Monitoring the Future

NATIONAL RESULTS ON ADOLESCENT DRUG USE

Overview of Key Findings

2009

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MONITORING THE FUTURE

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Overview of Key Findings, 2009

by

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Introduction

Monitoring the Future (MTF) is a long-term study of American adolescents, college students, and adults through age 50. It has been conducted annually by the University of Michigan's Institute for Social Research since its inception in 1975. It is supported under a series of investigator-initiated, competing research grants from the National Institute on Drug Abuse.

The need for a study such as MTF is clear. Substance use by American young people has proven to be a rapidly changing phenomenon, requiring frequent assessments and reassessments. Since the mid-1960s, when it burgeoned in the general youth population, illicit drug use has remained a major concern for the nation. Smoking, drinking, and illicit drug use are leading causes of morbidity and mortality, both during adolescence as well as later in life. How vigorously the nation responds to teenage substance use, how accurately it identifies the emerging substance abuse problems, and how well it comes to understand the effectiveness of policy and intervention efforts largely depend on the ongoing collection of valid and reliable data. Monitoring the Future is designed to generate such data in order to provide an accurate picture of what is happening in this domain and why, and has served that function well for the past 34 years. Policy discussions in the media; in government, education, and public health institutions; and elsewhere have been informed by the ready availability of extensive and accurate information from the study relating to a large number of substances.

The 2009 MTF survey encompassed over 46,000 eighth-, 10th-, and 12th-grade students in almost 400 secondary schools nationwide. The first published results are presented in this report. Recent trends in the use of licit and illicit drugs are emphasized, as well as trends in the levels of perceived risk and personal disapproval associated with each drug. This study has shown these beliefs and attitudes to be particularly important in explaining trends in use. In addition, trends in the perceived availability of each drug are presented.

A synopsis of the design and methods used in the study and an overview of the key results from the 2009 survey follow this introductory section. This is followed by a separate section for each individual drug class, providing figures that show trends in the overall proportions of students at each grade level (a) using the drug, (b) seeing a "great risk" associated with its use (perceived risk), (c) disapproving of its use (disapproval), and (d) saying that they think they could get it "fairly easily" or "very easily" if they wanted to (perceived availability). For 12th graders, annual data are available since 1975, and for 8th and 10th graders, since 1991, the first year they were included in the study.

The tables at the end of this report provide the statistics underlying the figures; in addition, they present data on lifetime, annual, 30-day, and (for selected drugs) daily prevalence.[1] For the sake of brevity, we present these prevalence statistics here only for the 1991–2009 interval, but statistics on 12th graders are available for earlier years in other MTF publications. For each prevalence period, the tables indicate which of the most recent one-year changes (between 2008 and 2009) are statistically significant. The graphic depictions of multiyear trends often indicate gradual, continuing change that may not reach significance in a given one-year interval.

A much more extensive analysis of the study's findings on secondary school students may be found in *Volume I*, the second monograph in this series, which will be published later in 2010.[2] *Volume I* also contains a more complete description of the study's methodology, as well as an appendix explaining how to test the significance of differences between groups or of trends over time. The most recent such volume is always available on the MTF Web site under Publications.

MTF's findings on American college students and adults through age 50 are not covered in this early

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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. For most drugs, the prevalence of daily use refers to reported 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., Bachman, J. G., & Schulenberg, J. E. (2009). *Monitoring the Future national survey results on drug use, 1975–2008: Volume I, Secondary school students* (NIH Publication No.09-7402). Bethesda, MD: National Institute on Drug Abuse, 721 pp.

Overview report because the data from those populations become available later in the year. These findings will be covered in *Volume II*, the third monograph in this annual series, which will be published later in 2010.[3] A fourth monograph, *HIV/AIDS; Risk and Protective Behaviors Among Young Adults*, dealing with national trends in HIV/AIDS-related risk and protective behaviors among young adults 21 to 30 years old, is published each year since 2009.[4] Volumes in these annual series are available from the NIDA Drug Pubs Research Dissemination Center at 877-NIDA-NIH (877-643-2644); or by e-mail at *drugpubs@nida.nih.gov*. They may also be viewed and downloaded from the MTF Web site. Further information on the study, including its latest press releases, a listing of all publications, and the text of many of them may be found on the Web site at *www.monitoringthefuture.org*.

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[3]The most recent publication in this series is: Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2009). *Monitoring the Future national survey results on drug use, 1975–2008: Volume II, College students & adults ages 19–50* (NIH Publication No. 09-7403). Bethesda, MD: National Institute on Drug Abuse, 305 pp.

[4]The most recent publication in this series is: Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (in press). *HIV/AIDS: Risk and protective behaviors among American young adults, 2004–2008* (NIH Publication No. yet to be determined). Bethesda, MD: National Institute on Drug Abuse, 52 pp.

Study Design and Methods

Monitoring the Future's main data collection involves a series of large, annual surveys of nationally representative samples of public and private secondary school students throughout the coterminous United States. Every year since 1975, a national sample of 12th graders has been surveyed. In 1991, the study was expanded to include comparable, independent national samples of 8th and 10th graders. The year 2009 marked the 35th survey of 12th graders and the 19th survey of 8th and 10th graders.

Sample Sizes

The 2009 sample sizes were about 15,500, 16,300, and 14,300 in 8th, 10th, and 12th grades, respectively. In all, about 46,000 students in 389 secondary schools participated. Because multiple questionnaire forms are administered at each grade level, and because not all questions are contained in all forms, the number of cases upon which a particular statistic is based may be less than the total sample size. The tables here contain notes on the number of forms used for each statistic if less than the total sample is used.

Field Procedures

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

In 8th and 10th grades the questionnaires are completely anonymous, and in 12th grade they are confidential (name and address information is gathered to permit the longitudinal follow-up surveys of random subsamples of participants for some years after high school). Extensive, carefully designed procedures are followed to protect the confidentiality of the participants and their data. All procedures are reviewed and approved on an annual basis by the University of Michigan's Institutional Review Board (IRB) for compliance with federal guidelines for the treatment of human subjects.

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 marijuana . . . (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, 1–2, 3–5, 6–9, 10–19, 20–39, and 40 or more occasions.

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

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

Smokeless tobacco questions parallel those for cigarettes.

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

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

Disapproval is measured by the question "Do YOU disapprove of people doing each of the following?" followed by "trying marijuana once or twice," for example. Answer categories are "don't disapprove," "disapprove," and "strongly disapprove." In the 8th- and 10th-grade questionnaires, a fourth category— "can't say, drug unfamiliar"—is provided and included in the calculations.

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," and "very easy." For 8th and 10th graders, an additional answer category—"can't say, drug unfamiliar"—is offered and included in the calculations.

A Special Adjustment

In reporting the 2009 data, we determined that the 10th-grade data for 2008 were most likely incorrect due to sampling error. This judgment was based on a number of criteria, including the facts that (a) 10th-grade data tended to deviate from the trends observed in the two other grades in both 2008 and 2009; (b) the data from the matched half sample of 10th-grade schools participating in both 2008 and 2009 showed different trends over that one-year interval than did the full sample of 10th-grade schools; (c) the increases observed in 2009 for certain drugs at 10th grade occurred in just two regions of the country, and this was not replicated in either of the other two grades; and (d) by omitting the 2008 tenth-grade data from the trend graphs, we found that the trend lines for all three grades moved much more in parallel (as is typically the case). Therefore, the 10th-grade data from 2008 have beem omitted from the trend lines in the graphs contained here; in the tables, the change score for 10th graders in the interval 2008–2009 have been replaced with the change scores observed for the *matched half sample* of schools participating in both years. These revised change scores are shown in brackets. The prevelence rates shown in both 2008 and 2009 are those derived from the *full samples* in each of those years.

Summary of Key Findings

In recent years, the trends in drug use have become more complex, and thus more difficult to describe. A major reason for this increased complexity is that cohort effects—lasting differences between different cohorts entering secondary school—have emerged, beginning with increases in drug use during the early 1990s. These effects result in the various grades reaching peaks or valleys in different years, and thus usage rates sometimes move in different directions. We have seen such cohort effects for cigarette smoking throughout most of the life of the study, but they were much less evident for illicit drugs until the mid-1990s. Since then, 8th graders have been the first to show turnarounds in illicit drug use, and have generally shown the greatest proportional declines from recent peak levels of use, attained for the most part during the 1990s, while the proportional declines have generally been smallest among 12th graders.

In 2008, we introduced an additional set of tables providing an overview of drug use trends for the *three grades combined*. While there are important differences by grade, this approach gives a more succinct summary of the general nature of historical trends over the last several years. Later sections in this monograph deal separately with each class of drugs and provide data for each grade individually.

This was again a year of gradual change in the use of *most illicit drugs*, much as was true in 2005–2008; but some of the observed changes were nonetheless important. Looking across Tables 1–4, based on the combined data from all three grades, one can see that very few one-year changes (2008–2009) reached statistical significance; among those that did change significantly, all but one showed declines. The exception was 30-day use of *smokeless tobacco*, which rose significantly in 2009.

But perhaps the most important finding in this year's results is the fact that, after a decade of gradual decline, *marijuana* use has begun to tilt up. Lifetime, annual, and 30-day prevalence of marijuana use leveled in 2008 and began to increase in 2009. The 2007–2009 increase in 30-day use for the three grades combined (from 12% to 14%) was, in fact, significant. So, it would appear that the turnaround, though not yet dramatic, is real. As is often the case, this increase was preceded and accompanied by a decline in

adolescents' beliefs about how much risk marijuana use poses. The proportion seeing great risk in regular marijuana use fell from 76% in 2004 to 70% in 2009 among 8th graders, from 66% in 2005 to 60% in 2009 among 10th graders, and from 58% in 2005 to 52% in 2009 among 12th graders.

Because marijuana is by far the most prevalent drug included in the *any illicit drug* use index, a similar change was observed in the usage trends for that index in annual and 30-day prevalence. The proportions using *any illicit drug other than marijuana* have been declining gradually since about 2001, and continued to do so in 2009 in grades 8 and 12.

Three drugs showed declines in 2009 in 12th grade only: *LSD*, *other hallucinogen*, and *Ritalin*. *Adderall*, the use of which was measured for the first time in 2009, may be replacing the use of Ritalin outside of medical supervision. The annual prevalence rates observed for Adderall are relatively high, at 2%, 6%, and 5% in grades 8, 10, and 12, respectively. Both Ritalin and Adderall are stimulants used in the treatment of attention deficit hyperactivity disorder (ADHD). *Cocaine* and *powder cocaine* continued to decline in all grades in 2009.

The use of quite a number of drugs held fairly steady in 2009. These included *crack* cocaine, *ecstasy*, *heroin*, *narcotics other than heroin* taken as a class, *Vicodin* specifically, *OxyContin* specifically, *amphetamines*, *methamphetamine*, *crystal methamphetamine*, *tranquilizers*, *Rohypnol*, and *ketamine*. Use of most of these drugs is at or below peak levels, in particular methamphetamine and crystal methamphetamine. In fact, methamphetamine use is down by between two thirds and three quarters since 1999, when its use was first measured. The drugs that are not down from peak levels are the narcotics other than heroin; their continued high rate of use is among the more disturbing findings from the 2009 survey.

Since 2007, particular emphasis has been placed on the use of *prescription drugs* outside of medical supervision, and on the use of *over-the-counter cough and cold medicines* to get high. As mentioned above, the use of amphetamines did not continue to decline this year. Use of *sedatives* (*barbiturates*) (measured in 12th grade only) continues a very

gradual decline that began after 2005. *Tranquilizer* use held fairly steady this year, while use of *narcotics other than heroin* has been the exception, as is mentioned above, holding steady at historically high levels since 2002 among 12th graders (use for 8th and 10th graders is not reported). The use of two important narcotics, *Vicodin* and *OxyContin*, has not changed significantly since peak levels reached in recent years, but their 2009 levels are the highest observed so far.

The misuse of *over-the-counter cough and cold medicines*, most of which contain dextromethorphan, was first measured in 2006; this misuse has declined a bit in 8th and 12th grades since then, but not in 10th grade.

The use of *anabolic steroids* had been steadily declining in recent years since peak levels were reached by 8th graders in 2000, by 10th graders in 2002, and by 12th graders in 2004. There was no further systematic change this year. The rates in 2009 are down from those peaks by roughly half.

Implications for Prevention

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

Unfortunately, word of the supposed benefits of using a drug usually spreads much faster than information about the adverse consequences. The former—supposed benefits—takes only rumor and a few testimonials, the spread of which has been hastened greatly by the media and Internet. It usually takes much longer for the evidence of adverse consequences (e.g., death, disease, overdose, addiction) to cumulate and then be disseminated. Thus, when a new drug comes onto the scene, it has a considerable grace period during which its benefits are alleged and its consequences are not yet known. We believe that ecstasy was the most recent example of this.

To a considerable degree, prevention must occur drug by drug, because people will not necessarily generalize the adverse consequences of one drug to the use of others. Many beliefs and attitudes held by

young people are drug specific. The figures in this *Overview* on perceived risk and disapproval for the various drugs—attitudes and beliefs that we have shown to be important in explaining many drug trends over the years—amply illustrate this assertion. These attitudes and beliefs are at quite different levels for the various drugs and, more importantly, often trend quite differently over time.

"Generational Forgetting" Helps Keep the Epidemic Going

Another point worth keeping in mind is that there tends to be a continuous flow of new drugs onto the scene and of older ones being rediscovered by young people. Many drugs have made a comeback years after they first fell from popularity, often because young people's knowledge of their adverse consequences faded as generational replacement took place. We call this process "generational forgetting." Examples include LSD and methamphetamine, two drugs used widely in the 1960s that made a comeback in the 1990s after their initial popularity faded as a result of their adverse consequences becoming widely recognized during periods of high use; heroin, cocaine, PCP, and crack are some others. At present, *LSD*, *inhalants*, and *ecstasy* are all showing the effects of generational forgetting—that is, perceived risk is declining appreciably for those drugs—which puts future cohorts at greater risk of having a resurgence in use.

As for newly emerging drugs, examples include 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 or new modes of administration of older ones, as illustrated by crack, crystal methamphetamine, and noninjected heroin) helps to keep this nation's drug problem alive. Because of the lag times described previously, the forces of containment are always playing catch up with the forces of encouragement and exploitation. Organized efforts to reduce the grace period experienced by new drugs would seem to be among the most promising responses for minimizing the damage they will cause. Such efforts regarding ecstasy by the National Institute on Drug Abuse and others appeared to pay off.

The *psychotherapeutic drugs* now make up a larger part of the overall U.S. drug problem than was true

10–15 years ago, in part because use has increased for many such drugs over that period, and in part because use of a number of street drugs has declined substantially since the mid-1990s. It seems likely that young people are less concerned about the dangers of using these drugs outside of medical regimen, likely because they are widely used for legitimate purposes. (Indeed, the low levels of perceived risk for sedatives and amphetamines observed among 12th graders illustrate this point.) Also, prescription psycho-therapeutic drugs are now being advertised directly to the consumer, which implies both that they are in widespread use and that they can be used with low risk.

Cigarettes and Alcohol

The statistics for use of the licit drugs—cigarettes and alcohol—also remain a basis for considerable concern.

Cigarettes. Nearly half (44%) of American young people have tried cigarettes by 12th grade, and one out of five (20%) 12th graders is a current smoker. Even as early as 8th grade, one in five (20%) has tried cigarettes, and 1 in 15 (7%) has already become a current smoker. Fortunately, there has been some real improvement in these statistics over the last 12–13 years, following a dramatic increase in adolescent smoking earlier in the 1990s. Some of that improvement was simply regaining lost ground; however, in 2009, cigarette use reached the lowest levels recorded in the life of the MTF study, going back 34 years in the case of 12th graders.

Thirty-day prevalence of cigarette use reached a peak in 1996 at grades 8 and 10, capping a rapid climb from the 1991 levels (when data were first gathered on these grades). Between 1996 and 2009, current smoking has fallen considerably in these grades (by 69% and 57%, respectively). For 12th graders, peak use occurred a year later, in 1997, and has since shown a more modest decline, dropping to 20% by 2009. However, because of the strong cohort effect that we have consistently observed for cigarette smoking, we expect the 12th graders to continue to show declines, as the lighter using cohorts of 8th and 10th graders become 12th graders. Overall increases in perceived risk and disapproval appear to have contributed to this downturn. Perceived risk increased substantially and steadily in all grades from 1995 through 2004, after which it leveled in 8th and 10th

grades, but continued rising in 12th grade until 2006, after which it leveled and then declined some in 2008. Disapproval of smoking had been rising steadily in all grades since 1996. After 2004, the rise decelerated in the lower grades through 2006—again, reflecting a cohort effect in this attitude.

It seems likely that some of the attitudinal change surrounding cigarettes is attributable to the adverse publicity suffered by the tobacco industry in the 1990s, as well as a reduction in cigarette advertising and an increase in antismoking advertising reaching children. Price is also likely to have been an important factor; cigarette prices rose appreciably in the late 1990s and early 2000s as cigarette companies tried to cover the costs of the tobacco settlement, and as many states increased excise taxes on cigarettes.

Various other attitudes toward smoking became more unfavorable during that interval, as well, though some have since leveled off. For example, among 8th graders, the proportions saying that they "prefer to date people who don't smoke" rose from 71% in 1996 to 81% by 2004, where it remains in 2009. Similar changes occurred in 10th and 12th grades, as well. Thus, at the present time, smoking is likely to make an adolescent less attractive to the great majority of potential romantic partners.

Smokeless tobacco use had also been in decline in recent years, continuing into the early 2000s, but the decline appears to have ended in all grades. The 30-day prevalence rates for smokeless tobacco were down by about half from peak levels, but all grades showed some increase in use over the past few years.

Alcohol use remains extremely widespread among today's teenagers. Nearly three quarters of students (72%) have consumed alcohol (more than just a few sips) by the end of high school, and more than one third (37%) have done so by 8th grade. In fact, more than half (57%) of 12th graders and one sixth (17%) of 8th graders in 2009 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 include a 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 and mid-1990s, though it was a proportionally smaller increase than was seen for most of the illicit drugs. Fortunately,

binge drinking rates leveled off seven to ten years ago, just about when the illicit drug rates began to turn around, and in 2002 a drop in drinking and drunkenness began to appear in all grades. Gradual declines continued until 2009, when rates leveled off in the upper grades.

The longer term trend data available for 12th graders show that alcohol usage rates, and binge drinking in particular, are now substantially below peak levels in the early 1980s.

Monitoring the Future routinely reports three different indexes of illicit drug use—"any illicit drug," "any illicit drug other than marijuana," and "any illicit drug including inhalants."[5] In this section we discuss only the first two; the statistics for all three may be found in Tables 5–7.

In order to make comparisons over time, we have kept the definitions of these indexes constant. Levels are little affected by the inclusion of newer substances, primarily because most individuals using 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, so in 1991, a special index was added that includes inhalants.

Trends in Use

In the late 20th century, young Americans reached extraordinarily high levels of illicit drug use by U.S. as well as international standards. The trends in lifetime use of any illicit drug are given in the first panel on the facing page.[6] In 1975, when MTF 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%) in 1981 before a long and gradual decline to 41% in 1992—the low point. After 1992 the proportion rose considerably, reaching a recent high point of 55% in 1999; it has declined some to 47% in 2009.

Trends for annual, as opposed to lifetime, prevalence appear in the second (upper right) panel. Among 8th graders, a gradual and continuing falloff occurred after 1996. Peak rates since 1991 were reached in 1997 in the two upper grades and declined little for several years. Between 2001 and 2007 all three grades showed declines, but annual use rates in all three grades are up slightly since then.

Because marijuana is much more prevalent than any other illicit drug, trends in its use tend to drive the index of any illicit drug use. Thus we have an index that excludes marijuana, and shows the proportions of high school students who use the other, so-called "harder" illicit drugs. The proportions who have used any illicit drug other than marijuana in their lifetime are shown in the third panel (lower left). In 1975 over one third (36%) of 12th graders had tried some illicit drug other than marijuana. This figure rose to 43% by 1981, then declined for a long period to a low of 25% in 1992. Some increase followed in the 1990s as the use of a number of drugs rose steadily, and it reached 30% by 1997. (In 2001 it was 31%, but this reflected a slight artifactual upward shift in the estimate due to a change in the question wording for "other hallucinogens" and tranquilizers.[7]) The rate of any illicit drug use other than marijuana has since fallen some, to 24% in 2009. The fourth panel presents the *annual* prevalence data for any illicit drug other than marijuana, which shows a pattern of change over the past few years similar to the index of any illicit drug use, but with much less pronounced change since 1991.

Overall, these data reveal that, while use of individual drugs (other than marijuana) may fluctuate widely, the proportion using any of them is much more stable. 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 its use is seen to be, how acceptable it is in the peer group, how accessible it is, and so on.

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[5]Footnote "a" to Tables 5 through 8 provides the exact definition of "any illicit drug."

[6]This is the only set of figures in this *Overview* presenting lifetime use statistics. For other drugs, lifetime statistics may be found in Table 5.

[7]The term "psychedelics" was replaced with "hallucinogens," and "shrooms" was added to the list of examples, resulting in somewhat more respondents indicating use of this class of drugs. For tranquilizers, Xanax was added to the list of examples given, slightly raising the reported prevalence of use.

