0.0
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	-0.2
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	-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	-0.8
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	-2.4s
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	-1.1
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	-0.3
10th Grade	12.6	12.3	14.2	14.6	16.3	18.3	18.0	15.8	15.9	14.0	12.2	10.1	-2.1ss
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	-2.1s
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	-0.2
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	-1.2s
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	-1.2
Smokeless Tobacco, daily[e,p]													
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	-0.4
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	-0.6
12th Grade	—	4.3	3.3	3.9	3.6	3.3	4.4	3.2	2.9	3.2	2.8	2.0	-0.9

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. See relevant figure to assess the impact of the wording changes. See Table 1 for relevant footnotes. 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 4

Trends in <u>Harmfulness</u> of Drugs as Perceived by Eighth and Tenth Graders, 1991–2002

Percentage saying "great risk"[a]

How much do you think people risk harming themselves (physically or in other ways), if they . . .	8th Grade													10th Grade												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
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	+0.5	30.0	31.9	29.7	24.4	21.5	20.0	18.8	19.6	19.2	18.5	17.9	19.9	+2.0s
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	-0.3	48.6	48.9	46.1	38.9	35.4	32.8	31.9	32.5	33.5	32.4	31.2	32.0	+0.8
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	-0.5	82.1	81.1	78.5	71.3	67.9	65.9	65.9	65.8	65.9	64.7	62.8	60.8	-2.0
Try inhalants once or twice[b]	35.9	37.0	36.5	37.9	36.4	40.8	40.1	38.9	40.8	41.2	45.6	42.8	-2.8s	37.8	38.7	40.9	42.7	41.6	47.2	47.5	45.8	48.2	46.6	49.9	48.7	-1.2
Try inhalants regularly[b]	65.6	64.4	64.6	65.5	64.8	68.2	68.7	67.2	68.8	69.9	71.6	69.9	-1.7	69.8	67.9	69.6	71.5	71.8	75.8	74.5	73.3	76.3	75.0	76.4	73.4	-3.0ss
Take LSD once or twice[c]	—	—	42.1	38.3	36.7	36.5	37.0	34.9	34.1	34.0	31.6	29.6	-2.0	—	—	48.7	46.5	44.7	45.1	44.5	43.5	45.0	43.0	41.3	40.1	-1.2
Take LSD regularly[c]	—	—	68.3	65.8	64.4	63.6	64.1	59.6	58.8	57.5	52.9	49.3	-3.6	—	—	78.9	75.9	75.5	75.3	73.8	72.3	73.9	72.0	68.8	64.9	-3.9ss
Try MDMA (Ecstasy) once or twice[d]	—	—	—	—	—	—	—	—	—	—	35.8	38.9	+3.1	—	—	—	—	—	—	—	—	—	—	39.4	43.5	+4.1s
Take MDMA (Ecstasy) occasionally[d]	—	—	—	—	—	—	—	—	—	—	55.5	61.8	+6.4sss	—	—	—	—	—	—	—	—	—	—	64.8	67.3	+2.6
Try crack once or twice[b]	62.8	61.2	57.2	54.4	50.8	51.0	49.9	49.3	48.7	48.5	48.6	47.4	-1.2	70.4	69.6	66.6	64.7	60.9	60.9	59.2	58.0	57.8	56.1	57.1	57.4	+0.3
Take crack occasionally[b]	82.2	79.6	76.8	74.4	72.1	71.6	71.2	70.6	70.6	70.1	70.0	69.7	-0.2	87.4	86.4	84.4	83.1	81.2	80.3	78.7	77.5	79.1	76.9	77.3	75.7	-1.7
Try cocaine powder once or twice[b]	55.5	54.1	50.7	48.4	44.9	45.2	45.0	44.0	43.3	43.3	43.9	43.2	-0.7	59.1	59.2	57.5	56.4	53.5	53.6	52.2	50.9	51.6	48.8	50.6	51.3	+0.7
Take cocaine powder occasionally[b]	77.0	74.3	71.8	69.1	66.4	65.7	65.8	65.2	65.4	65.5	65.8	64.9	-0.9	82.2	80.1	79.1	77.8	75.6	75.0	73.9	71.8	73.6	70.9	72.3	71.0	-1.4
Try heroin once or twice without using a needle[c]	—	—	—	—	60.1	61.3	63.0	62.8	63.0	62.0	61.1	62.6	+1.5	—	—	—	—	70.7	72.1	73.1	71.7	73.7	71.7	72.0	72.2	+0.1
Take heroin occasionally without using a needle[c]	—	—	—	—	76.8	76.6	79.2	79.0	78.9	78.6	78.5	78.5	0.0	—	—	—	—	85.1	85.8	86.5	84.9	86.5	85.2	85.4	83.4	-2.0
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	+0.3	9.0	10.1	10.9	9.4	9.3	8.9	9.0	10.1	10.5	9.6	9.8	11.5	+1.8ss
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	-0.4	36.1	36.8	35.9	32.5	31.7	31.2	31.8	31.9	32.9	32.3	31.5	31.0	-0.5
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	+0.4	54.7	55.9	54.9	52.9	52.0	50.9	51.8	52.5	51.9	51.0	50.7	51.7	+1.0
Smoke one or more packs of cigarettes per day[e]	51.6	50.8	52.7	50.8	49.8	50.4	52.6	54.3	54.8	58.8	57.1	57.5	+0.4	60.3	59.3	60.7	59.0	57.0	57.9	59.9	61.9	62.7	65.9	64.7	64.3	-0.4
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	+1.1	40.3	39.6	44.2	42.2	38.2	41.0	42.2	42.8	44.2	46.7	46.2	46.9	+0.7
Take steroids[f]	64.2	69.5	70.2	67.6	—	—	—	—	—	—	—	—	—	67.1	72.7	73.4	72.5	—	—	—	—	—	—	—	—	—
Approx. N (in thousands) =	17.4	18.7	18.4	17.4	17.5	17.9	18.8	18.1	16.7	16.7	16.2	15.1		14.7	14.8	15.3	15.9	17.0	15.7	15.6	15.0	13.6	14.3	14.0	14.3	

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.

[a]Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar.
[b]Beginning in 1997, data based on two-thirds of N indicated due to changes in questionnaire forms.
[c]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.
[d]Data based on one-third of N indicated due to changes in questionnaire forms.
[e]Beginning in 1999, data based on two-thirds of N indicated due to changes in questionnaire forms.
[f]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 5
Long-Term Trends in <u>Harmfulness</u> of Drugs as Perceived by Twelfth Graders

Percentage saying "great risk"[a]

<u>12th Grade</u>

How much do you think people risk harming themselves (physically or in other ways), if they . . .	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	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	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
Approx. N =	2804	2918	3052	3770	3250	3234	3604	3557	3305	3262	3250	3020	3315	3276	2796

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

(Table continued on next page)

TABLE 5 (cont.)
Long-Term Trends in <u>Harmfulness</u> of Drugs as Perceived by Twelfth Graders

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying "great risk"[a] 12th Grade													'01–'02 change
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
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	+0.8
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	-0.3
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	-4.4s
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	+3.5s
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	-0.2
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	+2.1
Try MDMA (Ecstasy) once or twice	—	—	—	—	—	—	—	33.8	34.5	35.0	37.9	45.7	52.2	+6.5sss
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	+0.4
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	-1.6
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	+0.4
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	+1.4
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	+0.2
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	-1.7
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	+0.5
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	+1.2
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	-0.2
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	+0.5
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	+0.7
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	+0.1
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	-0.1
Take heroin occasionally without using a needle	—	—	—	—	—	71.2	71.0	74.3	73.4	73.6	74.7	74.4	74.7	+0.3
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	-0.3
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	-2.4
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	+1.0
Try barbiturates once or twice	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	+0.5
Take barbiturates regularly	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	-1.0
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	-1.1
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	-2.4
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	-1.9
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	-1.4
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	+1.0
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	-2.9
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	-1.8
Approx. N =	2553	2549	2684	2759	2591	2603	2449	2579	2564	2306	2130	2173	2198	

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.