Any Illicit Drug: Trends in Lifetime and Annual Use
Grades 8, 10,* 12

% who used any illicit drug in lifetime

Legend:
- 8th Grade
- 10th Grade
- 12th Grade

PERCENT

YEAR
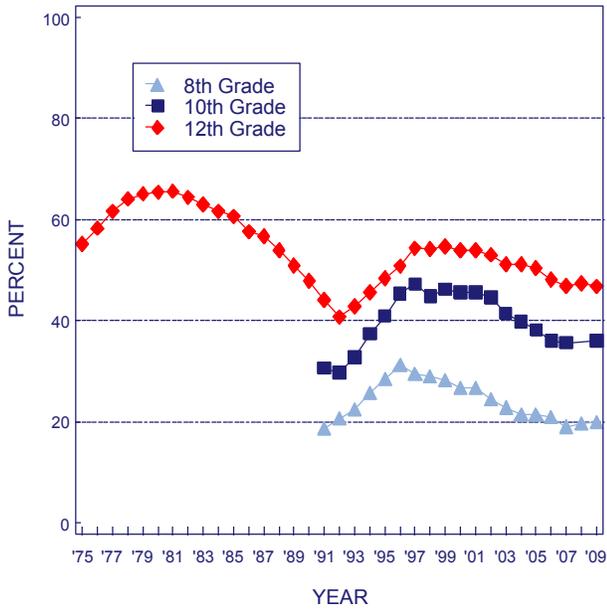
% who used any illicit drug in last 12 months

PERCENT

YEAR
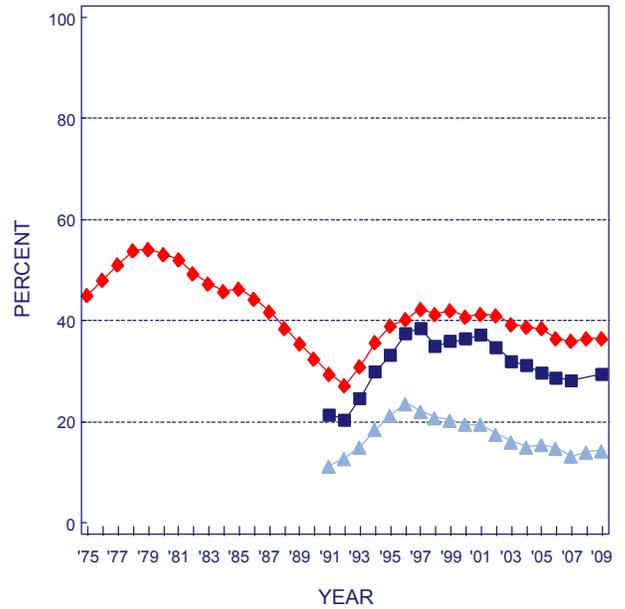
% who used any drug other than marijuana in lifetime**

PERCENT

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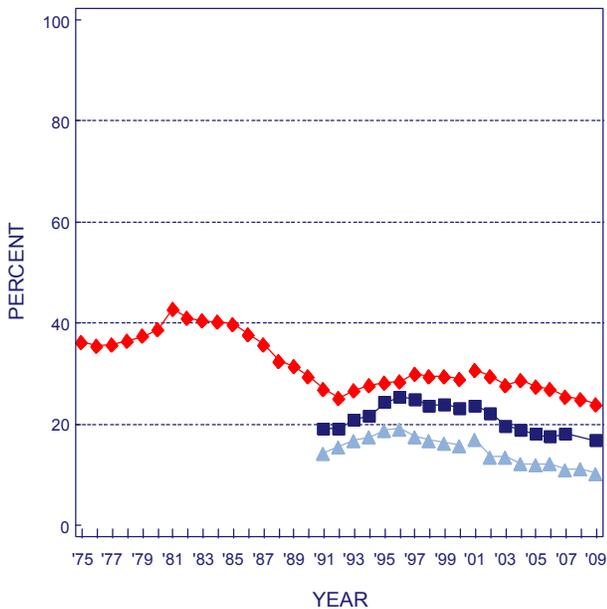
% who used any illicit drug other than marijuana in last 12 months**
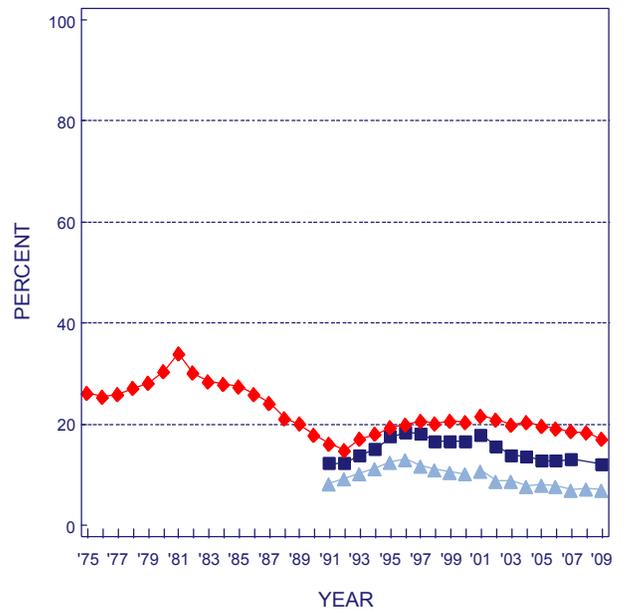
PERCENT

YEAR

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.
**Beginning in 2001, a revised set of questions on other hallucinogen use and tranquilizer use were introduced. Data for "any illicit drug other than marijuana" were affected by these changes.

11

Marijuana

Marijuana has been the most widely used illicit drug throughout MTF's 35 years. 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. Nearly all consumption in the U.S. involves smoking it in rolled cigarettes ("joints"), in pipes, or occasionally in hollowed-out cigars ("blunts").

Trends in Use

Annual marijuana prevalence peaked among 12th graders in 1979 at 51%, 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 (one that actually began among 8th graders a year earlier than among 10th and 12th graders), annual prevalence rates peaked in 1996 at 8th grade and in 1997 at 10th and 12th grades. After these peak years, use declined among all three grades through 2006 or 2007; since then there have been small but important increases in all three grades, indicating another possible period of resurgence of use.

Perceived Risk

The amount of risk perceived to result from using marijuana fell during the rise in use in the 1970s, and again during the subsequent rise in the 1990s. Indeed, at 10th and 12th grades, perceived risk declined a year before use rose 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 lack data starting early enough to know.) The decline in perceived risk halted in 1996 in 8th and 10th grades; the increases in use ended a year or two later, again making perceived risk a leading indicator. From 1996 to 2000, perceived risk held fairly steady, and the decline in use in the upper grades stalled.

After some decline prior to 2002, perceived risk increased in all grades through 2004 as use decreased. Perceived risk has fallen again in all grades since 2006 or 2007 as use rose.

Disapproval

Personal disapproval of marijuana use fell considerably among 8th graders between 1991 and 1996 and among 10th and 12th graders between 1992 and 1997—by 17, 21, and 19 percentage points, respectively, over those intervals of increasing use. After that there was some modest increase in disapproval among 8th graders, but not much among 10th and 12th graders until 2004, when all grades showed increases. From 2003 to 2007 disapproval increased in all three grades, but has declined since then.

Availability

Ever since the MTF study began in 1975, between 83% and 90% of 12th graders each year have said that they could get marijuana fairly easily or very easily if they wanted some. It has been considerably less accessible to younger adolescents. Still, in 2009 40% of 8th graders, 69% of 10th graders, and 81% of 12th graders reported it as being fairly or very easy to get. It thus seems clear that marijuana has remained a highly accessible drug.

As marijuana use rose sharply in the early and mid-1990s, reported availability increased as well, as more young people had friends who were users. Availability peaked for 8th and 10th graders in 1996 and has fallen off since then, particularly in 8th grade. Availability peaked in 1998 for 12th graders; it has declined some since then, but more gradually than among the younger students. Among 8th and 10th graders, availability has leveled since 2007.

Marijuana: Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12

Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th Grade

PERCENT

YEAR

Risk
% seeing "great risk" in using regularly

PERCENT

YEAR

Disapproval
% disapproving of using regularly

PERCENT

YEAR

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

PERCENT

YEAR

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

13
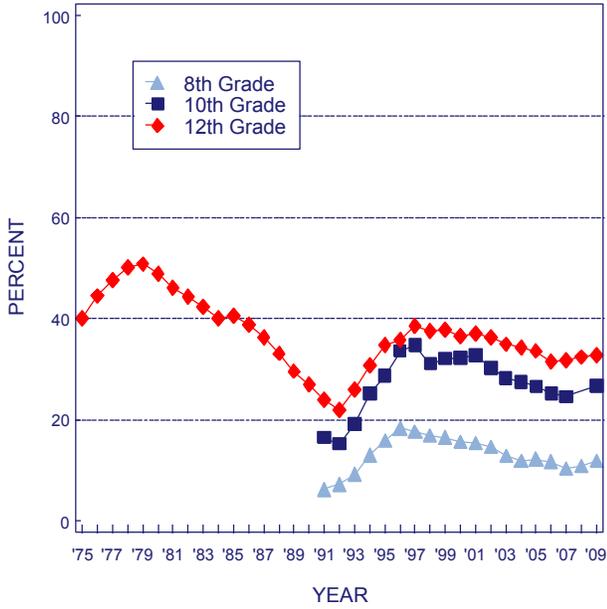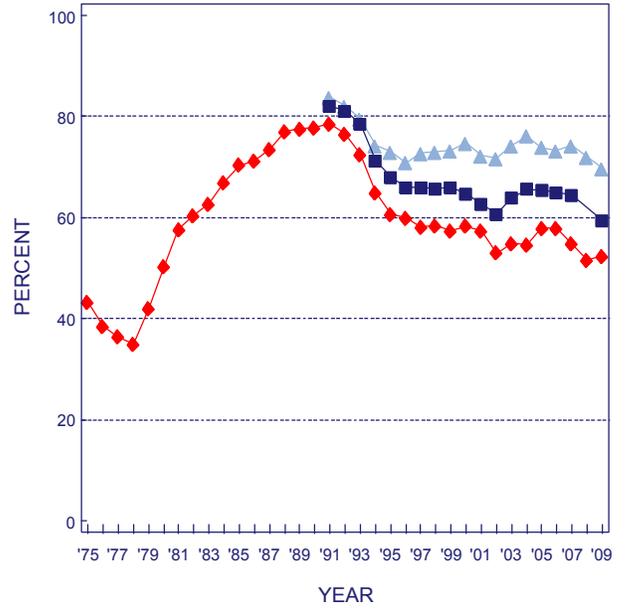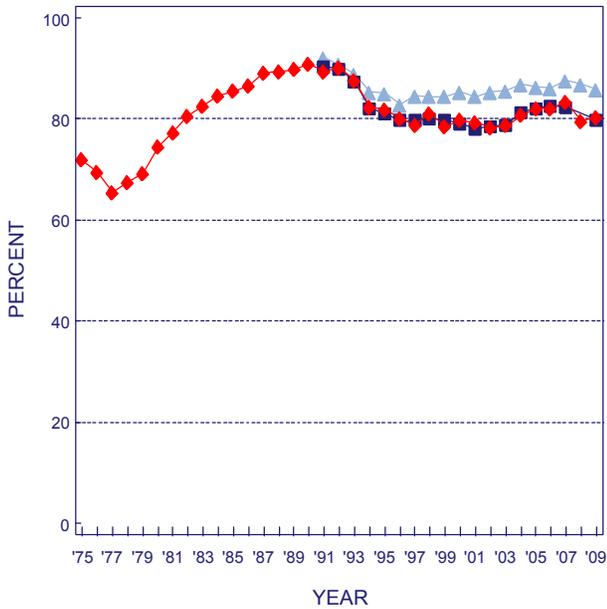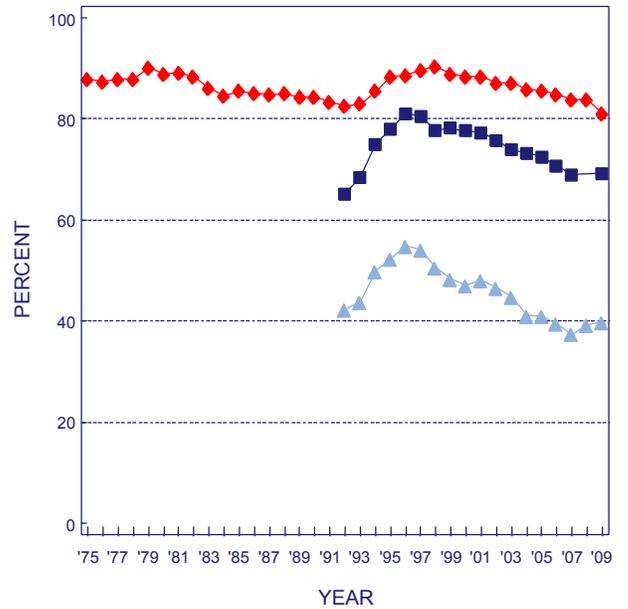
Inhalants

Inhalants are any gases or fumes that can be inhaled for the purpose of getting high. These include many household products—the sale and possession of which is perfectly legal—including glue, nail polish remover, gasoline, solvents, butane, and propellants used in certain commercial products such as whipped cream dispensers. Unlike nearly all other classes of drugs, their use is most common among younger adolescents and tends to decline as youth grow older. The early use of inhalants may reflect the fact that many inhalants are cheap, readily available (often in the home), and legal to buy and possess. The decline in use with age likely reflects their coming to be seen as "kids' drugs," in addition to the fact that a number of other drugs become available to older adolescents, who are also 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 from 1976 to 1987, which was somewhat unusual as most other forms of illicit drug use were in decline during the 1980s. Use rose among 8th and 10th graders from 1991, when data were first gathered on them, through 1995; it rose among 12th graders from 1992 to 1995. All grades then exhibited a fairly steady and substantial decline in use through 2001 or 2002. Since 2001 the grades have diverged somewhat in their trends; 8th graders showed a significant increase in use for two years, followed by a decline from 2004 to 2007; 10th graders showed an increase after 2002 but some decline since 2007; and 12th graders showed some increase from 2003 to 2005, but a decline since then.

Perceived Risk

Only 8th and 10th graders have been asked questions about the degree of risk they associate with inhalant use. Relatively low proportions think that there is a "great risk" in using an inhalant once or twice. However, significant increases in this belief were observed between 1995 and 1996 in both 8th and 10th grades, probably due to an anti-inhalant advertising initiative launched by The Partnership for a Drug-Free America at that time. That increase in perceived risk marked the beginning of a long and important decline in inhalant use. However, the degree of risk associated with inhalant use began to *decline* steadily after 2001 among both 8th and 10th graders, perhaps explaining the turnaround in use in 2003 among 8th graders and in 2004 in the upper grades. The hazards of inhalant use were communicated during the mid-1990s; but there may be a "generational forgetting" of those hazards taking place, as replacement cohorts who were too young to get that earlier message have entered adolescence. This steady decline in perceived risk is worrisome, though the decline did not continue into 2009.

Disapproval

Over 80% of students say that they would disapprove of even trying an inhalant. There was a very gradual upward drift in this attitude among 8th and 10th graders from 1995 through about 2001, with a gradual falloff since then among 8th graders and among 10th graders since 2004.

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
Grades 8, 10,* 12
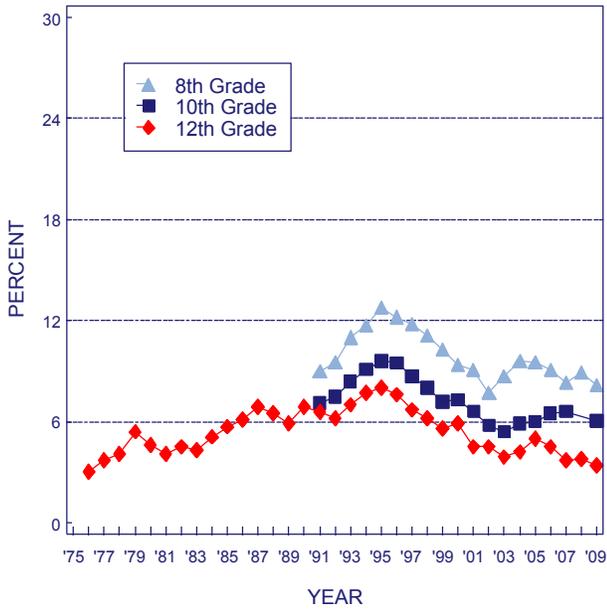
Use
% who used in last 12 months

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

Disapproval
% disapproving of using once or twice

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

(no data)
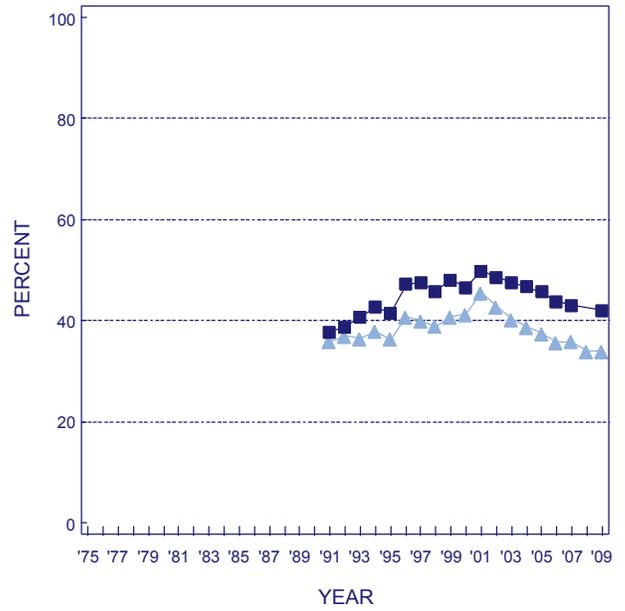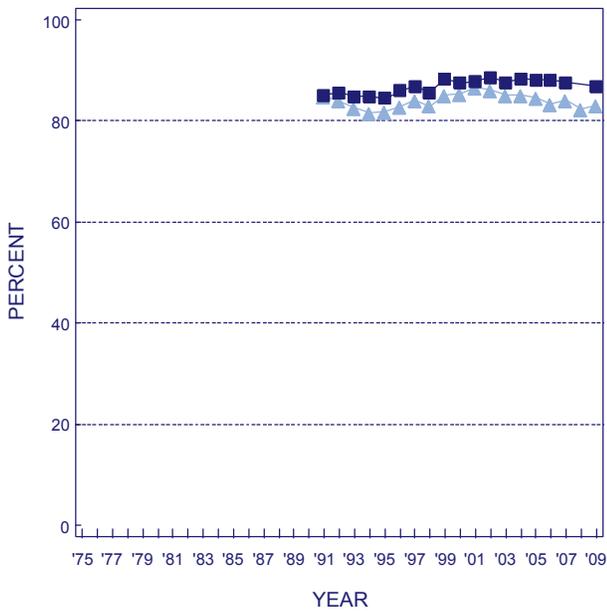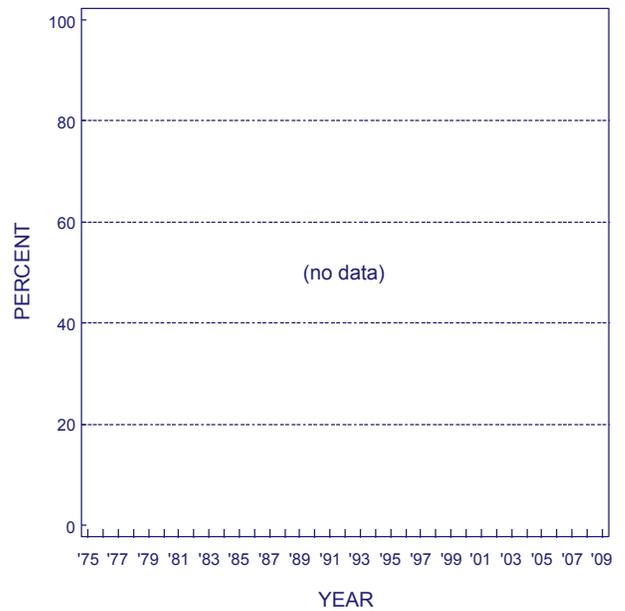
Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

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

Trends in Use

Annual prevalence of LSD use among 12th graders has been below 10% since MTF began. Use declined some for the first 10 years among 12th graders, likely continuing a decline that had begun before 1975. Use was fairly level in the latter half of the 1980s but, as was true for a number of other drugs, rose in all three grades between 1991 and 1996. Since 1996, use has declined in all three grades, with particularly sharp declines between 2001 and 2003; since then use has remained at historically low levels, though there has been a very slight increase in the past few years.

Perceived Risk

We think it likely that perceived risk for LSD use increased during the early 1970s, before MTF began, as concerns grew about possible neurological and genetic effects (most of which were never scientifically confirmed) as well as "bad trips" and "flashbacks." However, there was some decline in perceived risk in the late 1970s, after which it remained fairly level among 12th graders through most of the 1980s. A substantial decline occurred in all grades in the early 1990s, as use rose. Since about 2000, perceived risk has declined steadily and substantially among 8th graders, declined considerably among 10th graders, but held fairly steady among 12th graders. The decline in the lower grades suggests that younger teens are less knowledgeable about this drug's effects than their predecessors—through what we have called "generational forgetting"—making them vulnerable to a resurgence in use.

The decline of LSD use in recent years, despite a fall in perceived risk, suggests that some factors other than a change in underlying attitudes and beliefs are contributing to the downturn—perhaps some displacement by ecstasy prior to 2001, or declining availability (discussed below).

Disapproval

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

Availability

Reported availability of LSD by 12th graders fell considerably from 1975 to 1979, declined a bit further until 1986, and then began a substantial rise, reaching a peak in 1995. LSD availability also rose somewhat among 8th and 10th graders in the early 1990s, reaching a peak in 1995 or 1996. Since those peak years, there has been considerable falloff in all three grades—quite possibly in part because fewer students have LSD-using friends from whom they could gain access. There also may well have been a decrease in supply due to the closing of major LSD-producing labs by the Drug Enforcement Administration, with one particularly important seizure in 2000. It is clear that attitudinal changes cannot explain the recent declines in use.

LSD: Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12
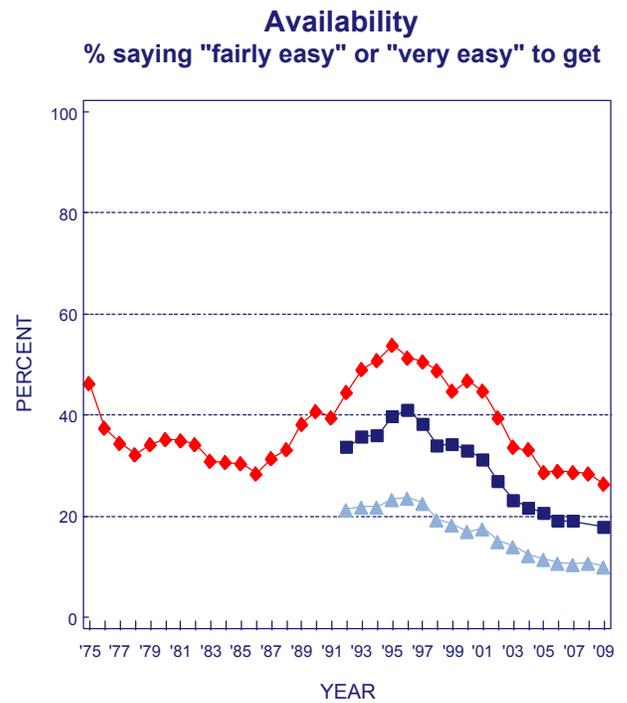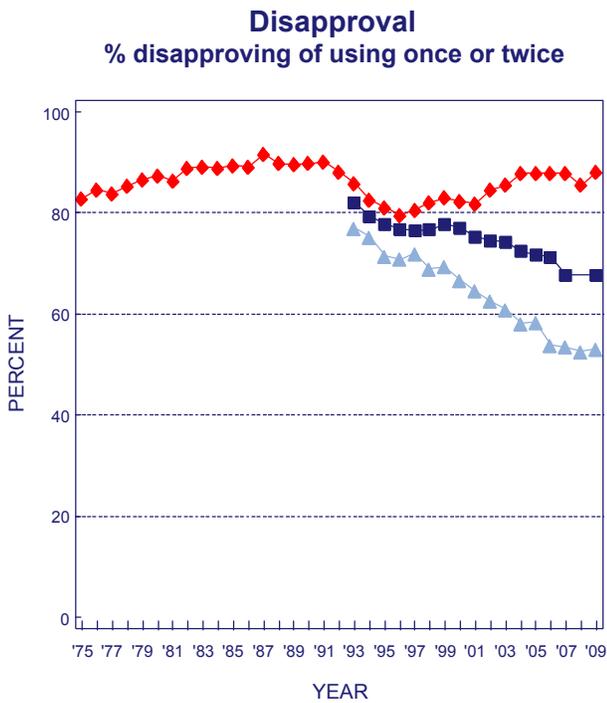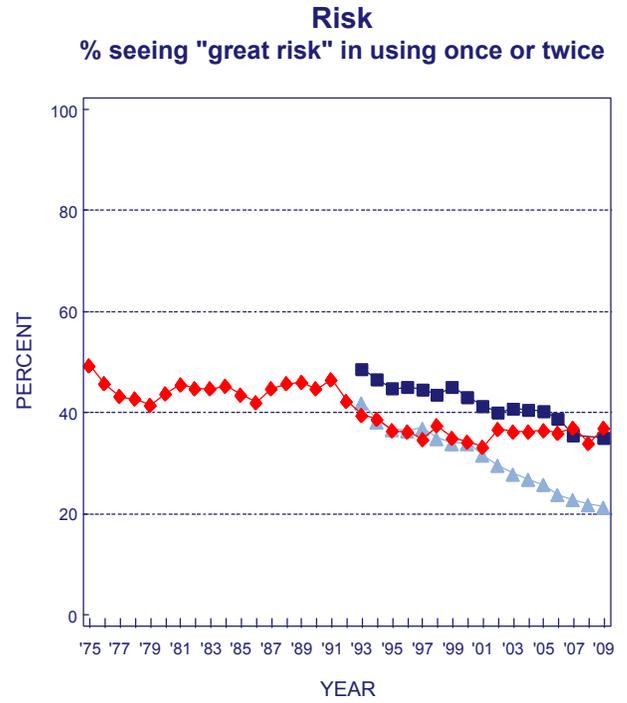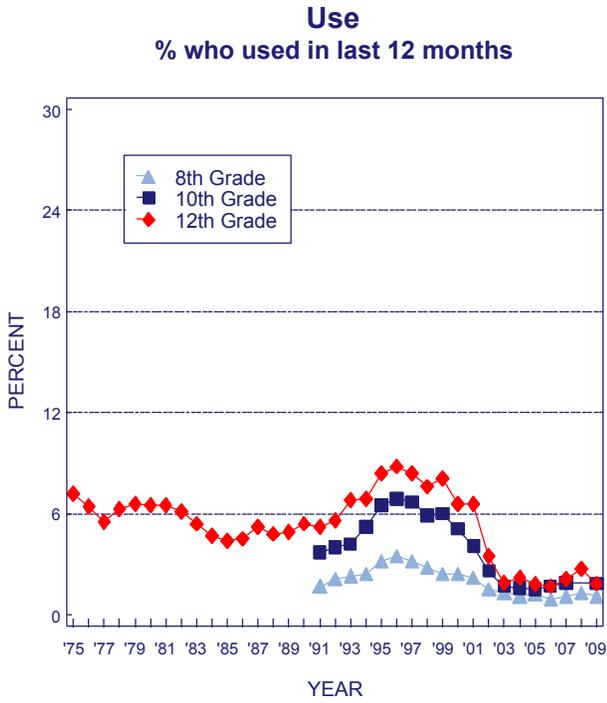
Use
% who used in last 12 months

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

Disapproval
% disapproving of using once or twice

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

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

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Cocaine

Cocaine was used almost exclusively in powder form for some years, though "freebasing" emerged for a while. Then in the early 1980s came the advent of crack cocaine. Our original questions did not distinguish among different forms of cocaine or modes of administration. In 1987 we began to ask separate questions about the use of crack and "cocaine other than crack," which was comprised almost entirely of powder cocaine use. Data on overall cocaine use are presented in the figures in this section, and results for crack alone are presented in the next section.

Trends in Use

There have been some important changes in the levels of overall cocaine use over the life of MTF. Use among 12th graders originally burgeoned in the late 1970s and remained fairly stable through the first half of the 1980s before starting a precipitous decline after 1986. Annual prevalence among 12th graders dropped by about three quarters between 1986 and 1992. Between 1992 and 1999, use reversed course again and doubled before declining by 2000; 12th-grade use stands at just 3.4% in 2009. Use also rose among 8th and 10th graders after 1992 before reaching recent peak levels in 1998 and 1999, respectively. During the last decade, use declined in all three grades.

Perceived Risk

General questions about the dangers 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 was later proven to be incorrect, the message had already "taken." We believe that this event helped to persuade many young people that use of cocaine at any level is dangerous, no matter how healthy the individual. Perceived risk continued to rise through 1991 as the fall in use continued. From 1991 to 2000, perceived risk declined modestly. Perceived risk has leveled in recent years at far higher levels than existed prior to 1987, and there is little evidence of generational forgetting of cocaine's risks.

Disapproval

Questions about disapproval of cocaine have been asked only of 12th graders. Disapproval of cocaine use by 12th graders followed a cross-time pattern similar to that for perceived risk, although its seven-percentage-point jump in 1987 was not quite as pronounced. There was some decline from 1991 to 1997, but this belief has been fairly stable since then.

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 as use rose, and held fairly level through 1982; then, after a one-year drop, it increased steadily to 59% by 1989 (in a period of rapidly *declining* use). Perceived availability then fell back to about 47% by 1994. After 2007 it dropped a significant 4.7 percentage points, and stood at 39% in 2009. Note that the pattern of change does not map well onto the pattern of actual use, suggesting that changes in overall availability have not been a major determinant of use—particularly during the sharp decline in use in the late 1980s. The advent of crack cocaine in the early 1980s, however, provided a lower cost form of cocaine, thus reducing the prior social class differences in use.

Cocaine (including Crack): Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12
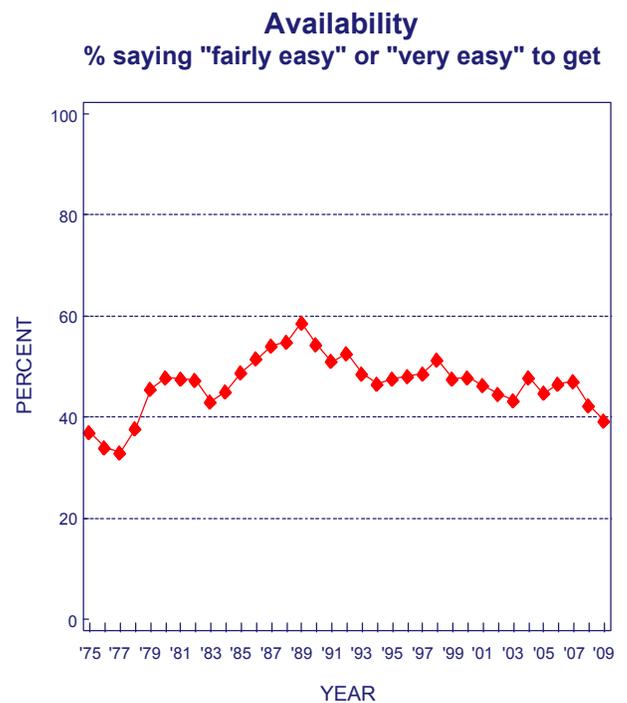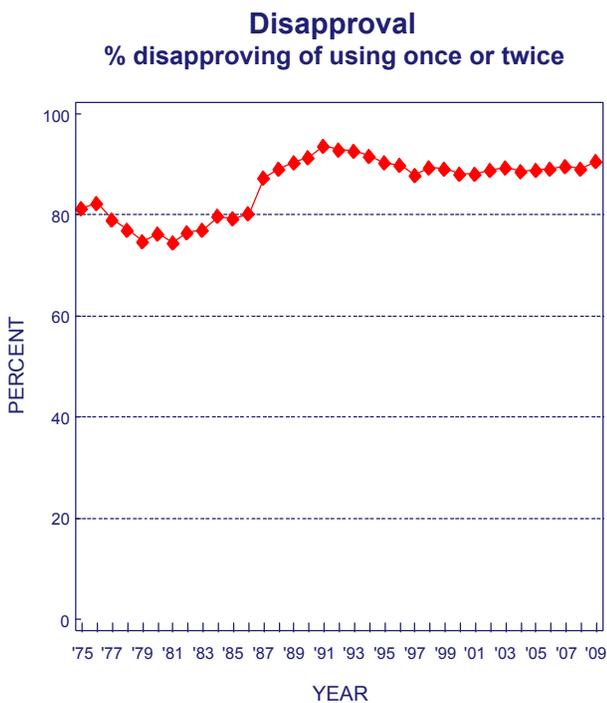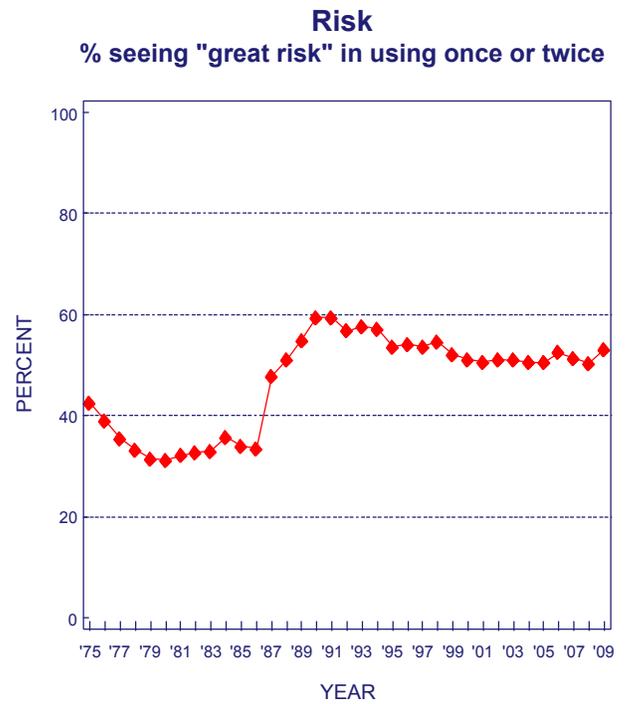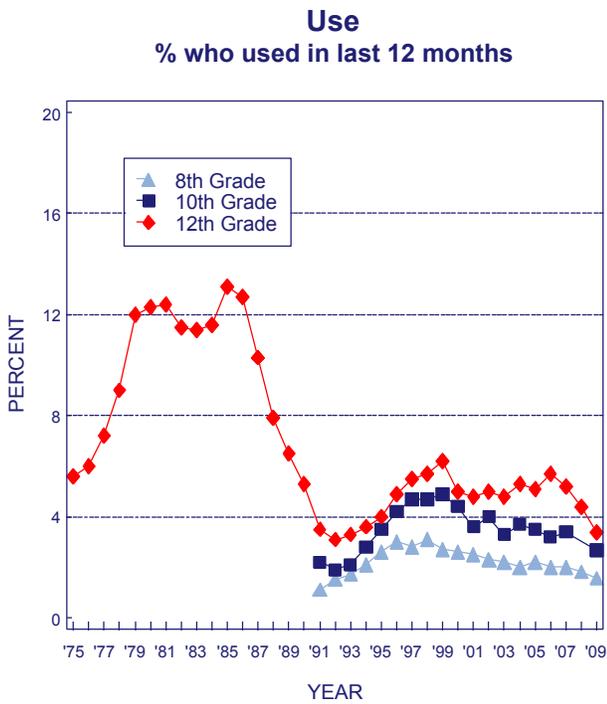
Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th 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

Crack

Several indirect indicators suggest that crack use grew rapidly in the period 1983–1986, beginning before we had direct measures of its use. In 1986 a single usage question was included in one of the five 12th-grade questionnaire forms, asking 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, we introduced three questions about crack use into several questionnaire forms.

Trends in Use

After 1986 there was a precipitous drop in crack use among 12th graders—a drop that continued through 1991. After 1991 for 8th and 10th graders (when data were first available) and after 1993 for 12th graders, all three grades showed a slow, steady increase in use through 1998. Since then, annual prevalence dropped by roughly half in all three grades. As with many drugs, the decline at 12th grade has lagged behind those in the lower grades due to a cohort effect.

Perceived Risk

By the time we added questions about the perceived risk of using crack in 1987, crack was already seen by 12th graders as one of the most dangerous illicit drugs: 57% saw a great risk in even trying it. This compared to 54% for heroin, for example. (See the previous section on cocaine for a discussion of changes in perceived risk in 1986.) Perceived risk for crack rose still higher through 1990, reaching 64% of 12th graders who said they thought there was a great risk in taking crack once or twice. (Use was dropping during that interval.) After 1990 some falloff in perceived risk began, well before crack use began to increase in 1994. Thus, here again, perceived risk was a leading indicator. Between 1991 and 1998 there was a considerable falloff in this belief in grades 8 and 10, as use rose quite steadily. Perceived risk leveled in 2000 in grades 8 and 12 and a year later in grade 10. We think that the declines in perceived risk for crack and cocaine during the 1990s may well reflect an example of "generational forgetting," wherein the class cohorts that were in adolescence when the adverse consequences were most obvious (i.e., in the mid-1980s) were replaced by newer cohorts who had heard much less about the dangers of this drug as they were growing up.

Disapproval

Disapproval of crack use was not included in the MTF study until 1990, by which time it was also at a very high level, with 92% of 12th graders saying that they disapproved of even trying it. Disapproval of crack use declined slightly but steadily in all three grades from 1991 through about 1997. After a brief period of stability, disapproval has increased very slightly since.

Availability

Crack availability has not changed dramatically across the interval for which data are available, as the fourth panel on the facing page illustrates. Eighth and 10th graders reported some modest increase in availability in the early 1990s. This was followed by a slow, steady decrease from 1995 through 2004 in 8th grade (followed by a leveling) and sharper drops among 10th and 12th graders beginning in 1999 and 2000, respectively. Since 2004, availability has declined further, particularly in the upper grades.

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

Crack: Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12

Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th Grade
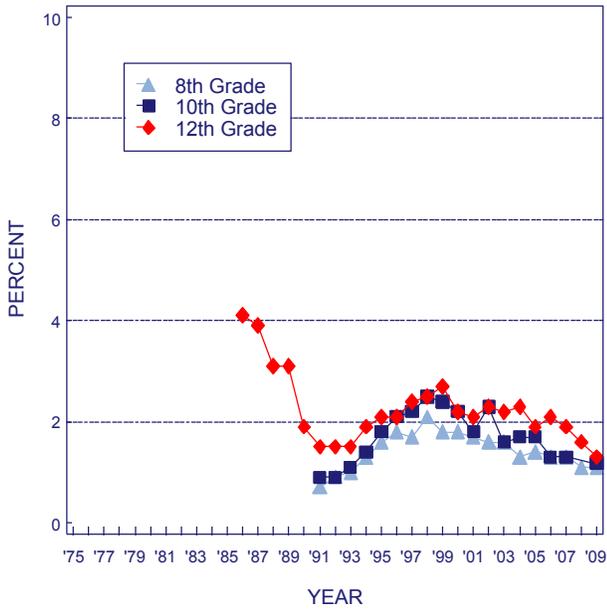
Risk
% seeing "great risk" in using once or twice
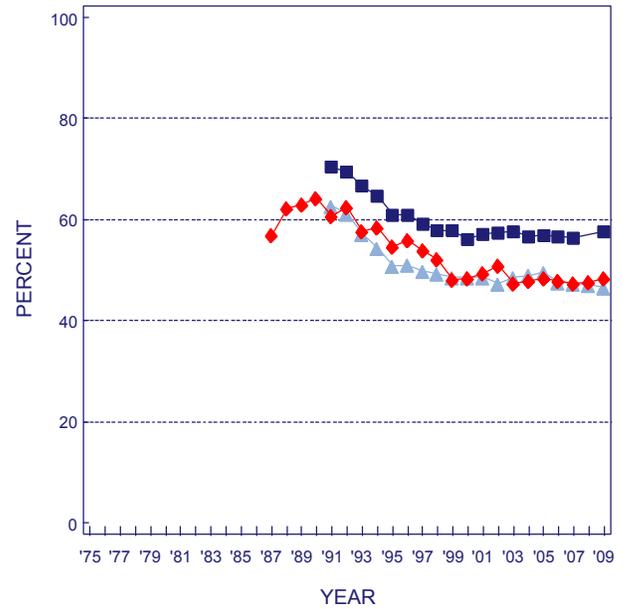
Disapproval
% disapproving of using once or twice
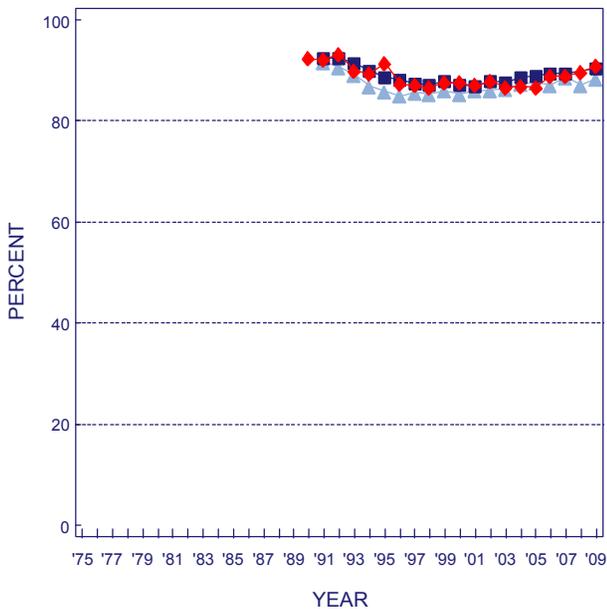
Availability
% saying "fairly easy" or "very easy" to get
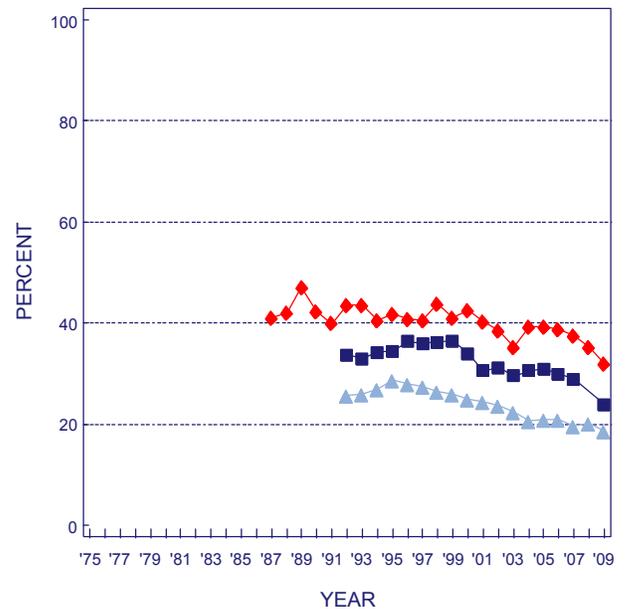
Amphetamines

Amphetamines, a class of psychotherapeutic stimulants, had a relatively high prevalence of use in the youth population for many years. The behavior reported here excludes any use under medical supervision. Amphetamines are controlled substances—they cannot 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 12th graders' use of amphetamines began, which did not end until 1992.

As with many other illicit drugs, amphetamines made a comeback in the 1990s. Use peaked in the lower two grades by 1996. Since then, use declined steadily in 8th grade, and sporadically in 10th grade. Only after 2002 did it begin to decline in 12th grade. The decline in 8th grade has stalled for the last several years, while declines continue in the upper grades—a pattern that we have seen for a number of drugs. Since the recent peaks in use, annual prevalence has declined by half in 8th grade, and by about four tenths in 10th and 12th grades.

Perceived Risk

Only 12th graders are asked about the amount of risk they associate with amphetamine use. For a few years, changes in perceived risk were not correlated with changes in usage levels (at the aggregate level). Specifically, in the interval 1981–1986, risk was quite stable even though use fell considerably, likely as a result of some displacement by cocaine. There was, however, a decrease in risk during the period 1975–1981 (when use was rising), some increase in perceived risk in 1986–1991 (when use was falling), and some decline in perceived risk from 1991 to 1995 (in advance of use rising again). Perceived risk has generally been rising in recent years, very likely contributing to the decline in use that has been occurring among 12th graders since 2002.

Disapproval

Disapproval of amphetamine use is asked in 12th grade only. Relatively high proportions of 12th graders have disapproved of even trying amphetamines throughout the life of the MTF study. Disapproval did not change in the late 1970s despite an increase in use. From 1981 to 1992, disapproval rose gradually from 71% to 87% as perceived risk rose and use steadily declined. Disapproval has increased fairly steadily since 1996 along with perceived risk.

Availability

When the MTF study started in 1975, amphetamines had a high level of reported availability. The level fell by about 10 percentage points by 1977, drifted up a bit through 1980, jumped sharply in 1981, and then began a long, gradual decline through 1991. There was a modest increase in availability at all three grade levels in the early 1990s, as use rose, followed by some decline after that. Some further decline occurred in all grades in 2009.