TABLE 6

Trends in <u>Disapproval</u> of Drug Use by Eighth and Tenth Graders, 1991–2002

Percentage who "disapprove" or "strongly disapprove"[a]

Do you disapprove of people who . . .	8th Grade													10th Grade											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
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	+0.9	74.6	74.8	70.3	62.4	59.8	55.5	54.1	56.0	56.2	54.9	54.8	57.8	+3.0s
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	+0.2	83.7	83.6	79.4	72.3	70.0	66.9	66.2	67.3	68.2	67.2	66.2	68.3	+2.1
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	+0.9	90.4	90.0	87.4	82.2	81.1	79.7	79.7	80.1	79.8	79.1	78.0	78.6	+0.6
Try inhalants once or twice[b]	84.9	84.0	82.5	81.6	81.8	82.9	84.1	83.0	85.2	85.4	86.6	86.1	-0.5	85.2	85.6	84.8	84.9	84.5	86.0	86.9	85.6	88.4	87.5	87.8	88.6	+0.8
Take inhalants regularly[b]	90.6	90.0	88.9	88.1	88.8	89.3	90.3	89.5	90.3	90.2	90.5	90.4	0.0	91.0	91.5	90.9	91.0	90.9	91.7	91.7	91.1	92.4	91.8	91.3	91.8	+0.5
Take LSD once or twice[c]	—	—	77.1	75.2	71.6	70.9	72.1	69.1	69.4	66.7	64.6	62.6	-2.0	—	—	82.1	79.3	77.9	76.8	76.6	76.7	77.8	77.0	75.4	74.6	-0.8
Take LSD regularly[c]	—	—	79.8	78.4	75.8	75.3	76.3	72.5	72.5	69.3	67.0	65.5	-1.5	—	—	86.8	85.6	84.8	84.5	83.4	82.9	84.3	82.1	80.8	79.4	-1.4
Try MDMA (Ecstasy) once or twice[d]	—	—	—	—	—	—	—	—	—	—	69.0	74.3	+5.2sss	—	—	—	—	—	—	—	—	—	—	72.6	77.4	+4.9ss
Take MDMA (Ecstasy) occasionally[d]	—	—	—	—	—	—	—	—	—	—	73.6	78.6	+5.0sss	—	—	—	—	—	—	—	—	—	—	81.0	84.6	+3.6ss
Try crack once or twice[b]	91.7	90.7	89.1	86.9	85.9	85.0	85.7	85.4	86.0	85.4	86.0	86.2	+0.2	92.5	92.5	91.4	89.9	88.7	88.2	87.4	87.1	87.8	87.1	86.9	88.0	+1.2
Take crack occasionally[b]	93.3	92.5	91.7	89.9	89.8	89.3	90.3	89.5	89.9	88.8	89.8	89.6	-0.1	94.3	94.4	93.6	92.5	91.7	91.9	91.0	90.6	91.5	90.9	90.6	91.0	+0.3
Try cocaine powder once or twice[b]	91.2	89.6	88.5	86.1	85.3	83.9	85.1	84.5	85.2	84.8	85.6	85.8	+0.2	90.8	91.1	90.0	88.1	86.8	86.1	85.1	84.9	86.0	84.8	85.3	86.4	+1.2
Take cocaine powder occasionally[b]	93.1	92.4	91.6	89.7	89.7	88.7	90.1	89.3	89.9	88.8	89.6	89.9	+0.2	94.0	94.0	93.2	92.1	91.4	91.1	90.4	89.7	90.7	89.9	90.2	89.9	-0.2
Try heroin once or twice without using a needle[c]	—	—	—	—	85.8	85.0	87.7	87.3	88.0	87.2	87.2	87.8	+0.6	—	—	—	—	89.7	89.5	89.1	88.6	90.1	90.1	89.1	89.2	+0.1
Take heroin occasionally without using a needle[c]	—	—	—	—	88.5	87.7	90.1	89.7	90.2	88.9	88.9	89.6	+0.7	—	—	—	—	91.6	91.7	91.4	90.5	91.8	92.3	90.8	90.7	-0.1
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	+1.3	37.6	39.9	38.5	36.5	36.1	34.2	33.7	34.7	35.1	33.4	34.7	37.7	+3.0ss
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	+0.9	81.7	81.7	78.6	75.2	75.4	73.8	75.4	74.6	75.4	73.8	73.8	74.9	+1.1
Have five or more drinks once or twice each weekend	85.2	83.9	83.3	80.7	80.7	79.1	81.3	81.0	80.3	81.2	81.6	81.9	+0.3	76.7	77.6	74.7	72.3	72.2	70.7	70.2	70.5	69.9	68.2	69.2	71.5	+2.4s
Smoke one or more packs of cigarettes per day[e]	82.8	82.3	80.6	78.4	78.6	77.3	80.3	80.0	81.4	81.9	83.5	84.6	+1.1	79.4	77.8	76.5	73.9	73.2	71.6	73.8	75.3	76.1	76.7	78.2	80.6	+2.4s
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	+1.3	75.4	74.6	73.8	71.2	71.0	71.0	72.3	73.2	75.1	75.8	76.1	78.7	+2.7ss
Take steroids[f]	89.8	90.3	89.9	87.9	—	—	—	—	—	—	—	—	—	90.0	91.0	91.2	90.8	—	—	—	—	—	—	—	—	—
Approx. N (in thousands) =	17.4	18.5	18.4	17.4	17.6	18.0	18.8	18.1	16.7	16.7	16.2	15.1		14.8	14.8	15.3	15.9	17.0	15.7	15.6	15.0	13.6	14.3	14.0	14.3	