Amphetamines: Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12
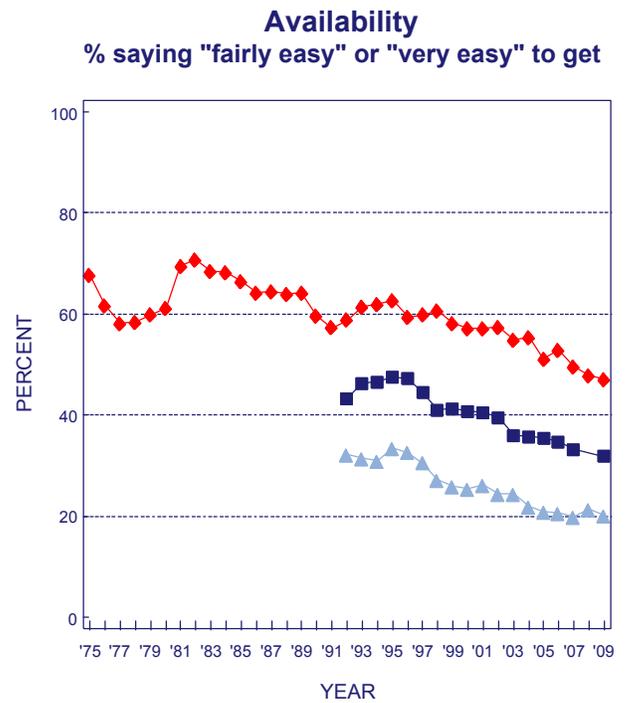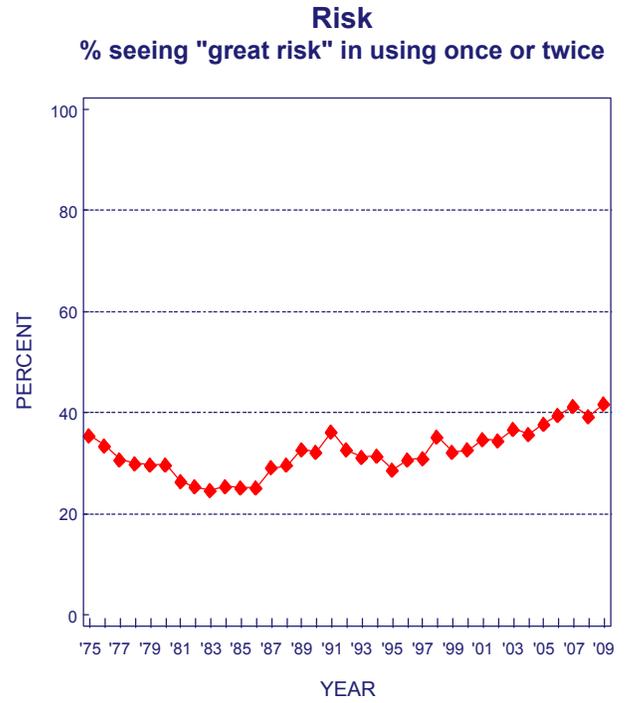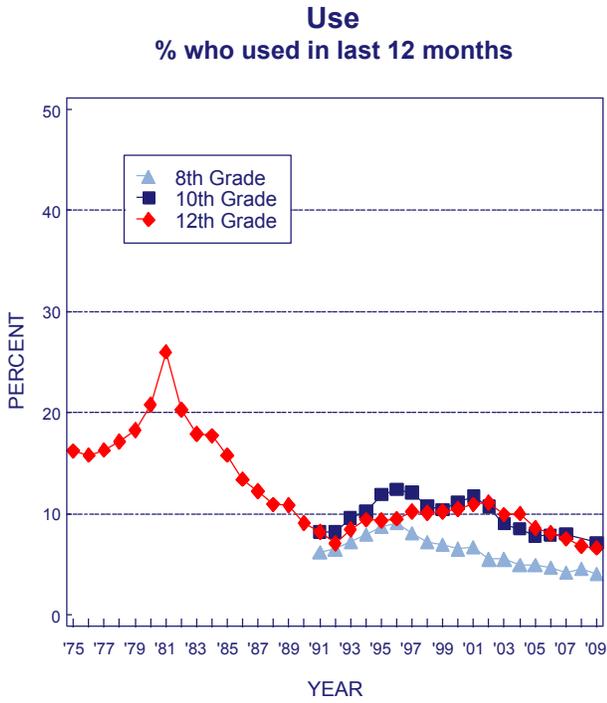
Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th 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

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

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Methamphetamine and Crystal Methamphetamine (Ice)

One subclass of amphetamines is called methamphetamine ("speed"). This subclass 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 popular for some years, so we did not include a full set of questions about its use in MTF's early 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.

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 indicate on a prespecified list the types they had used during that period. Methamphetamine was one type on the list, and data exist on its use since 1976. In 1976, annual prevalence was 1.9%; it then roughly doubled to 3.7% by 1981 (the peak year), before declining for over a decade all the way down to 0.4% by 1992. Use then rose again in the 1990s, as did use of a number of drugs, reaching 1.3% by 1998. In other words, it has followed a cross-time trajectory fairly similar to that for amphetamines as a whole.

In 1990, in the 12th-grade questionnaires only, we introduced our usual set of three questions for crystal methamphetamine, measuring lifetime, annual, and 30-day use. Among 12th graders in 1990, 1.3% indicated any use in the prior year; use then climbed to 3.0% by 1998, and has generally been declining since. This variable is charted on the first facing panel.

Responding to the growing concern about methamphetamine use in general—not just crystal methamphetamine use—we added a full set of three questions about the use of any methamphetamine to the 1999 questionnaires for all three grade levels. These questions yield a somewhat higher annual prevalence for 12th graders: 4.3% in 2000, compared to the sum of the methamphetamine and crystal 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 examples of amphetamines). We think it unlikely that the shape of the trend curve was distorted, however.

The newer questions (not graphed here) show annual prevalence rates in 2009 of 1.0%, 1.6%, and 1.2% for 8th, 10th, and 12th graders, respectively. All of these levels are down considerably from the first measurment taken in 1999, when they were 3.2%, 4.6%, and 4.7% (see Table 6). So, despite growing public attention to the methamphetamine problem in the U.S., use has shown a fairly steady decline over the past seven years, at least among secondary school students. (A similar decline in methamphetamine use did not begin to appear among college students and young adults until after 2004, reflecting a cohort effect.)

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.

Clearly the perceived risk of crystal methamphetamine use has risen considerably since 2002, very likely explaining much of the decline in use since then.

Crystal Methamphetamine (Ice): Trends in Annual Use, Risk, and Availability
Grades 8, 10,* 12
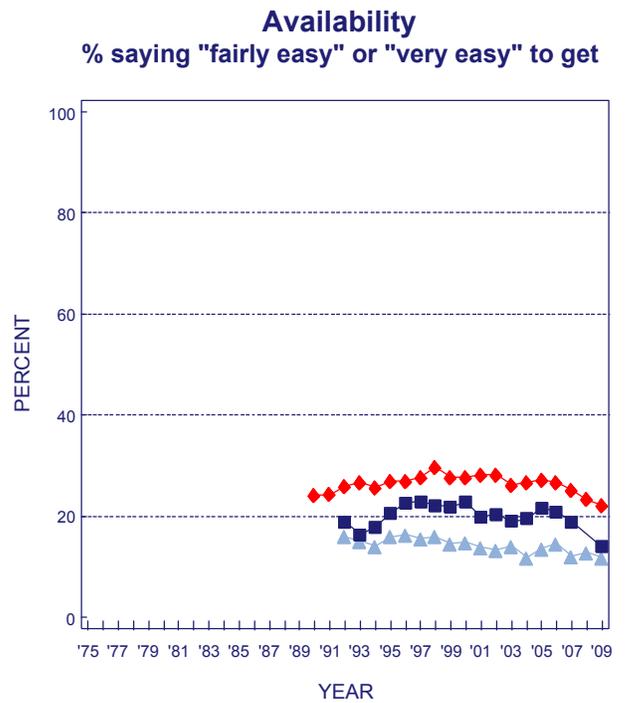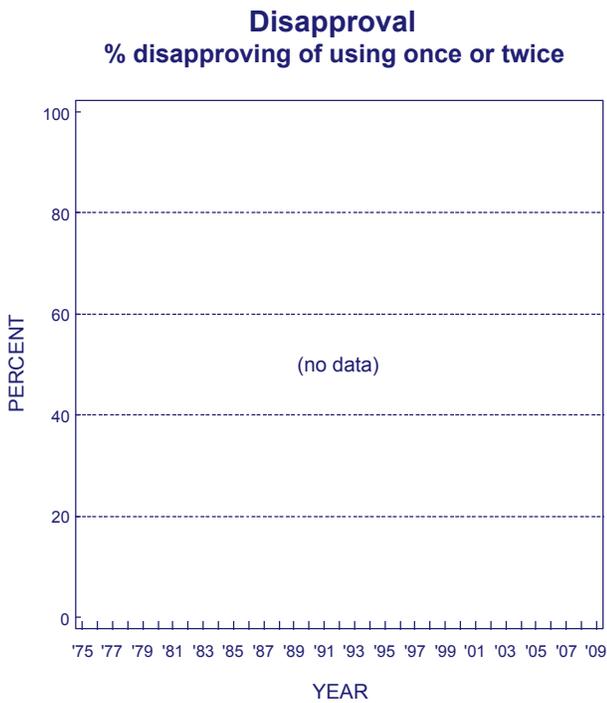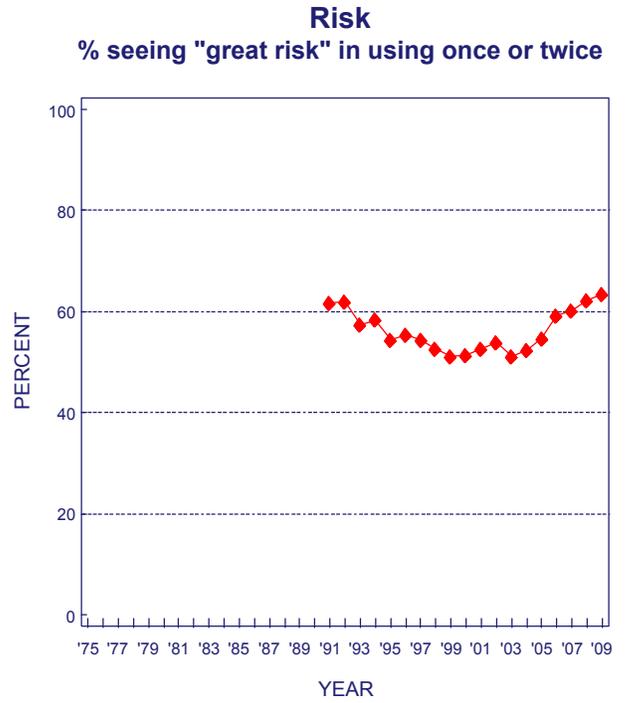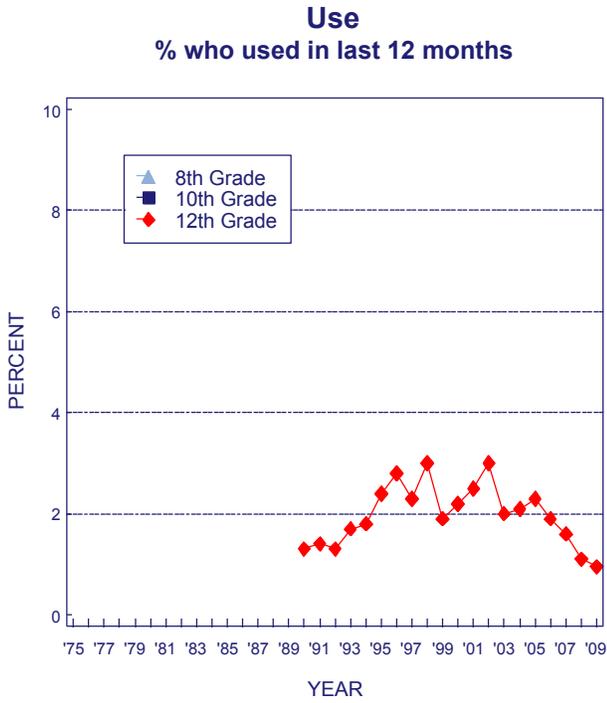
Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th Grade

PERCENT

YEAR

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

PERCENT

YEAR

Disapproval
% disapproving of using once or twice

PERCENT

(no data)

YEAR

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

PERCENT

YEAR

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

Heroin

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

Trends in Use

The annual prevalence of heroin use among 12th graders fell by half between 1975 and 1979, from 1.0% to 0.5%. The rate then held amazingly steady until 1993. Use rose in the mid- and late 1990s, along with the use of most drugs; it reached peak levels in 1996 among 8th graders (1.6%), in 1997 among 10th graders (1.4%), and in 2000 among 12th graders (1.5%). Since those peak levels, use has declined, with annual prevalence in all three grades fluctuating between 0.7% and 0.9% from 2005 through 2009.

Because the questions about use with and without a needle were not introduced until the 1995 survey, they did not encompass much of the period of increasing heroin use. Responses to the new questions showed that by then about equal proportions of all 8th-grade users were taking heroin by each method of ingestion, and some—nearly a third of users—were using by both means. At 10th grade a somewhat higher proportion of all users took heroin without a needle, and at 12th grade the proportion was even higher. Much of the remaining increase in overall heroin use beyond 1995 occurred in the proportions using it without injecting, which we strongly suspect was true in the immediately preceding period of increase as well. Likewise, most of the decrease in use since the recent peak levels has been due to decreasing use of heroin without a needle.

Perceived Risk

Students have long seen heroin to be one of the most dangerous drugs, which no doubt helps to account both for the consistently high level of personal disapproval of use (see next section) and the quite low prevalence of use. Nevertheless, there have been some changes in perceived risk levels over the years. Between 1975 and 1986, perceived risk gradually declined, even though use dropped and then stabilized in that interval. Then there was a big spike in 1987 (the same year that perceived risk for cocaine jumped dramatically), where it held for four years. In 1992, perceived 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, the tables at the end of this report illustrate that perceived risk of use without a needle rose in the lower grades 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 a number of others. During the 2000s, perceived risk has been relatively stable in all three grades.

Disapproval

There has been little fluctuation in the very high disapproval levels for heroin use over the years, and the small changes that have occurred have been generally consistent with 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% from 1992 through 1998. At the lower grade levels, reported availability has been markedly lower. Availability has declined some since the late 1990s in all grades.

Heroin: Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12
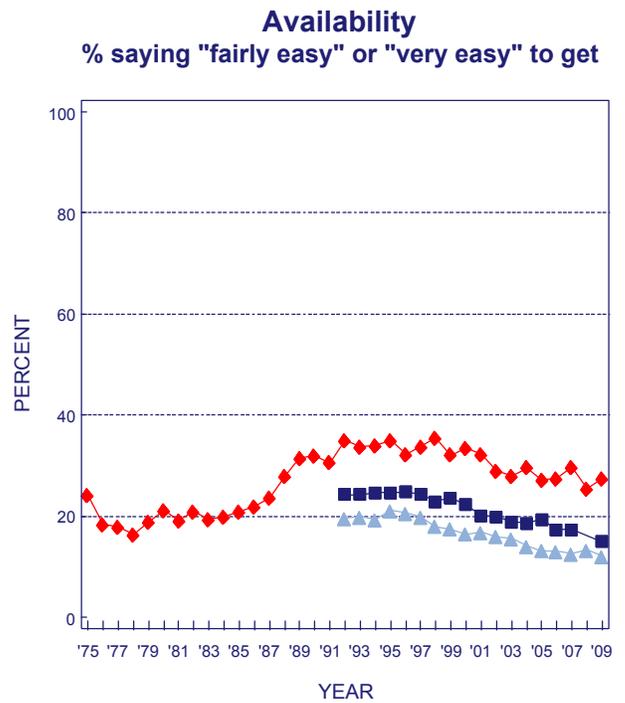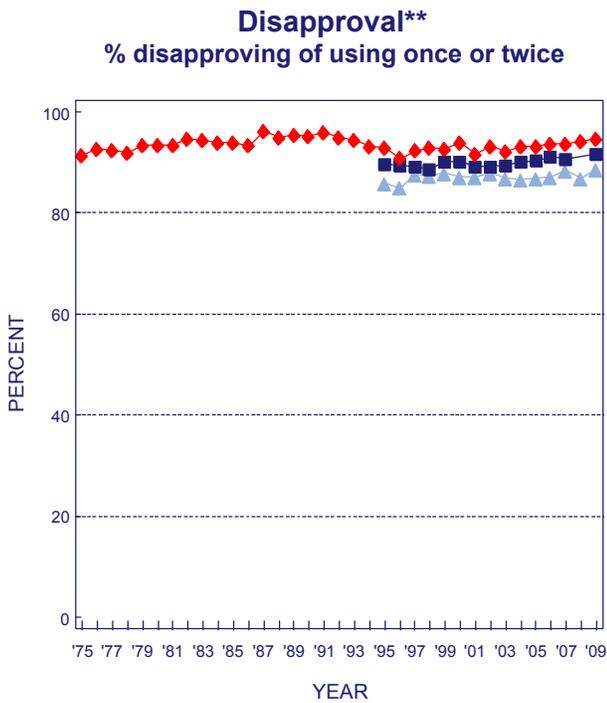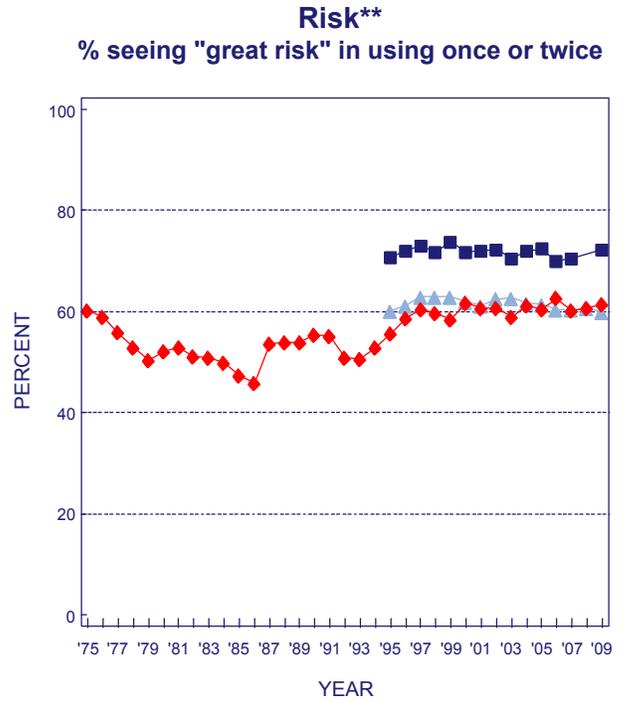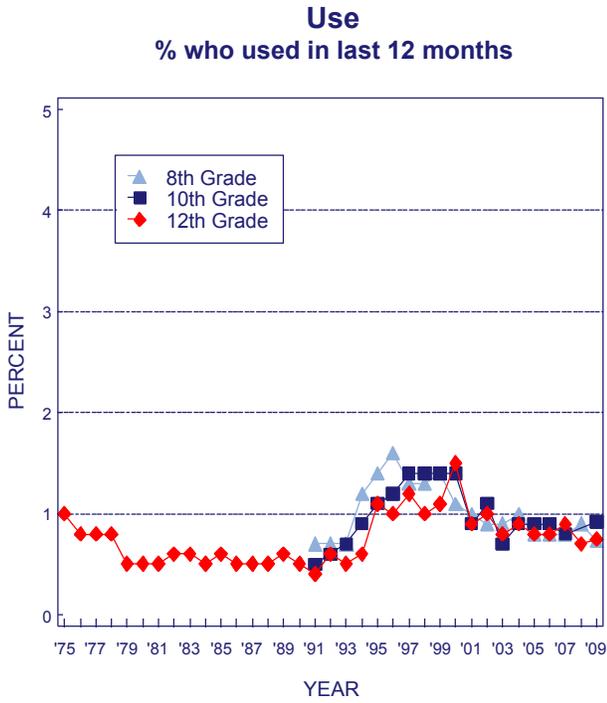
Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th 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

Source. The Monitoring the Future study, the University of Michigan.

*The data for 10th graders in 2008 are omitted. See text for details.

**Prior to 1995, the questions asked about heroin use in general. Since 1995, the questions have asked about heroin use without a needle.

Narcotics other than Heroin

There are a number of narcotic drugs other than heroin—all controlled substances. Many are analgesics that can be prescribed by physicians and dentists for pain. Like heroin, many are derived from opium, but there are also a number of synthetic analogues in use today, including OxyContin and Vicodin.

Throughout the life of the MTF study, we have asked about the use of any narcotic drug other than heroin without specifying which one. Examples of drugs in the class are provided in the question stem. In one of the six 12th-grade questionnaire forms, however, respondents indicating that they had used any narcotic in the past 12 months were then asked to check which of a fairly complete list of such drugs they used. Table E-4 in *Volume I* of this annual monograph series provides trends in their annual prevalence data. In the late 1970s, opium and codeine were among the narcotics most widely used. In recent years Vicodin, codeine, Percocet, and OxyContin are the most popular.

Trends in Use

Use is reported only for 12th graders, because we considered the data from 8th and 10th graders to be of questionable validity. As shown in the first panel of the facing page, 12th graders' use of narcotics other than heroin generally trended down from about 1977 through 1992. After 1992 use rose rather steeply, with annual prevalence increasing from 3.3% in 1992 to 9.5% in 2004, before leveling. (In 2002 the question was revised to add Vicodin, OxyContin, and Percocet

to the examples given, which clearly had the effect of increasing reported prevalence, as may be seen in the first panel on the facing page. So the extent of the increase over the full time span may be exaggerated, but probably not by much, because these drugs came onto the scene later, during the rise. They simply were not being fully reported by the late 1990s.)

Use rates for two narcotics of recent interest—*OxyContin* and *Vicodin*—are presented in the second and third panels on the facing page, in a departure from the usual arrangement. (There are no data to display for perceived risk or disapproval of use of narcotics other than heroin.) OxyContin use increased for all grades from 2002 (when it was first measured) through 2009, though the trend lines have been irregular. Annual prevalence in 2009 was 2.0%, 5.1%, and 4.9% in grades 8, 10, and 12, respectively. Use of Vicodin, on the other hand, has remained fairly constant since 2002, though at considerably higher levels. In 2009 annual prevalence rates were 2.5%, 8.1%, and 9.7% in grades 8, 10, and 12.

Availability

Questions were asked about the availability of other narcotics, taken as a class. Perceived availability increased gradually among 12th graders from 1978 through 1989, even as reported use was dropping. Among 12th graders, perceived availability rose gradually from 1991 through 2001, as use rose more sharply. In contrast, perceived availability has declined among 8th and 10th graders since the late 1990s.

Narcotics other than Heroin (including OxyContin and Vicodin):
Trends in Annual Use and Availability
Grades 8, 10,* 12

Use of Narcotics other than Heroin
% who used any narcotics other than heroin
in last 12 months**

Legend:
- 8th Grade
- 10th Grade
- 12th Grade

PERCENT

YEAR
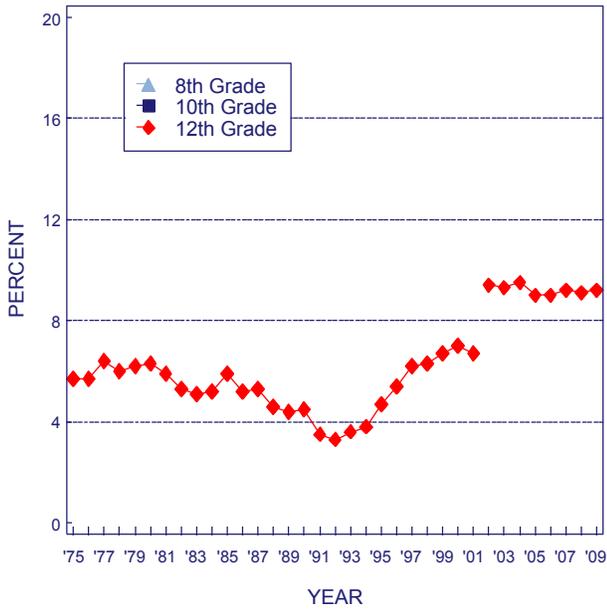
OxyContin Use
% who used OxyContin in last 12 months

PERCENT

YEAR
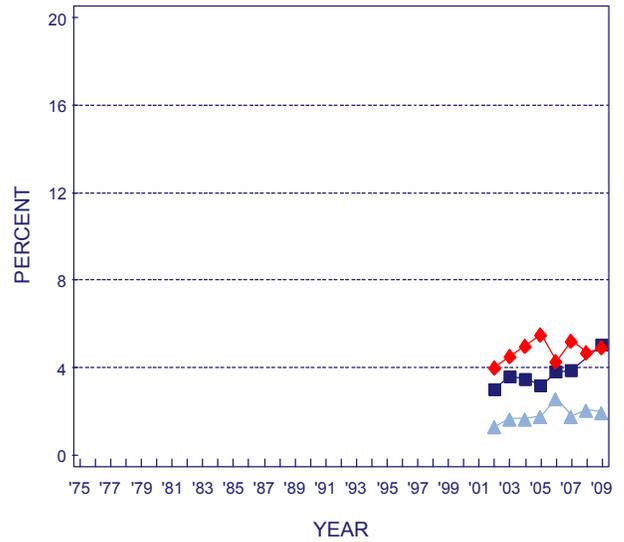
Vicodin Use
% who used Vicodin in last 12 months

PERCENT

YEAR
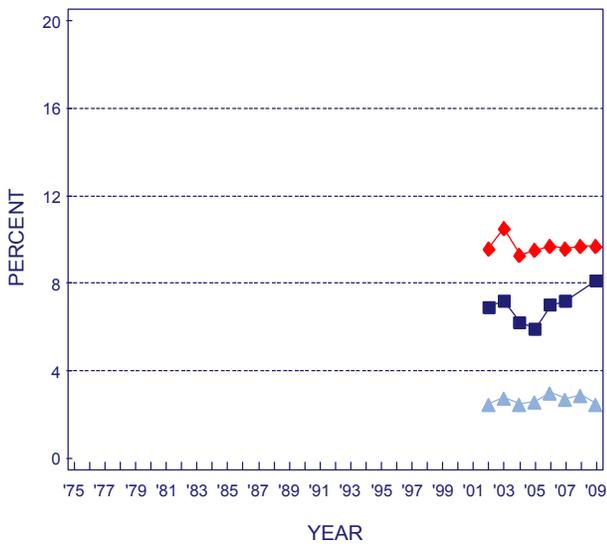
Availability of Narcotics other than Heroin
% saying "fairly easy" or "very easy" to get
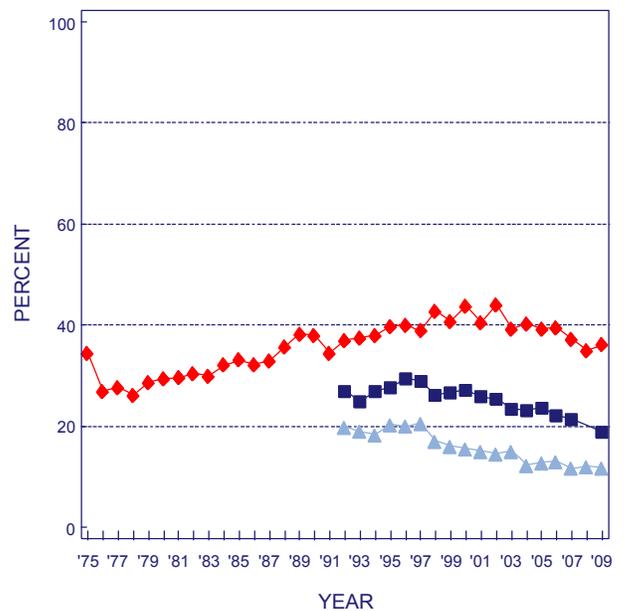
PERCENT

YEAR

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.
**Beginning in 2002, a revised set of questions on other narcotics use was introduced in which "Talwin," "laudanum," and "paregoric" were replaced with "Vicodin," "Oxycontin," and "Percocet."

Tranquilizers

Tranquilizers are 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), although some nonbenzodiazepines have been introduced. Respondents are instructed to exclude any medically prescribed use from their answers. At present, Valium and Xanax are the two tranquilizers most commonly used by students. (See appendix E of *Volume I* in this monograph series for detailed tables.) In 2001 the examples given in the tranquilizer question were modified to reflect changes in the drugs in common use—Miltown was dropped and Xanax was added. As the first panel on the facing page shows, this caused a modest increase in the reported level of tranquilizer use in the upper grades, so we have broken the trend line to reflect the point of redefinition.

Trends in Use

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

graders, at considerably lower levels than the upper two grades. From 2002 to 2005 there was some decline among 10th graders, followed by a leveling, while among 12th graders there was a very gradual decline from 2002 through 2007, before leveling. This staggered pattern of change suggests that a cohort effect is at work. At present the prevalence of use of these prescription-type drugs remains near recent peak levels.

Perceived Risk

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

Disapproval

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

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 or very easy to get. Whether declining use caused the decline in availability, or vice versa, is unclear. Twelfth graders' perceived availability has continued to fall since then, and is now down by more than two thirds over the life of the study—from 72% in 1975 to 21% by 2009. Availability has fallen some since 1991 in the lower grades as well, though not as sharply.

Tranquilizers: Trends in Annual Use and Availability
Grades 8, 10,* 12
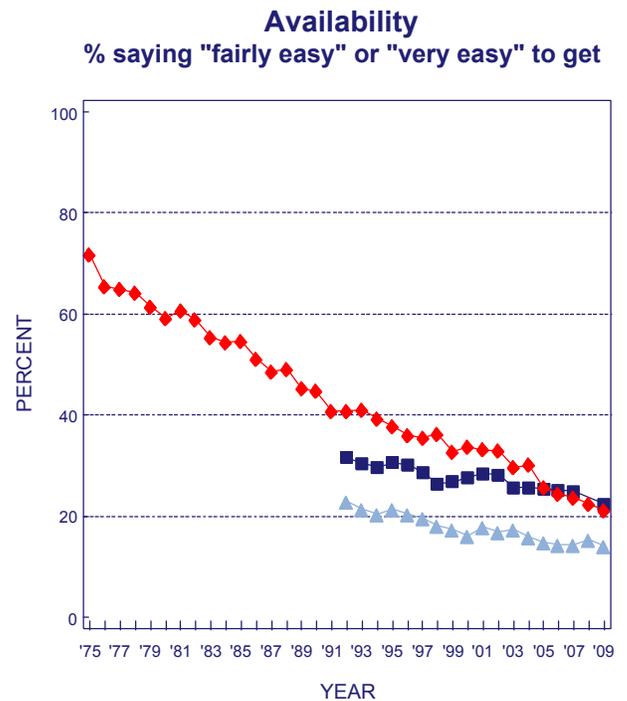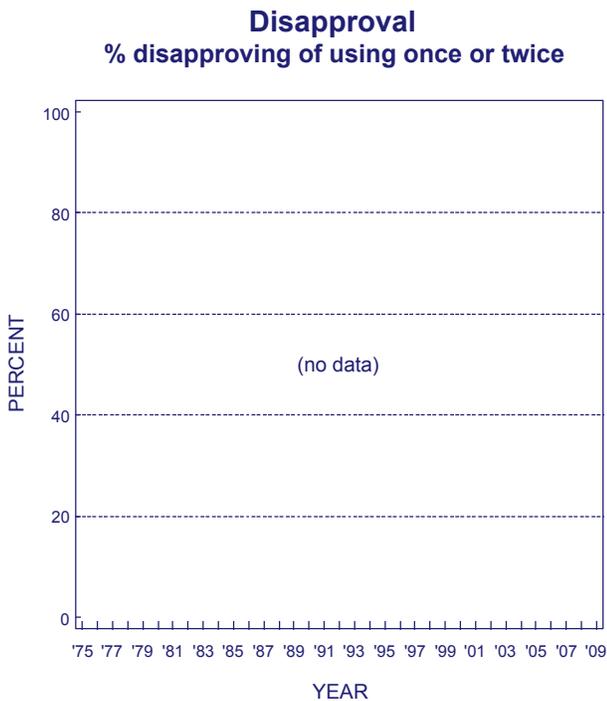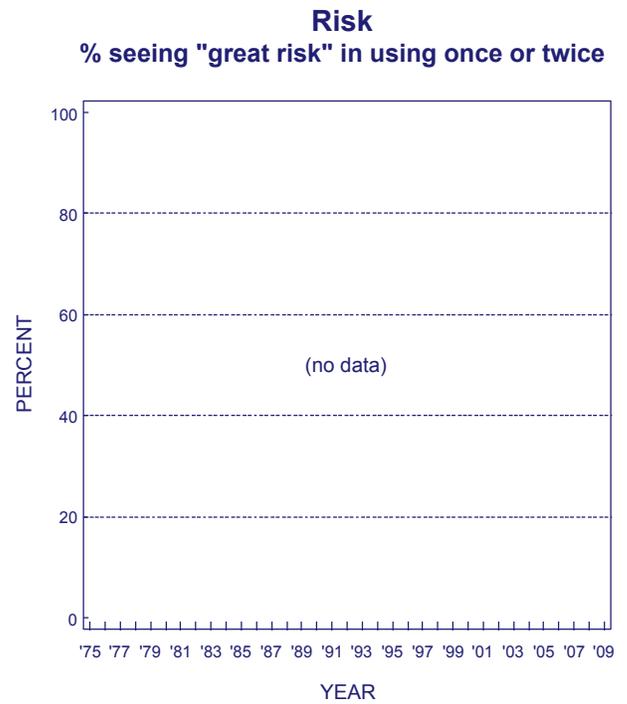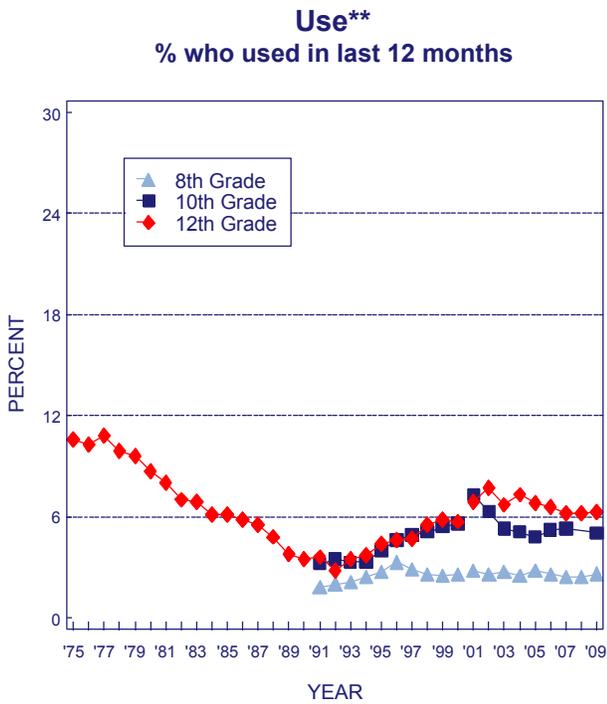
Use**
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th Grade

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

Source. The Monitoring the Future study, the University of Michigan.

*The data for 10th graders in 2008 are omitted. See text for details.

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

31

Sedatives (Barbiturates)

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

Though for many years respondents have been asked specifically about their use of barbiturate sedatives, they likely have been including other classes of sedatives in their answers. In 2004 the question on use was revised to say "sedatives (barbiturates)"—a change that appeared to have no impact on reported levels of use. Respondents are told for what purposes sedatives are prescribed, and they are instructed to exclude from their answers any use under medical supervision. Usage data are reported only for 12th graders because we believe that 8th- and 10th-grade students tend to overreport use, perhaps including in their answers their use of nonprescription sleep aids or other over-the-counter drugs.

Trends in Use

As with tranquilizers, the use of sedatives (barbiturates) fell steadily among 12th graders from the mid-1970s through the early 1990s. From 1975 to 1992, use fell by three fourths, from 10.7% annual prevalence to 2.8%. As with many other drugs, a gradual, long-term resurgence in sedative use occurred after 1992, and use continued to rise steadily through 2005, well beyond the point where the use of many illegal drugs began falling. Use has declined some since 2005, but in 2009 the annual prevalence rate is down only about one fourth from its recent peak. The sedative methaqualone has been included in the MTF study from the very beginning, and has never been as popular as barbiturates; use rates have generally been declining since 1975, reaching an annual prevalence of just 0.5% in 2006, about where it has remained since.

Perceived Risk

Trying sedatives (barbiturates) was never seen by most students as very dangerous, and it is clear from the second panel on the facing page that perceived risk cannot explain the trends in use that occurred from 1975 through 1986, when perceived risk was actually declining along with use. But then perceived risk shifted up some through 1991 while use was still falling. It dropped back some through 1995, as use was increasing, and then remained relatively stable for a few years. Perceived risk has generally been at quite low levels, which may help to explain why this class of psychotherapeutic drugs (and likely others) has stayed at relatively high levels in this decade. However, it began to rise after 2000, foretelling the decline in use that began after 2005. When the term "sedatives" was changed to "sedatives/barbiturates" in 2004, the trend line shifted down slightly, but perceived risk has continued to climb since then. As perceived risk has risen, use has declined some.

Disapproval

Like many illicit drugs other than marijuana, sedative (barbiturate) use has received the disapproval of most high school seniors since 1975, with some variation in disapproval rates that have moved consistently with usage patterns. A change in question wording in 2004 appeared to lessen disapproval slightly. There has been some modest increase since 2000.

Availability

As the fourth panel on the facing page shows, the availability of sedatives (barbiturates) has generally been declining during most of the life of the study, except for one upward shift that occurred in 1981—a year in which look-alike drugs became more widespread. (The change in question text in 2004 appears to have had the effect of increasing reported availability among 12th graders but not among those in the lower grades.)

Sedatives (Barbiturates): Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12
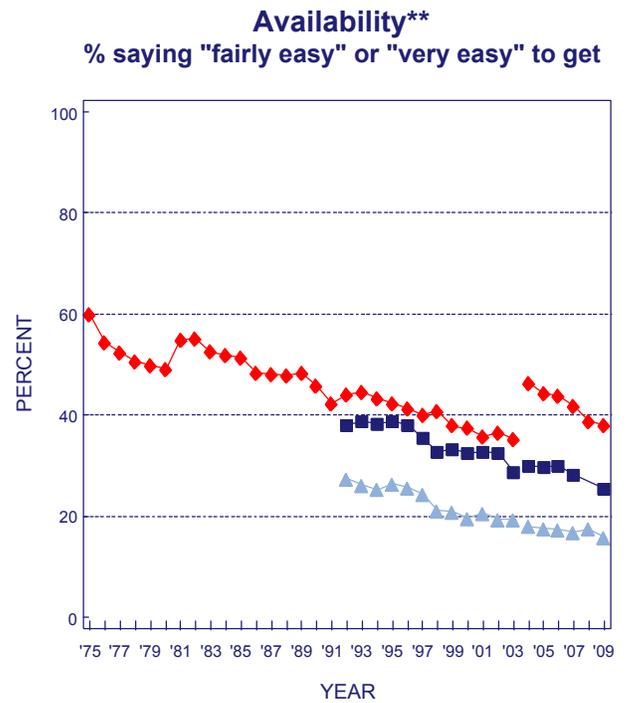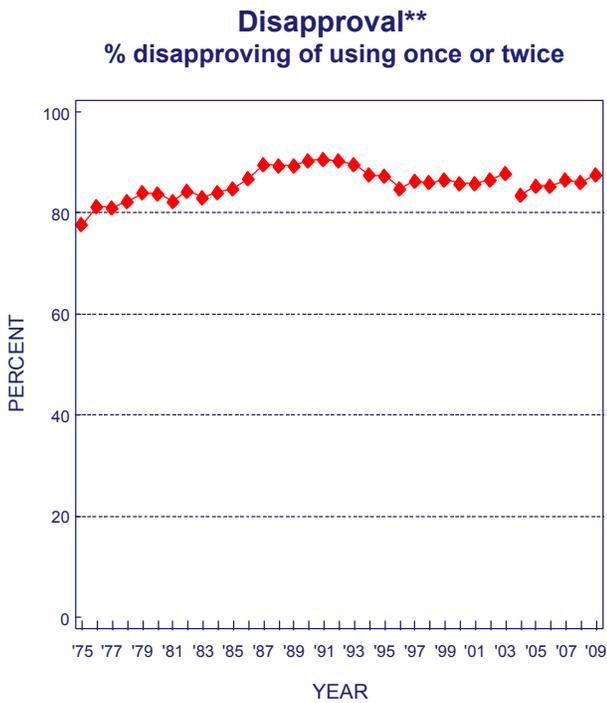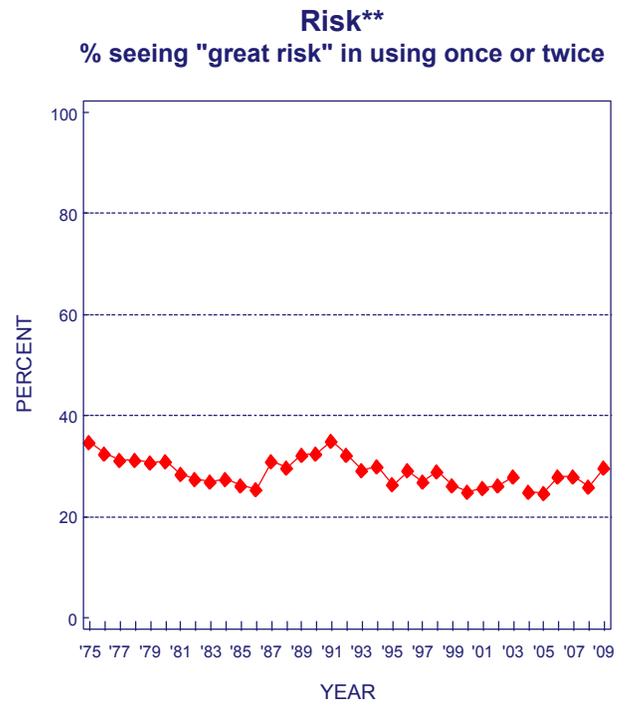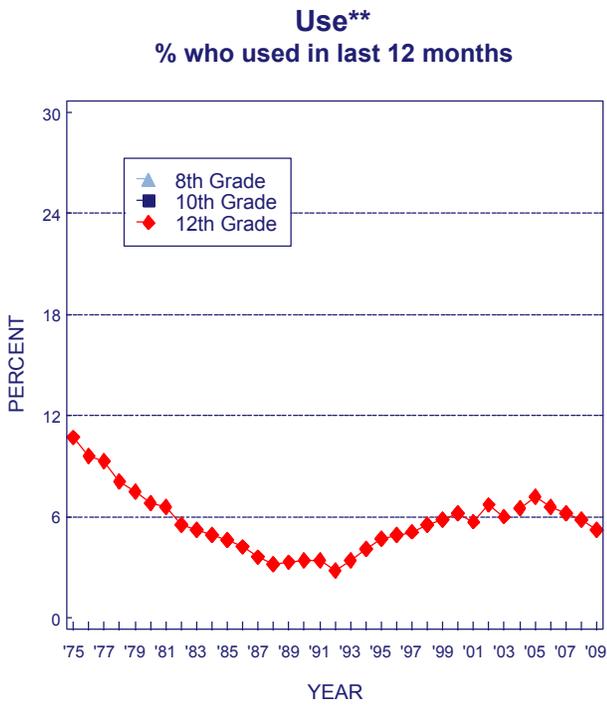
Use**
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th 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

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.
**In 2004, the question text changed from "barbiturates" to "sedatives/barbiturates" and the list of examples changed.

33

Ecstasy (MDMA) and Other "Club Drugs"

There are a number of "club drugs," so labeled because they have been popular at night clubs and "raves." They include LSD, MDMA ("ecstasy"), methamphetamine, GHB (gammahydroxybutyrate), ketamine ("special K"), and Rohypnol. Because previous sections in this *Overview* deal with LSD and methamphetamine, they will not be discussed further here.