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 years is due to rounding error.
SOURCE: The Monitoring the Future Study, the University of Michigan.
[a]Answer alternatives were: (1) Don't disapprove, (2) Disapprove, (3) Strongly disapprove, and (4) Can't say, drug unfamiliar.
[b]Beginning in 1997, data based on two-thirds of N indicated due to changes in questionnaire forms.
[c]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.
[d]Data based on one-third of N indicated due to changes in questionnaire forms.
[e]Beginning in 1999, data based on two-thirds of N indicated due to changes in questionnaire forms.
[f]Data based on two forms in 1991 and 1992 and on one of two forms in 1993 and 1994; N is one-half of N indicated.

TABLE 7

Long-Term Trends in <u>Disapproval</u> of Drug Use by Twelfth Graders

						Percentage "disapproving"[b]									
	<u>12th Grade</u>														
Do you disapprove of people (who are 18 or older) doing each of the following?[a]	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
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	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	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Approx. N =	*2677*	*2957*	*3085*	*3686*	*3221*	*3261*	*3610*	*3651*	*3341*	*3254*	*3265*	*3113*	*3302*	*3311*	*2799*

[a]The 1975 question asked about people who are "20 or older."
[b]Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

TABLE 7 (cont.)

Long-Term Trends in <u>Disapproval</u> of Drug Use by Twelfth Graders

	Percentage "disapproving"[b]													
Do you disapprove of people (who are 18 or older) doing each of the following?[a]	<u>12th Grade</u>													<u>'01–'02</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>change</u>
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	+2.5
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	+0.2
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	-1.0
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	+2.8s
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	0.0
Try MDMA (Ecstasy) once or twice	—	—	—	—	—	—	—	82.2	82.5	82.1	81.0	79.5	83.6	+4.1ss
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	+0.9
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	0.0
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	+0.8
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	-0.1
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	+0.1
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	+0.6
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	+0.4
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	-0.4
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	+1.1
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	+0.2
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	0.0
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	+1.4
Take heroin occasionally without using a needle	—	—	—	—	—	94.7	93.2	94.4	94.3	93.8	95.2	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	+1.5
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	+0.2
Try barbiturates once or twice	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	+0.7
Take barbiturates regularly	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	+0.2
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	-0.3
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	0.0
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	+1.1
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	+1.8
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	+2.0
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	+0.4
Approx. N =	*2566*	*2547*	*2645*	*2723*	*2588*	*2603*	*2399*	*2601*	*2545*	*2310*	*2150*	*2144*	*2160*	

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.