Rohypnol and GHB, both of which can induce amnesia while under the influence, have also been labeled "date rape drugs." The annual prevalence of GHB use in 2009 was 0.7%, 1.0%, and 1.1% in grades 8, 10, and 12, respectively, and the annual prevalence of ketamine use was 1.0%, 1.3%, and 1.7%. Both have shown considerable drops since their recent peak levels of use (Table 6). There are no questions on risk, disapproval, or availability for GHB, ketamine, or Rohypnol.

Trends in Ecstasy Use

Ecstasy is used more for its mildly hallucinogenic properties than for its stimulant properties. Questions on ecstasy use were added to the high school surveys in 1996. (They were asked of college students and adults since 1989.)

Annual prevalence of ecstasy use in 10th and 12th grades in 1996 was 4.6%—considerably higher than among college students and young adults at that time—but it fell in both grades over the next two years. Use then rose sharply in both grades in 1999 through 2001, bringing annual prevalence up to 6.2% among 10th graders and 9.2% among 12th graders. In 2000 and 2001, use also began to rise among 8th graders, to 3.5%. In 2002, use decreased sharply—by about one fifth—in all three grades, followed by an even sharper decline in 2003. The drops continued in 2004, but decelerated considerably. By 2005 the decline had halted among 8th and 10th graders, but it continued for another year among 12th graders. For two or three years there was some rebound in use among 10th and 12th graders, raising the concern that a new epidemic of ecstasy use may be developing;

however, after 2008 the trend lines leveled off in all grades.

Perceived Risk of Ecstasy Use

There was little change in 12th graders' perceived risk of ecstasy use until 2001, when it jumped by eight percentage points, and then by another seven percentage points in 2002. Significant increases occurred again in 2003 for all grades. This very sharp rise likely explains the turnaround in use, as we predicted it would. However, since 2004, we have seen a troubling drop in perceived risk, first among 8th and 10th graders, then among 12th graders. This shift corresponded to the increase in use in the upper two grades, suggesting that there may be a generational forgetting of the dangers of ecstasy use resulting from generational replacement. The decline in perceived risk continued in 2009 in all three grades.

Disapproval of Ecstasy Use

Disapproval of ecstasy use had been declining slightly after 1998, but increased significantly in all three grades in 2002, perhaps because of the rise in perceived risk. The significant increases in disapproval continued through 2003 for 8th graders, 2004 for 10th graders, and 2006 for 12th graders. Since those peaks, disapproval has been dropping, sharply among 8th graders, less so among 10th graders, and not at all among 12th graders. We believe that the erosion in perceived risk and disapproval—which has been most sharp among 8th graders—leaves the younger age groups more vulnerable to a possible rebound in ecstasy use.

Availability of Ecstasy

The figure shows a dramatic rise in 12th graders' perceived availability of ecstasy after 1991, particularly between 1999 and 2001, consistent with informal reports about growing importation of the drug. Perceived availability then declined considerably in all grades after 2001.

Ecstasy (MDMA): Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12

Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th 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

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

35
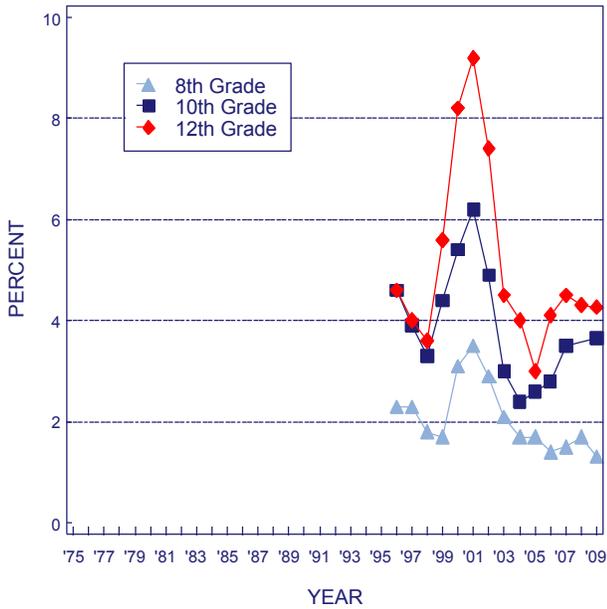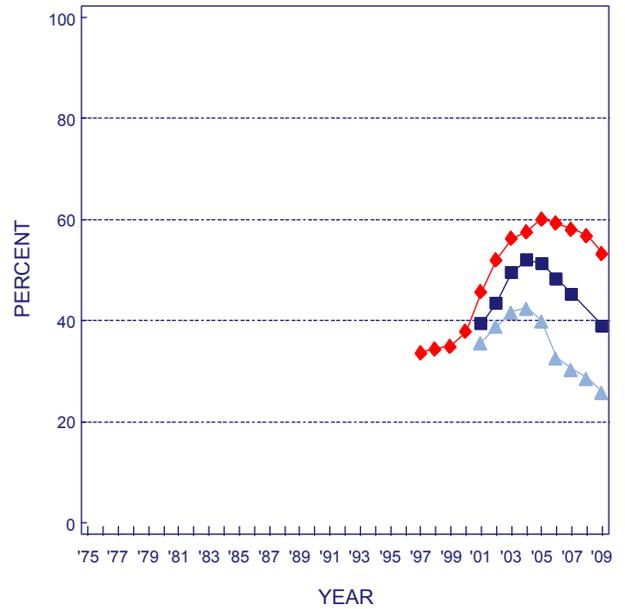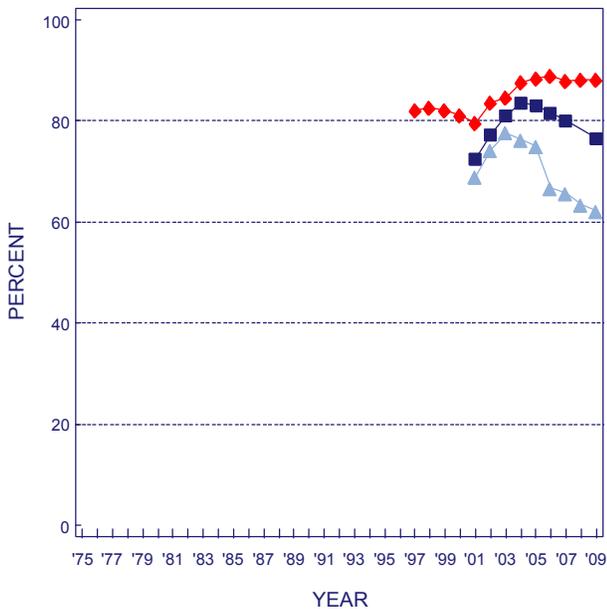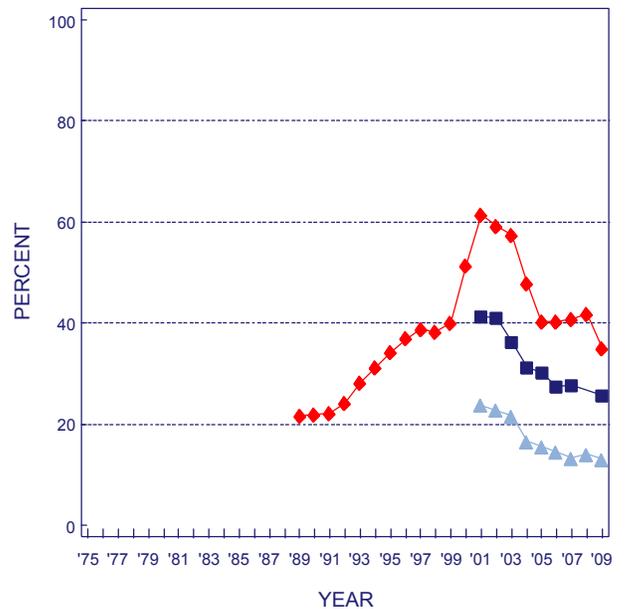
Alcoholic beverages have been among the most widely used substances by American young people for a very long time. In 2009 the proportions of 8th, 10th, and 12th graders who admitted drinking an alcoholic beverage in the just the 30-day period prior to the survey were 15%, 30%, and 44%, respectively. A number of measures of alcohol use are presented in the tables at the end of this report. Here we focus on episodic heavy or "binge" drinking (i.e., five or more drinks in a row during the prior two-week interval)—the pattern of alcohol consumption that is probably of greatest concern from a public health perspective.

Trends in Use

Among 12th graders, binge drinking peaked at about the same time as overall illicit drug use, in 1979. It held steady for a few years before declining substantially from 41% in 1983 to a low of 28% in 1992 (also the low point of any illicit drug use). This was a drop of almost one third in binge drinking. Although illicit drug use rose by considerable proportions in the 1990s, binge drinking rose by only a small fraction, followed by some decline in binge drinking at all three grades. By 2009, proportional declines since recent peaks are 42%, 28%, and 20% for grades 8, 10, and 12, respectively (Table 8).

It should be noted 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

Throughout most of the life of the MTF study, the majority of 12th graders have not viewed binge drinking on weekends as carrying a great risk (second panel). However, an increase from 36% to 49% occurred between 1982 and 1992. There then followed a decline to 43% by 1997, before it stabilized. Since 2003, perceived risk has risen some. These changes are consistent with changes in actual binge drinking. We believe that the public service advertising campaigns in the 1980s against drunk driving, as well as those that urged use of designated drivers when drinking, may have contributed to the increase in perceived risk of binge drinking generally. As we have published elsewhere, drunk driving by 12th graders declined during that period by an even larger proportion than binge drinking. Also, we have demonstrated that increases in the minimum drinking age during the 1980s were followed by reductions in drinking, and increases in perceived risk associated with drinking.

Disapproval

Disapproval of weekend binge drinking moved fairly parallel with perceived risk, suggesting that such drinking (and very likely the drunk-driving behavior associated with it) became increasingly unacceptable in the peer group. Note that the rates of disapproval and perceived risk for binge drinking are higher in the lower grades than in 12th grade. As with perceived risk, disapproval has increased appreciably in all grades in recent years, especially in the upper grades.

Availability

Perceived availability of alcohol, which until 1999 was asked only of 8th and 10th graders, was very high and mostly steady in the 1990s. Since 1996, however, there have been significant declines in 8th and 10th grades. For 12th grade, availability has declined very slightly but is still at a very high level, with 92% saying that it is, or would be, fairly easy or very easy for them to get alcohol.

Alcohol: Trends in Binge Drinking, Risk, Disapproval, and Availability
Grades 8, 10,* 12

Use
% who used in last 30 days

Legend:
- 8th Grade
- 10th Grade
- 12th Grade
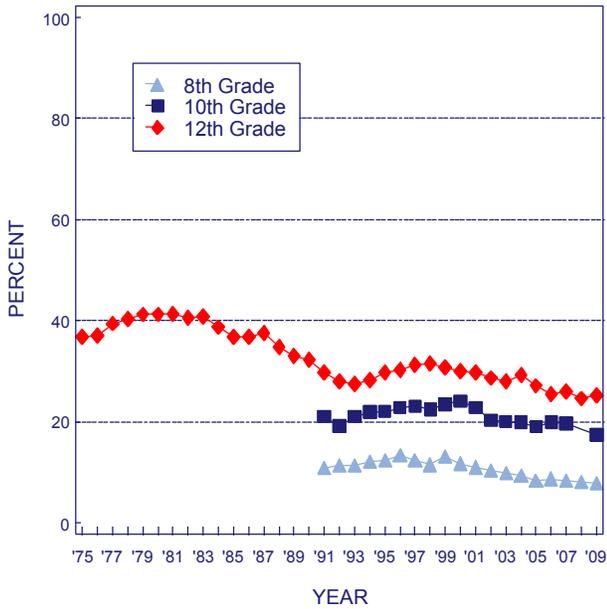
Risk
% seeing "great risk" in having 5+ drinks in a row once or twice each weekend
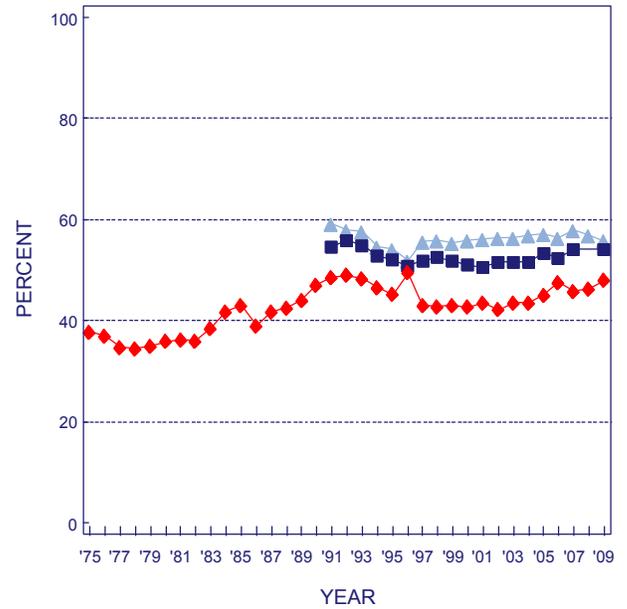
Disapproval
% disapproving of having 5+ drinks in a row once or twice each weekend
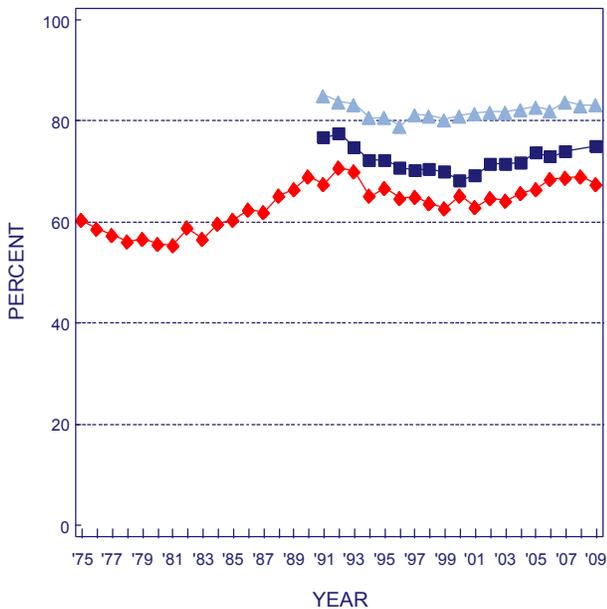
Availability
% saying "fairly easy" or "very easy" to get
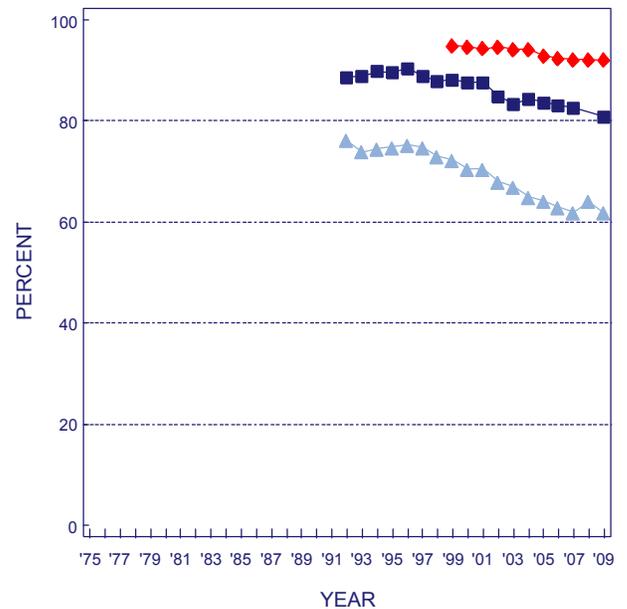
Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

37

Cigarettes

Cigarette smoking is the leading cause of preventable disease and mortality in the United States, and is usually initiated in adolescence. That makes what happens in adolescence particularly important.

Trends in Use

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

Among 12th graders, 30-day prevalence of smoking reached a peak in 1976, at 39%. (The peak likely occurred considerably earlier at lower grade levels as these same class cohorts passed through them in previous years.) There was about a one quarter drop in the 12th-grade 30-day prevalence between 1976 and 1981, when the rate reached 29%, and remained there until 1992 (28%). In the 1990s, smoking began to rise sharply, after 1991 among 8th and 10th graders and 1992 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 to which MTF drew public attention. Smoking peaked in 1996 for 8th and 10th graders and in 1997 for 12th graders before beginning a fairly steady and substantial decline that continued through 2004 for 8th and 10th graders (12th graders increased a bit in 2004). Between those peak levels in the mid-1990s and 2004, 30-day prevalence of smoking declined by 56% in 8th grade, 47% in 10th, and 32% in 12th. It is noteworthy, however, that this important decline in adolescent smoking decelerated sharply after about 2002. There was some further decline after 2004 in all grades, but use appeared to level by around 2006. Fortunately, the declines continued after 2007.

Perceived Risk

Among 12th graders, the proportion seeing great risk in pack-a-day smoking rose before and during the first decline in use. It leveled in 1980 (before use leveled), declined a bit in 1982, but then started to rise again gradually for five years. (It is possible that cigarette advertising effectively offset the influence of rising perceptions of risk during that period.) Perceived risk fell some in the early 1990s at all three grade levels as use increased sharply. After 1995, risk began to climb in all three grades (a year before smoking started to decline in grade 12). Between 2000 and 2003, perceived risk leveled in all grades. In 2004, it increased in all grades, but since 2004 it has declined a bit in the lower two grades. Only the 12th grade showed any further rise (to 2006)—very likely due to a cohort effect playing itself out—and that rise halted in 2007, with a decline thereafter. Note the disparity of the degrees of perceived risk among grade levels. There is a clear age effect, and by the time most youngsters fully appreciate the hazards of smoking, many have already initiated the behavior.

Disapproval

Disapproval rates for smoking have been fairly high throughout the study and, unlike perceived risk, are higher in the lower grade levels. Among 12th graders, there was a gradual increase in disapproval of smoking from 1976 to 1986, some erosion over the following five years, then a steeper erosion from the early 1990s through 1997. After 1997, disapproval rose for some years in all three grades, but leveled in grade 12 after 2006 and in the lower grades after 2007. We measure a number of other smoking-related attitudes; these became increasingly negative for some years, but leveled off two to three years ago (see Table 3 in the 2009 MTF press release on teen smoking, available at *www.monitoringthefuture.org*).

Availability

When the question was first introduced in 1992, availability of cigarettes was reported to be very high by 8th graders (78% saying fairly or very easy to get) and 10th graders (89%). (We do not ask the question of 12th graders, for whom we assume accessibility to be nearly universal.) Since 1996, availability has declined considerably, especially among 8th graders. Some 55% of 8th graders and 76% of 10th graders now say that cigarettes would be easy to get, reflecting declines since 1992 of 22 and 13 percentage points, respectively.

Cigarettes: Trends in 30-Day Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12

Use
% who used in last 30 days

Legend:
- 8th Grade
- 10th Grade
- 12th Grade
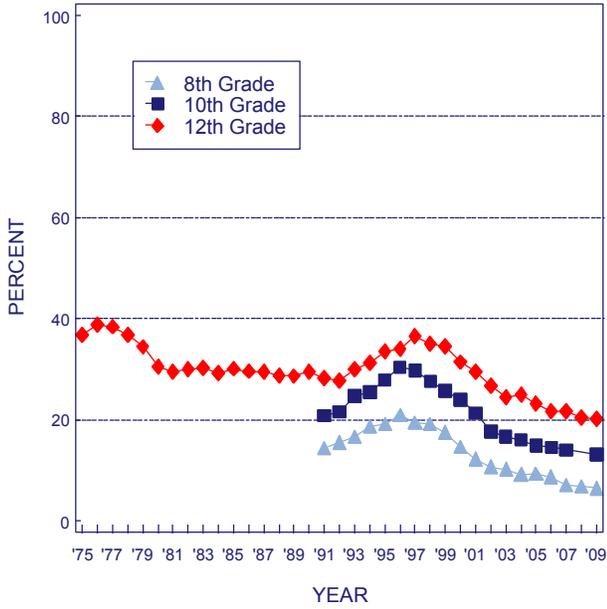
Risk
% seeing "great risk" in smoking a pack or more per day
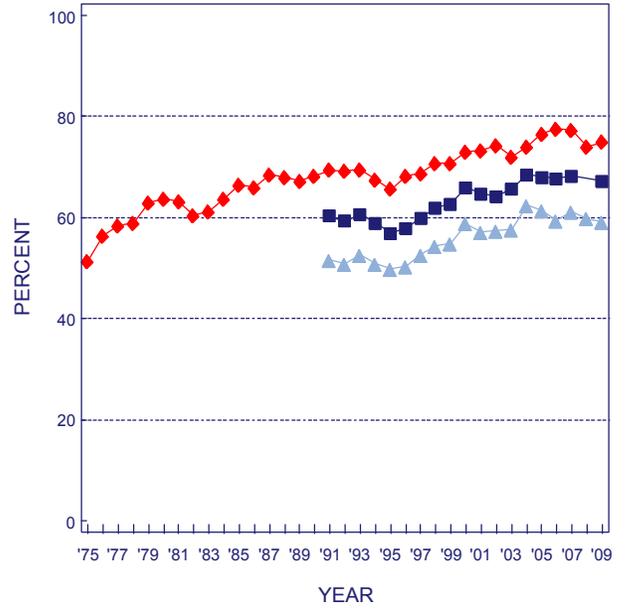
Disapproval
% disapproving of smoking a pack or more per day
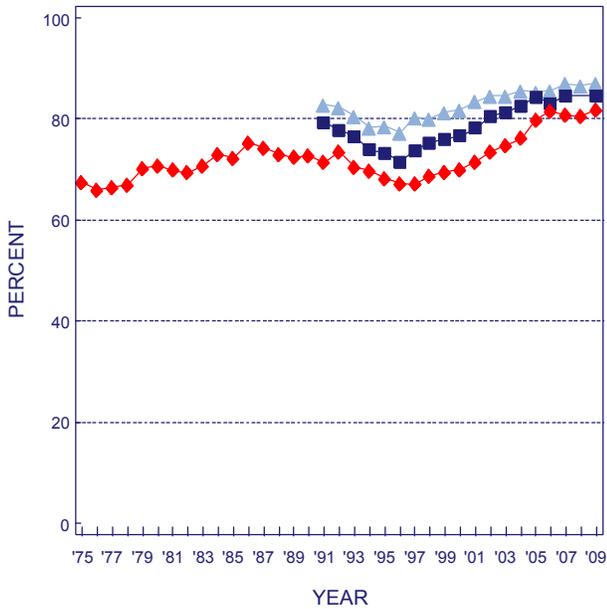
Availability
% saying "fairly easy" or "very easy" to get
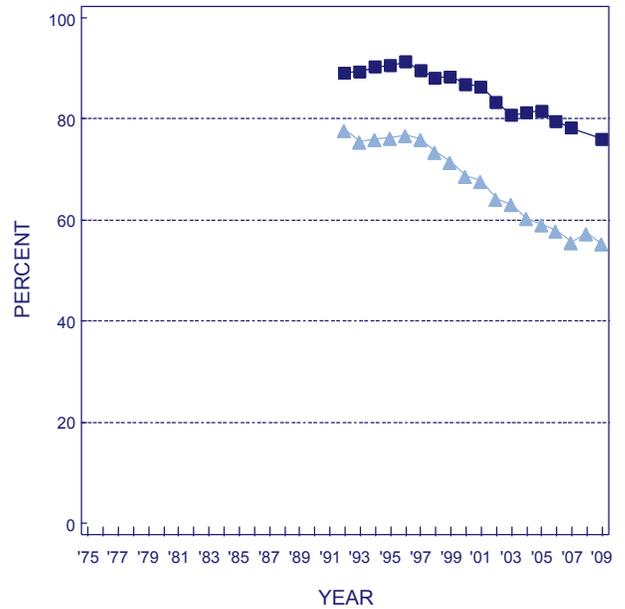
Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

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Smokeless Tobacco

Smokeless tobacco comes in two forms: "snuff" and "chew." Snuff is finely ground tobacco usually sold in tins, either loose or in packets. It is held in the mouth between the lip or cheek and the gums. Chew is a leafy form of tobacco, usually sold in pouches. It too is held in the mouth and may, as the name implies, be chewed. In both cases, nicotine is absorbed by the mucous membranes of the mouth. Smokeless tobacco is sometimes called "spit" tobacco because users spit out the tobacco juices and saliva (stimulated by the tobacco) that accumulate in the mouth. ("Snus" is a relatively new variation on smokeless tobacco; measures on snus will be added beginning with the 2010 survey.)

Trends in Use

The use of smokeless tobacco by teens had been decreasing gradually, and 30-day prevalence is now only about half of recent peak levels in the mid-1990s. Among 8th graders, 30-day prevalence dropped from a 1994 peak of 7.7% to a low of 3.3% in 2002. It stands at 3.7% in 2009. Tenth graders' use was down from a 1994 peak of 10.5% to 4.9% in 2004, but has risen some to 6.5% in 2009; and 12th graders' use decreased from a 1995 peak of 12.2% to 6.5% in 2002, before leveling and then rising to 8.4% in 2009). Thirty-day prevalence of *daily* use of smokeless tobacco also fell gradually, but appreciably, in recent years. Daily usage rates in 2009 are 0.8%, 1.9%, and 2.9% in grades 8, 10, and 12—down substantially from peak levels recorded in the 1990s but, again, the declines have halted and begun to reverse.

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 2009 are 6.3%, 11.1%, and 15.8%

in grades 8, 10, and 12, respectively, versus 1.4%, 2.0%, and 1.7% among females. The respective current daily use rates for males are 1.4%, 3.7%, and 5.8% compared to 0.3%, 0.2%, and 0.4% for females.

Perceived Risk

The most recent low point in the level of perceived risk for smokeless tobacco was 1995 in all three grades. For a decade following 1995 there was a gradual but substantial increase in proportions saying that there is a great risk in using smokeless tobacco regularly. It thus appears that one important reason for the appreciable declines in smokeless tobacco use during the latter half of the 1990s was that an increasing proportion of young people were persuaded of the dangers of using it. But the increases in perceived risk ended by 2005, and it has started to decline in the upper two grades since then. This could be due to generational forgetting of the dangers of use, the increased marketing of snus, and/or public statements about smokeless tobacco use being relatively less dangerous than cigarette smoking.

Disapproval

Only 8th and 10th graders are asked about their personal disapproval of using smokeless tobacco regularly. The most recent low points for disapproval in both grades were 1995 and 1996. After 1996, disapproval rose among 8th graders from 74% to 82% in 2005, where it remains in 2009, and from 71% to 80% among 10th graders, with a significant decline in 2009.

Availability

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

Smokeless Tobacco: Trends in 30-Day Use, Risk, and Disapproval
Grades 8, 10,* 12
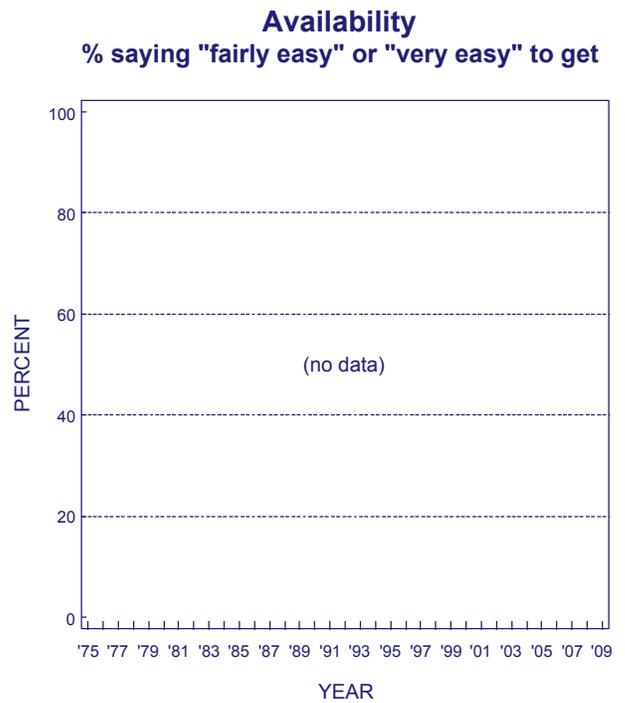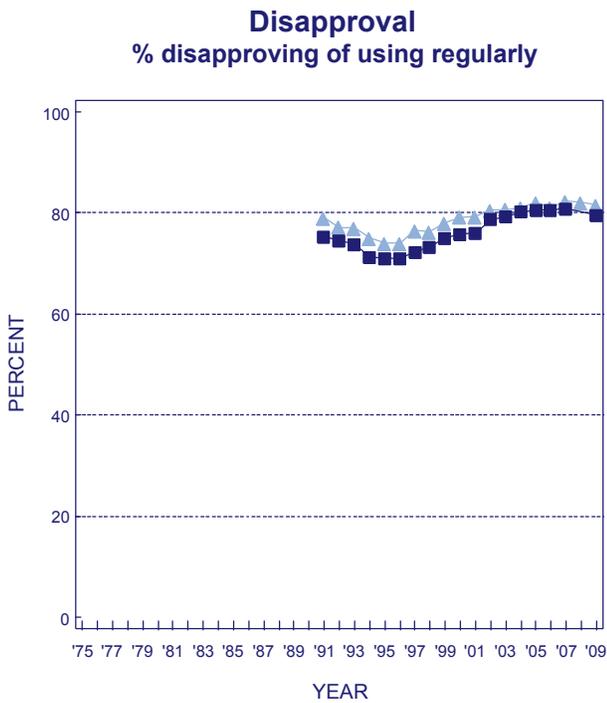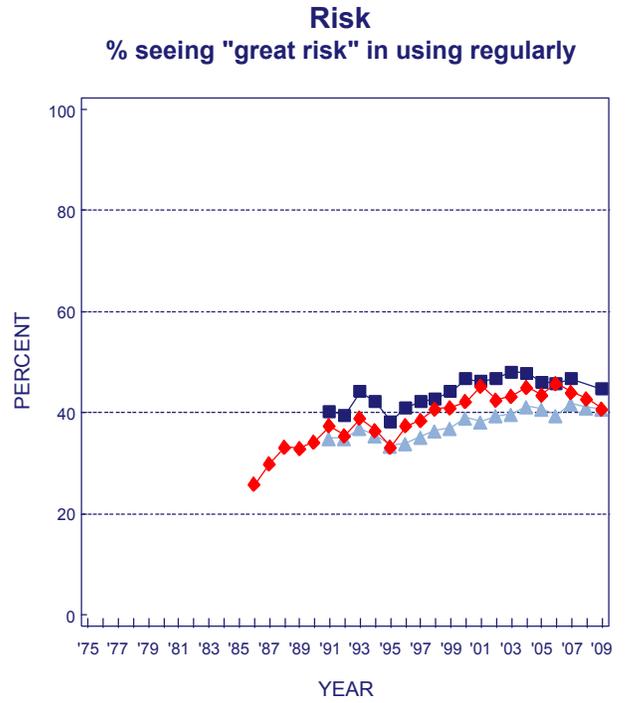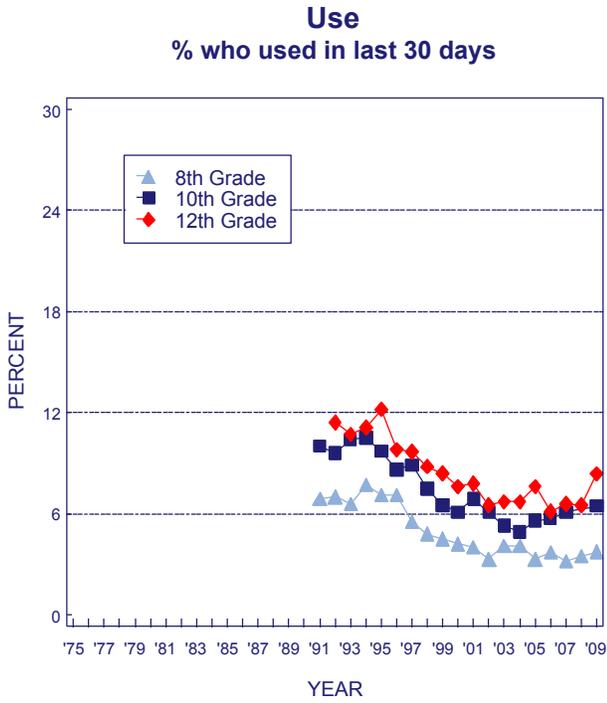
Use
% who used in last 30 days

Legend:
- 8th Grade
- 10th Grade
- 12th 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

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.

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Steroids

Unlike all other drugs discussed in this *Overview*, anabolic steroids are not usually taken for their psychoactive effects but rather for muscle and strength development. However, they are similar to most other drugs studied here in two respects: they can have adverse consequences for the user, and they are controlled substances for which there is an illicit market. Questions about steroid use were added to MTF questionnaires 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 . . . ?" In 2006 the question text was changed slightly in some questionnaire forms—the phrase "to promote healing from certain types of injuries" was replaced by "to treat certain conditions." The resulting data did not show any effect from this rewording. In 2007 the remaining forms were changed in the same manner.

Trends in Use

Anabolic steroids are used predominately by males; therefore, data based on all respondents can mask the higher rates and larger fluctuations that occur among males. (For example, in 2009, annual prevalence rates were 1.0%, 1.2%, and 2.5% for boys in grades 8, 10, and 12, compared with 0.5%, 0.4%, and 0.4% for girls.) Between 1991 and 1998, the overall annual prevalence rate was fairly stable among 8th and 10th graders, ranging between 0.9% and 1.2%. In 1999, however, use jumped from 1.2% to 1.7% in both 8th and 10th grades. (Almost all of that increase occurred among boys increasing from 1.6% in 1998 to 2.5% in 1999 in 8th grade and from 1.9% to 2.8% in 10th grade. Thus, rates among boys increased by about 50% in a single year.) Among all 8th graders, steroid use has declined since then by about one half to 0.8% in 2009. Among 10th graders, use continued to increase, reaching 2.2% in 2002, but then declined to 0.8% by 2009. In 12th grade there was a different trend story. With data going back to 1989, we can see that steroid use first fell from 1.9% overall in 1989 to 1.1% in 1992—the low point. From 1992 to 1999 there was a more gradual increase in use, reaching

1.7% in 2000. In 2001, use rose significantly among 12th graders to 2.4% (possibly reflecting the effect of the younger, heavier using cohorts getting older). Use was at 2.5% in 2004 and decreased significantly to 1.5% in 2005, where it remains in 2009. Use at the lower grades is now down by about one half from recent peak levels, and at 12th grade by about four tenths. The use of androstenedione—a steroid precursor—has also declined sharply since 2001.

Perceived Risk

Perceived risk and disapproval were asked of 8th and 10th graders for only a few years. All grades seemed to have a peak in perceived risk around 1993. The longer term data from 12th graders show a ten-percentage-point drop between 1998 and 2000, and an additional three-percentage-point drop by 2003 (to 55%, the lowest point ever). A change this sharp is quite unusual and highly significant, suggesting that some particular event or events in 1998—perhaps publicity about use of performance-enhancing substances by a famous athlete—made steroids seem less risky. It seems likely that perceived risk dropped substantially in the lower grades as well, because the sharp upturn in use that year would be consistent with such a change. By 2009, perceived risk for 12th graders was at 60%.

Disapproval

Disapproval of steroid use has been quite high for some years. Between 1998 and 2003 there was a modest decrease, though not as dramatic as the drop in perceived risk. Since then, disapproval has risen some as perceived risk has risen and use has declined.

Availability

Perceived availability of steroids was relatively high and increased with grade level; but it has declined appreciably at all grades in the last several years. Some substances were previously sold over-the-counter, but now a number have been scheduled by the DEA. Androstenedione was legally available until January 2005, when it was classified as a Schedule III controlled substance.

Steroids: Trends in Annual Use, Risk, Disapproval, and Availability
Grades 8, 10,* 12
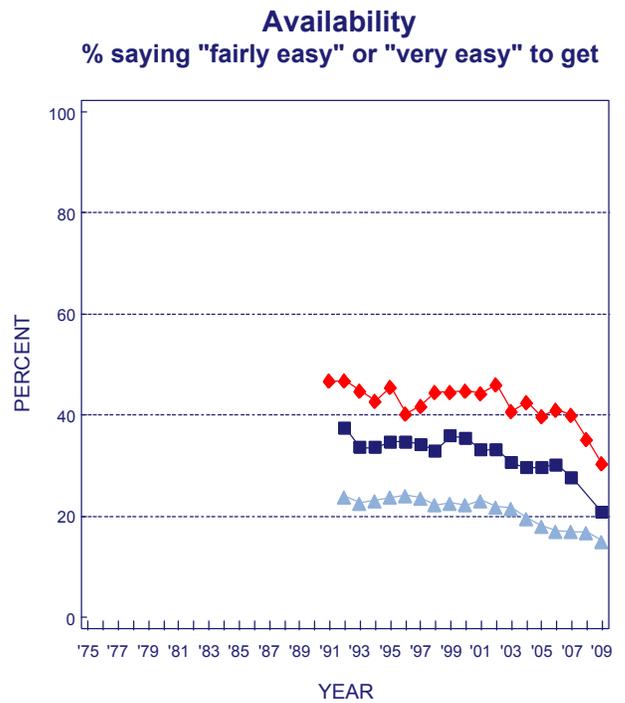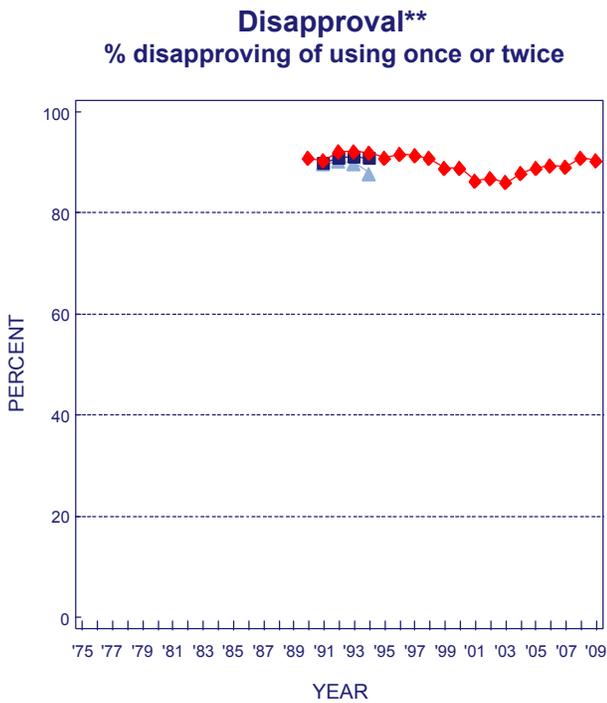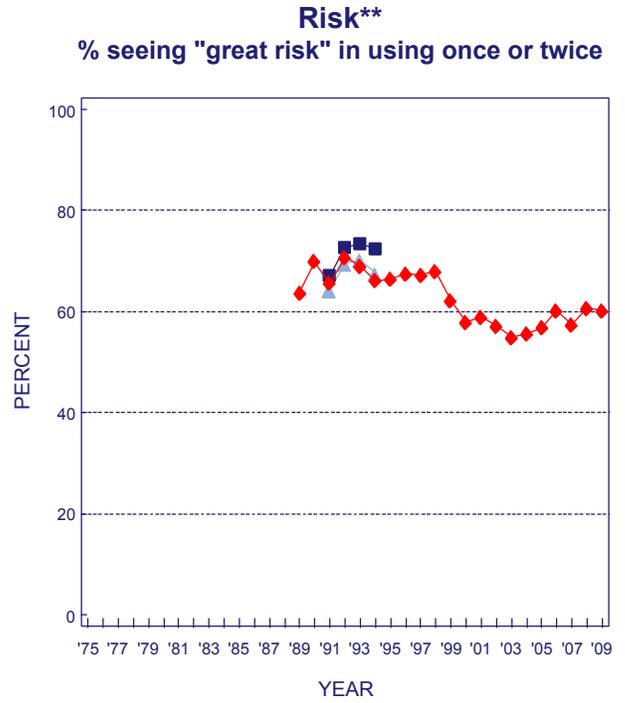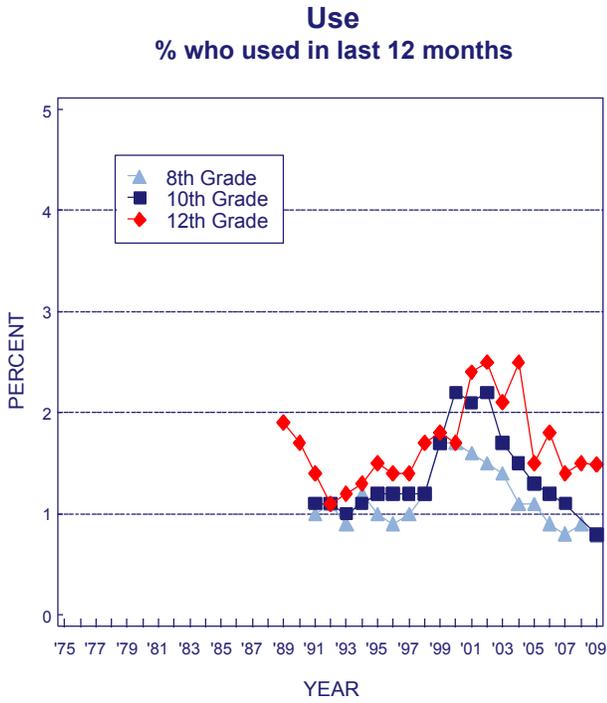
Use
% who used in last 12 months

Legend:
- 8th Grade
- 10th Grade
- 12th 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

Source. The Monitoring the Future study, the University of Michigan.
*The data for 10th graders in 2008 are omitted. See text for details.
**Question discontinued in 8th- and 10th-grade questionnaires in 1995.

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Subgroup Differences

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

Space does not permit a full discussion or documentation of the many subgroup differences on the host of drugs covered in this report. However, *Volume I* in this monograph series—including the one published in 2009 and the one forthcoming in 2010—contains an extensive appendix with tables giving the subgroup prevalence levels and trends for all of the classes of drugs discussed here. Chapters 4 and 5 in *Volume I* also present a more in-depth discussion and interpretation of those subgroup differences. Comparisons are made by gender, college plans, region of the country, community size, socioenomic level (as measured by educational level of the parents), and race/ethnicity. In addition, Monitoring the Future Occasional Paper 71—to be succeeded by Occasional Paper 73 (forthcoming)—is available on the MTF Web site (*www.monitoringthefuture.org*), and provides in chart form the many subgroup trends for all drugs. The reader will probably find the graphic presentations in these occasional papers much easier to comprehend.

Gender

Generally, we have found males to have somewhat higher rates of illicit drug use than females (especially higher rates of *frequent* use), and much higher rates of smokeless tobacco and steroid use. Males have generally had higher rates of heavy drinking; however, in their 30-day prevalence of alcohol use at 8th grade, girls overtook the boys in 2002 and have had higher rates since. At 10th grade, girls caught up to the boys by 2005 and have remained equivalent since. The genders have had roughly equivalent rates of cigarette smoking in recent years among 8th and 10th graders. Among 12th graders, the two genders have reversed order twice during the life of the study, but since 1991 males have had slightly higher smoking rates. These gender differences appear to emerge as students grow older. In 8th grade, females actually have higher rates of use for some drugs. Usage rates for the various substances generally tend to move much in parallel across time for both genders, although the absolute differences tend to be largest in the historical periods in which overall prevalence rates are highest.

College Plans

While in high school, 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, drinking heavily, and particularly smoking cigarettes. 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 non-college-bound peers.

Region of the Country

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

Population Density

There have not been very large or consistent differences in overall illicit drug use associated with population density since MTF began, helping to demonstrate just how ubiquitous the illicit drug phenomenon has been in this country. Crack and heroin use have generally not been concentrated in urban areas, as is commonly believed, meaning that no parents should assume that their children are

immune to these threats simply because they do not live in a city.

Socioeconomic Level

The average level of education of the student's parents, as reported by the student, is used as a proxy for socioeconomic status of the family. For many drugs the differences in use by socioeconomic class are very small, and the trends have been highly parallel. One very interesting difference occurred for cocaine, the use of which was *positively* associated with socioeconomic level in the early 1980s. However, with the advent of crack, which offered cocaine at a lower price, that association nearly disappeared by 1986. 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 has re-emerged in the lower grades as use declined faster among students from more educated families. Rates of binge drinking are roughly equivalent across the social classes in the upper grades, a pattern that has existed for some time among 12th graders. But, among 10th graders, a negative correlation between social class and binge drinking has begun to develop in the past few years.