TABLE 8

Trends in Perceived <u>Availability</u> of Drugs by Eighth and Tenth Graders, 1992–2002

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[a]

	8th Grade												10th Grade										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Marijuana	42.3	43.8	49.9	52.4	54.8	54.2	50.6	48.4	47.0	48.1	46.6	-1.4	65.2	68.4	75.0	78.1	81.1	80.5	77.9	78.2	77.7	77.4	75.9	-1.5
LSD	21.5	21.8	21.8	23.5	23.6	22.7	19.3	18.3	17.0	17.6	15.2	-2.4ss	33.6	35.8	36.1	39.8	41.0	38.3	34.0	34.3	32.9	31.2	26.8	-4.4sss
PCP[b]	18.0	18.5	17.7	19.0	19.6	19.2	17.5	17.1	16.0	15.4	14.1	-1.4	23.7	23.4	23.8	24.7	26.8	24.8	23.9	24.5	25.0	21.6	20.8	-0.8
MDMA (Ecstasy)[b]	—	—	—	—	—	—	—	—	—	23.8	22.8	-1.0	—	—	—	—	—	—	—	—	—	41.4	41.0	-0.4
Crack	25.6	25.9	26.9	28.7	27.9	27.5	26.5	25.9	24.9	24.4	23.7	-0.7	33.7	33.0	34.2	34.6	36.4	36.0	36.3	36.5	34.0	30.6	31.3	+0.7
Cocaine powder	25.7	25.9	26.4	27.8	27.2	26.9	25.7	25.0	23.9	23.9	22.5	-1.5	35.0	34.1	34.5	35.3	36.9	37.1	36.8	36.7	34.5	31.0	31.8	+0.9
Heroin	19.7	19.8	19.4	21.1	20.6	19.8	18.0	17.5	16.5	16.9	16.0	-0.9	24.3	24.3	24.7	24.6	24.8	24.4	23.0	23.7	22.3	20.1	19.9	-0.3
Other narcotics[b]	19.8	19.0	18.3	20.3	20.0	20.6	17.1	16.2	15.6	15.0	14.7	-0.3	26.9	24.9	26.9	27.8	29.4	29.0	26.1	26.6	27.2	25.8	25.4	-0.4
Amphetamines	32.2	31.4	31.0	33.4	32.6	30.6	27.3	25.9	25.5	26.2	24.4	-1.8s	43.4	46.4	46.6	47.7	47.2	44.6	41.0	41.3	40.9	40.6	39.6	-1.0
Crystal meth. (ice)[b]	16.0	15.1	14.1	16.0	16.3	15.7	16.0	14.7	14.9	13.9	13.3	-0.6	18.8	16.4	17.8	20.7	22.6	22.9	22.1	21.8	22.8	19.9	20.5	+0.6
Barbiturates	27.4	26.1	25.3	26.5	25.6	24.4	21.1	20.8	19.7	20.7	19.4	-1.2	38.0	38.8	38.3	38.8	38.1	35.6	32.7	33.2	32.4	32.8	32.4	-0.4
Tranquilizers	22.9	21.4	20.4	21.3	20.4	19.6	18.1	17.3	16.2	17.8	16.9	-0.9	31.6	30.5	29.8	30.6	30.3	28.7	26.5	26.8	27.6	28.5	28.3	-0.2
Alcohol	76.2	73.9	74.5	74.9	75.3	74.9	73.1	72.3	70.6	70.6	67.9	-2.8sss	88.6	88.9	89.8	89.7	90.4	89.0	88.0	88.2	87.7	87.7	84.8	-2.9sss
Cigarettes	77.8	75.5	76.1	76.4	76.9	76.0	73.6	71.5	68.7	67.7	64.3	-3.5sss	89.1	89.4	90.3	90.7	91.3	89.6	88.1	88.3	86.8	86.3	83.3	-3.1sss
Steroids	24.0	22.7	23.1	23.8	24.1	23.6	22.3	22.6	22.3	23.1	22.0	-1.2	37.6	33.6	33.6	34.8	34.8	34.2	33.0	35.9	35.4	33.1	33.2	0.0
Approx. N =	*8355*	*16775*	*16119*	*15496*	*16318*	*16482*	*16208*	*15397*	*15180*	*14804*	*13972*		*7014*	*14652*	*15192*	*16209*	*14887*	*14856*	*14423*	*13112*	*13690*	*13518*	*13694*	

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.

[a]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.
[b]Beginning in 1993, data based on half of forms; N is one-half of N indicated.

TABLE 9
Long-Term Trends in Perceived <u>Availability</u> of Drugs 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[a]

12th Grade

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	'01–'02 change
Marijuana	87.8	87.4	87.9	87.8	90.1	89.0	89.2	88.5	86.2	84.6	85.5	85.2	84.8	85.0	84.3	84.4	83.3	82.7	83.0	85.5	88.5	88.7	89.6	90.4	88.9	88.5	88.5	87.2	-1.3
Amyl/butyl nitrites	—	—	—	—	—	—	—	—	—	—	—	—	23.9	25.9	26.8	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	-0.2
LSD	46.2	37.4	34.5	32.2	34.2	35.3	35.0	34.2	30.9	30.6	30.5	28.5	31.4	33.3	38.3	40.7	39.5	44.5	49.2	50.8	53.8	51.3	50.7	48.8	44.7	46.9	44.7	39.6	-5.1ss
Some other psychedelic/ hallucinogen[b]	47.8	35.7	33.8	33.8	34.6	35.0	32.7	30.6	26.6	26.6	26.1	24.9	25.0	26.2	28.2	28.3	28.0	29.9	33.5	33.8	35.8	33.9	33.9	35.1	29.5	34.5	‡48.5	47.7	-0.8
PCP	—	—	—	—	—	—	—	—	—	—	—	—	22.8	24.9	28.9	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	-1.4
MDMA (Ecstasy)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.7	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	-2.4
Cocaine	37.0	34.0	33.0	37.8	45.5	47.9	47.5	47.4	43.1	45.0	48.9	51.5	54.2	55.0	58.7	54.5	51.0	52.7	48.5	46.6	47.7	48.1	48.5	51.3	47.6	47.8	46.2	44.6	-1.6
Crack	—	—	—	—	—	—	—	—	—	—	—	—	41.1	42.1	47.0	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	-1.7
Cocaine powder	—	—	—	—	—	—	—	—	—	—	—	—	52.9	50.3	53.7	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	-0.5
Heroin	24.2	18.4	17.9	16.4	18.9	21.2	19.2	20.8	19.3	19.9	21.0	22.0	23.7	28.0	31.4	31.9	30.6	34.9	33.7	34.1	35.1	32.2	33.8	35.6	32.1	33.5	32.3	29.0	-3.3
Some other narcotic (including methadone)	34.5	26.9	27.8	26.1	28.7	29.4	29.6	30.4	30.0	32.1	33.1	32.2	33.0	35.8	38.3	38.1	34.6	37.1	37.5	38.0	39.8	40.0	38.9	42.8	40.8	43.9	40.5	44.0	+3.5
Amphetamines	67.8	61.8	58.1	58.5	59.9	61.3	69.5	70.8	68.5	68.2	66.4	64.3	64.5	63.9	64.3	59.7	57.3	58.8	61.5	62.0	62.8	59.4	59.8	60.8	58.1	57.1	57.1	57.4	+0.3
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	0.0
Barbiturates	60.0	54.4	52.4	50.6	49.8	49.1	54.9	55.2	52.5	51.9	51.3	48.3	48.2	47.8	48.4	45.9	42.4	44.0	44.5	43.3	42.3	41.4	40.0	40.7	37.9	37.4	35.7	36.6	+0.9
Tranquilizers	71.8	65.5	64.9	64.3	61.4	59.1	60.8	58.9	55.3	54.5	54.7	51.2	48.6	49.1	45.3	44.7	40.8	40.9	41.1	39.2	37.8	36.0	35.4	36.2	32.7	33.8	33.1	32.9	-0.2
Alcohol	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95.0	94.8	94.3	94.7	+0.4
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	+1.1
Approx. N =	2627	2865	3065	3598	3172	3240	3578	3602	3385	3269	3274	3077	3271	3231	2806	2549	2476	2586	2670	2526	2552	2340	2517	2520	2215	2095	2120	2138	

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.

[a]Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

[b]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.