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 students 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 has been dramatically lower than Whites' use—a difference that emerged largely during the life of the study (i.e., since 1975).

Hispanic students 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 African Americans. Hispanics do have the highest reported rates of use for some drugs in 12th grade—crack, methamphetamine, and crystal methamphetamine. 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 considerably higher school dropout rates of Hispanic youth. Thus, more of the drug-prone segment of that ethnic group may leave school before 12th grade compared to the other two racial/ethnic groups. Another explanation could be that Hispanics are more precocious in their initiation of these types of behaviors.

Again, we refer the reader to Occasional Paper 73 (forthcoming) at *www.monitoringthefuture.org* for a much more complete picture of these complex subgroup differences and how they have changed over the years.

TABLE 1
Trends in Lifetime Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change[b]	Peak year–2009 change Absolute change	Peak year–2009 change Proportional change (%)[a]
Any Illicit Drug	30.4	29.8	32.1	35.7	38.9	42.2	43.3	42.3	41.9	41.0	40.9	39.5	37.5	36.4	35.7	34.0	32.7	32.6	33.2	[-0.2]	-10.1 sss	-23.4
Any Illicit Drug other than Marijuana	19.7	19.7	21.2	22.0	23.6	24.2	24.0	23.1	22.7	22.1‡	**23.2**	21.1	19.8	19.3	18.6	18.2	17.7	16.8	16.5	[-0.4]	-6.7 sss	-28.9
Any Illicit Drug including Inhalants	36.8	36.3	38.8	41.9	44.9	47.4	48.2	47.4	46.9	46.2	45.5	43.7	41.9	41.3	41.0	39.3	38.0	37.9	37.9	[-0.5]	-10.2 sss	-21.2
Marijuana/Hashish	22.7	21.1	23.4	27.8	31.6	35.6	37.8	36.5	36.4	35.3	35.3	34.0	32.4	31.4	30.8	28.9	27.9	27.9	29.0	[+0.4]	-8.8 sss	-23.3
Inhalants	17.0	16.9	18.2	18.6	19.4	19.1	18.6	18.1	17.5	16.4	15.3	13.6	13.4	13.7	14.1	13.7	13.5	13.1	12.5	[-0.3]	-6.9 sss	-35.7
Hallucinogens	6.1	6.3	7.0	7.7	8.9	10.0	10.2	9.5	9.0	8.5‡	**9.2**	7.6	6.9	6.3	5.9	5.7	5.8	5.6	5.3	[-0.4]	-3.8 sss	-41.8
LSD	5.5	5.7	6.5	6.9	8.1	8.9	9.1	8.3	7.9	7.2	6.5	5.0	3.7	3.0	2.6	2.5	2.6	2.7	2.5	[-0.2]	-6.5 sss	-72.0
Hallucinogens other than LSD	2.4	2.5	2.7	3.6	3.9	4.8	4.9	4.8	4.4	4.5‡	**6.7**	6.0	5.8	5.6	5.4	5.2	5.1	4.8	4.7	[-0.3]	-2.0 sss	-30.0
Ecstasy (MDMA)	—	—	—	—	—	4.9	5.2	4.5	5.3	7.2	**8.0**	6.9	5.4	4.7	4.0	4.3	4.5	4.1	4.6	[+0.3]	-3.4 sss	-42.6
Cocaine	4.6	4.0	4.1	4.5	5.1	6.0	6.6	7.0	7.2	6.5	5.9	5.7	5.3	5.5	5.5	5.3	5.2	4.8	4.2	[-0.6] s	-2.9 sss	-40.8
Crack	2.0	1.9	2.0	2.5	2.8	3.2	3.4	3.8	3.8	3.5	3.2	3.2	2.9	2.9	2.8	2.6	2.5	2.2	2.0	[-0.2]	-1.8 sss	-47.3
Other cocaine	4.1	3.5	3.6	3.9	4.2	5.2	5.9	6.1	6.3	5.6	5.1	4.8	4.5	4.7	4.7	4.7	4.6	4.1	3.7	[-0.5]	-2.6 sss	-41.1
Heroin	1.1	1.3	1.3	1.6	1.9	2.1	2.1	2.2	2.2	2.1	1.7	1.7	1.5	1.5	1.5	1.4	1.4	1.3	1.4	[+0.1]	-0.9 sss	-39.0
With a needle	—	—	—	—	1.1	1.2	1.1	1.1	1.3	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	[+0.1]	-0.5 sss	-35.8
Without a needle	—	—	—	—	1.3	1.7	1.7	1.6	1.6	**1.8**	1.3	1.3	1.3	1.2	1.1	1.0	1.0	0.9	0.9	[-0.1]	-0.9 sss	-49.6
Amphetamines	12.9	12.5	13.8	14.3	15.2	15.5	15.2	14.5	14.0	13.5	13.9	13.1	11.8	11.2	10.3	10.1	9.5	8.6	8.6	[-0.2]	-6.9 sss	-44.7
Methamphetamine	—	—	—	—	—	—	—	—	6.5	6.2	5.8	5.3	5.0	4.5	3.9	3.4	2.5	2.5	2.2	[-0.5] s	-4.3 sss	-66.1
Tranquilizers	5.5	5.3	5.4	5.5	5.8	6.5	6.6	6.9	7.0	6.9‡	**7.9**	**7.9**	7.3	7.1	6.8	7.0	6.7	6.3	6.5	[+0.3]	-1.3 sss	-17.0
Alcohol	80.1	79.2‡	68.4	68.4	68.2	68.4	68.8	67.4	66.4	66.6	65.5	62.7	61.7	60.5	58.6	57.0	56.3	55.1	54.6	[-0.9] s	-14.2 sss	-20.6
Been drunk	46.3	44.9	44.6	44.3	44.5	45.1	45.7	44.0	43.7	44.0	43.4	40.5	38.9	39.4	38.4	37.6	36.6	35.1	35.9	[+0.1]	-10.4 sss	-22.5
Flavored alcoholic beverages	—	—	—	—	—	—	—	—	—	—	—	—	—	**54.7**	**54.7**	53.1	51.3	49.3	47.9	[-2.0] s	-6.8 sss	-12.4
Cigarettes	53.5	53.0	54.0	54.6	55.8	57.8	57.4	56.0	54.5	51.8	49.1	44.2	40.8	39.6	37.4	35.0	33.3	31.3	31.2	[+0.1]	-26.6 sss	-46.1
Smokeless Tobacco	—	26.2	25.6	**26.3**	26.0	25.7	22.7	21.1	19.4	17.9	16.6	15.2	14.1	13.6	13.8	13.3	12.9	12.3	13.5	[+1.3]	-12.8 sss	-48.8
Steroids	1.9	1.8	1.8	2.1	2.1	1.8	2.1	2.3	2.8	3.0	**3.3**	**3.3**	3.0	2.5	2.1	2.0	1.8	1.6	1.5	[0.0]	-1.7 sss	-52.8

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between classes: s = .05, ss = .01, sss = .001. Values in **bold** equal peak levels since 1991.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. "‡" indicates a change in the question text.

Underlined values equal peak level before wording change. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

[a] The proportional change is the percent by which the most recent year deviates from the peak year for the drug in question. So, if a drug was at 20% prevalence in the peak year and declined to 10% prevalence in the most recent year, that would reflect a proportional decline of 50%.

[b] "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change shown here was calculated by utilizing the matched half-sample of schools participating in both years rather than the full sample for 10th graders only.

TABLE 2

Trends in <u>Annual</u> Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change[b]	Peak year–2009 change Absolute change	Proportional change (%)[a]
Any Illicit Drug	20.2	19.7	23.2	27.6	31.0	33.6	**34.1**	32.2	31.9	31.4	31.8	30.2	28.4	27.6	27.1	25.8	24.8	24.9	25.9	[+0.3]	-8.1 sss	-23.8
Any Illicit Drug other than Marijuana	12.0	12.0	13.6	14.6	16.4	<u>17.0</u>	16.8	15.8	15.6	15.3‡	**16.3**	14.6	13.7	13.5	13.1	12.7	12.4	11.9	11.6	[-0.4]	-4.7 sss	-28.7
Any Illicit Drug including Inhalants	23.5	23.2	26.7	31.1	34.1	36.6	**36.7**	35.0	34.6	34.1	34.3	32.3	30.8	30.1	30.1	28.7	27.6	27.6	28.5	[+0.2]	-8.3 sss	-22.5
Marijuana/Hashish	15.0	14.3	17.7	22.5	26.1	29.0	**30.1**	28.2	27.9	27.2	27.5	26.1	24.6	23.8	23.4	22.0	21.4	21.5	22.9	[+0.8]	-7.1 sss	-23.7
Inhalants	7.6	7.8	8.9	9.6	**10.2**	9.9	9.1	8.5	7.9	7.7	6.9	6.1	6.2	6.7	7.0	6.9	6.4	6.4	6.1	[0.0]	-4.1 sss	-40.4
Hallucinogens	3.8	4.1	4.8	5.2	6.6	<u>7.2</u>	6.9	6.3	6.1	5.4‡	**6.0**	4.5	4.1	4.0	3.9	3.6	3.8	3.8	3.5	[-0.5] s	-2.5 sss	-42.1
LSD	3.4	3.8	4.3	4.7	5.9	**6.3**	6.0	5.3	5.3	4.5	4.1	2.4	1.6	1.6	1.5	1.4	1.7	1.9	1.6	[-0.2]	-4.7 sss	-75.0
Hallucinogens other than LSD	1.3	1.4	1.7	2.2	2.7	<u>3.2</u>	<u>3.2</u>	3.1	2.9	2.8‡	**4.0**	3.7	3.6	3.6	3.4	3.3	3.3	3.2	3.0	[-0.3] s	-1.1 sss	-26.2
Ecstasy (MDMA)	—	—	—	—	—	3.1	3.4	2.9	3.7	5.3	**6.0**	4.9	3.1	2.6	2.4	2.7	3.0	2.9	3.0	[+0.1]	-3.1 sss	-51.0
Cocaine	2.2	2.1	2.3	2.8	3.3	4.0	4.3	**4.5**	**4.5**	3.9	3.5	3.7	3.3	3.5	3.5	3.5	3.4	2.9	2.5	[-0.5] ss	-2.0 sss	-44.8
Crack	1.0	1.1	1.2	1.5	1.8	2.0	2.1	**2.4**	2.2	2.1	1.8	2.0	1.8	1.7	1.6	1.5	1.5	1.3	1.2	[-0.2]	-1.2 sss	-50.8
Other cocaine	2.0	1.8	2.0	2.3	2.8	3.4	3.7	3.7	**4.0**	3.3	3.0	3.1	2.8	3.1	3.0	3.1	2.9	2.6	2.1	[-0.5] s	-1.9 sss	-46.4
Heroin	0.5	0.6	0.6	0.9	1.2	**1.3**	**1.3**	1.2	**1.3**	**1.3**	0.9	1.0	0.8	0.9	0.8	0.8	0.8	0.8	0.8	[0.0]	-0.5 sss	-39.3
With a needle	—	—	—	—	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	[0.0]	-0.2 s	-28.5
Without a needle	—	—	—	—	0.9	0.9	1.0	0.9	1.0	**1.1**	0.7	0.7	0.6	0.7	0.7	0.6	0.7	0.6	0.5	[-0.1]	-0.6 sss	-52.6
OxyContin	—	—	—	—	—	—	—	—	—	—	—	2.7	3.2	3.3	3.4	**3.5**	**3.5**	3.4	3.9	[-0.1]	+0.4	11.1
Vicodin	—	—	—	—	—	—	—	—	—	—	—	6.0	**6.6**	5.8	5.7	6.3	6.2	6.1	6.5	[+0.2]	0.0	-0.7
Amphetamines	7.5	7.3	8.4	9.1	10.0	**10.4**	10.1	9.3	9.0	9.2	9.6	8.9	8.0	7.6	7.0	6.8	6.5	5.8	5.9	[-0.3]	-4.5 sss	-43.5
Ritalin	—	—	—	—	—	—	—	—	—	—	**4.2**	3.8	3.5	3.6	3.3	3.5	2.8	2.6	2.5	[-0.1]	-1.7 sss	-39.8
Adderall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.3	—	—	
Methamphetamine	—	—	—	—	—	—	—	—	**4.1**	3.5	3.4	3.2	3.0	2.6	2.4	2.0	1.4	1.3	1.3	[-0.1]	-2.8 sss	-69.3
Tranquilizers	2.8	2.8	2.9	3.1	3.7	4.1	4.1	4.4	4.4	4.5‡	**5.5**	5.3	4.8	4.8	4.7	4.6	4.5	4.3	4.5	[+0.2]	-1.0 sss	-18.2
Rohypnol	—	—	—	—	—	1.1	1.1	**1.1**	0.8	0.7	0.9‡	0.8	0.8	0.9	0.8	0.7	0.8	0.7	0.6	[-0.1]	-0.3 s	-37.9
GHB	—	—	—	—	—	—	—	—	—	**1.4**	1.2	1.2	1.2	1.1	0.8	0.9	0.7	0.9	0.9	[-0.1]	-0.5 ss	-33.4
Ketamine	—	—	—	—	—	—	—	—	—	**2.0**	1.9	**2.0**	1.7	1.3	1.0	1.1	1.0	1.2	1.3	[-0.1]	-0.7 sss	-34.0
Alcohol	<u>67.4</u>	66.3‡	59.7	60.5	60.4	60.9	**61.4**	59.7	59.0	59.3	58.2	55.3	54.4	54.0	51.9	50.7	50.2	48.7	48.4	[-0.7]	-13.0 sss	-21.2
Been drunk	35.8	34.3	34.3	35.0	35.9	36.7	**36.9**	35.5	36.0	35.9	35.0	32.1	31.2	32.5	30.8	30.7	29.7	28.1	28.7	[+0.1]	-8.2 sss	-22.1
Flavored alcoholic beverages	—	—	—	—	—	—	—	—	—	—	—	—	—	**44.5**	43.9	42.4	40.8	39.0	37.8	[-2.3] ss	-6.7 sss	-15.0
Steroids	1.2	1.1	1.0	1.2	1.3	1.1	1.2	1.3	1.7	1.9	**2.0**	**2.0**	1.7	1.6	1.3	1.3	1.1	1.1	1.0	[-0.1]	-1.0 sss	-51.3

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between classes: s = .05, ss = .01, sss = .001. Values in **bold** equal peak levels since 1991.

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Underlined values equal peak level before wording change. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

[a]The proportional change is the percent by which the most recent year deviates from the peak year for the drug in question. So, if a drug was at 20% prevalence in the peak year and declined to 10% prevalence in the most recent year, that would reflect a proportional decline of 50%.

[b]"[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change shown here was calculated by utilizing the matched half-sample of schools participating in both years rather than the full sample for 10th graders only.

TABLE 3
Trends in 30-Day Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change[b]	Peak year–2009 change Absolute change	Peak year–2009 change Proportional change (%)[a]
Any Illicit Drug	10.9	10.5	13.3	16.8	18.6	**20.6**	20.5	19.5	19.5	19.2	19.4	18.2	17.3	16.2	15.8	14.9	14.8	14.6	15.8	[+0.6]	-4.8 sss	-23.5
Any Illicit Drug other than Marijuana	5.4	5.5	6.5	7.1	8.4	**8.4**	8.4	8.2	7.9	8.0‡	**8.2**	7.7	7.1	7.0	6.7	6.4	6.4	5.9	5.7	[-0.3]	-2.4 sss	-29.9
Any Illicit Drug including Inhalants	13.0	12.5	15.4	18.9	20.7	**22.4**	22.2	21.1	21.1	21.0	20.8	19.5	18.6	17.5	17.5	16.5	16.5	16.1	17.3	[+0.8]	-5.1 sss	-22.8
Marijuana/Hashish	8.3	7.7	10.2	13.9	15.6	17.7	**17.9**	16.9	16.9	16.3	16.6	15.3	14.8	13.6	13.4	12.5	12.4	12.5	13.8	[+0.9]	-4.2 sss	-23.1
Inhalants	3.2	3.3	3.8	4.0	**4.3**	3.9	3.7	3.4	3.3	3.2	2.8	2.7	2.7	2.9	2.9	2.7	2.6	2.6	2.5	[+0.1]	-1.8 sss	-41.6
Hallucinogens	1.5	1.6	1.9	2.2	3.1	2.7	3.0	2.8	2.5	3.2	2.8	1.7	1.5	1.5	1.5	1.3	1.4	1.4	1.3	[-0.2]	-1.0 sss	-44.5
LSD	1.3	1.5	1.6	1.9	**2.8**	2.1	2.4	2.3	2.0	1.4	1.5	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.5	[-0.2] s	-2.2 sss	-81.0
Hallucinogens other than LSD	0.5	0.5	0.7	1.0	1.0	1.2	1.2	1.2	1.1	1.1‡	**1.4**	**1.4**	1.2	1.3	1.2	1.1	1.1	1.2	1.0	[-0.1]	-0.4 sss	-27.2
Ecstasy (MDMA)	—	—	—	—	—	1.5	1.3	1.2	1.6	2.4	**2.4**	1.8	1.0	0.9	0.9	1.0	1.1	1.2	1.2	[0.0]	-1.2 sss	-49.4
Cocaine	0.8	0.9	0.9	1.2	1.5	1.7	1.8	**1.9**	**1.9**	1.7	1.5	1.6	1.4	1.6	1.6	1.6	1.4	1.3	1.0	[-0.3] ss	-0.9 sss	-48.8
Crack	0.4	0.5	0.5	0.7	0.8	0.9	0.8	**1.0**	0.9	0.9	0.9	**1.0**	0.8	0.8	0.8	0.7	0.7	0.6	0.5	[-0.1]	-0.5 sss	-49.0
Other cocaine	0.7	0.7	0.8	1.1	1.2	1.3	1.5	1.6	**1.7**	1.4	1.3	1.3	1.2	1.4	1.3	1.4	1.1	1.1	0.8	[-0.2] s	-0.8 sss	-49.8
Heroin	0.2	0.3	0.3	0.4	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	[0.0]	-0.2 ss	-32.2
With a needle	—	—	—	—	0.3	**0.4**	0.3	**0.4**	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	[0.0]	-0.1 ss	-35.3
Without a needle	—	—	—	—	0.4	0.4	**0.5**	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	[0.0]	-0.3 sss	-56.1
Amphetamines	3.0	3.3	3.9	4.0	4.5	**4.8**	4.5	4.3	4.2	4.5	4.7	4.4	3.9	3.6	3.3	3.0	3.2	2.6	2.7	[+0.1]	-2.0 sss	-42.9
Methamphetamine	—	—	—	—	—	—	—	—	**1.5**	**1.5**	1.4	**1.5**	1.4	1.1	0.9	0.7	0.5	0.7	0.5	[+0.4]	-1.0 sss	-63.7
Tranquilizers	1.1	1.1	1.1	1.3	1.6	1.7	1.7	1.9	1.9	2.1‡	2.3	**2.4**	2.2	2.1	2.1	2.1	2.0	1.9	1.9	[0.0]	-0.5 sss	-20.9
Alcohol	39.8	38.4‡	36.3	37.6	37.8	**38.8**	38.6	37.4	37.2	36.6	35.5	33.3	33.2	32.9	31.4	31.0	30.1	28.1	28.4	[-0.1]	-10.3 sss	-26.7
Been drunk	19.2	17.8	18.2	19.3	20.3	20.4	**21.2**	20.4	20.6	20.3	19.7	17.4	17.7	18.1	17.0	17.4	16.5	14.9	15.2	[-0.1]	-6.0 sss	-28.3
Flavored alcoholic beverages	—	—	—	—	—	—	—	—	—	—	—	—	—	**23.0**	21.6	21.7	20.4	18.6	17.9	[-1.0] s	-5.1 sss	-22.3
Cigarettes	20.7	21.2	23.4	24.7	26.6	**28.3**	**28.3**	27.0	25.2	22.6	20.2	17.7	16.6	16.1	15.3	14.4	13.6	12.6	12.7	[+0.1]	-15.6 sss	-55.3
Smokeless Tobacco	—	9.2	9.1	**9.7**	9.6	8.5	8.0	7.0	6.3	5.8	6.1	5.2	5.3	5.1	5.3	5.1	5.2	4.9	6.0	[+1.3] ss	-3.7 sss	-38.0
Steroids	0.6	0.6	0.6	0.7	0.6	0.5	0.7	0.7	0.9	0.9	0.9	**1.0**	0.9	0.9	0.7	0.7	0.6	0.6	0.6	[0.0]	-0.4 sss	-41.5

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between classes: s = .05, ss = .01, sss = .001. Values in **bold** equal peak levels since 1991.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. "‡" indicates a change in the question text.

Underlined values equal peak level before wording change. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

[a] The proportional change is the percent by which the most recent year deviates from the peak year for the drug in question. So, if a drug was at 20% prevalence in the peak year and declined to 10% prevalence in the most recent year, that would reflect a proportional decline of 50%.

[b] "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change shown here was calculated by utilizing the matched half-sample of schools participating in both years rather than the full sample for 10th graders only.

TABLE 4
Trends in Daily Prevalence of Use of Selected Drugs for Grades 8, 10, and 12 Combined

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change[b]	Peak year–2009 change Absolute change	Proportional change (%)[a]
Marijuana	0.9	0.9	1.2	2.1	2.7	3.2	3.4	3.4	3.5	3.5	**3.7**	3.5	3.4	3.0	2.9	2.8	2.7	2.8	2.8	[0.0]	-0.9 sss	-23.3
Alcohol	<u>1.7</u>	1.6‡	2.0	1.8	1.9	2.0	2.1	**2.2**	2.0	1.7	2.0	1.9	1.7	1.5	1.5	1.5	1.6	1.4	1.3	[-0.1] s	-0.9 sss	-41.7
5+ drinks in a row in last 2 weeks[b]	20.0	19.0	19.5	20.3	21.1	**21.9**	**21.9**	21.5	21.7	21.2	20.4	18.9	18.6	18.8	17.5	17.4	17.2	15.5	16.1	[+0.3]	-5.8 sss	-26.6
Been drunk	0.4	0.4	0.5	0.6	0.7	0.7	**0.9**	0.8	**0.9**	0.8	0.7	0.6	0.7	0.7	0.6	0.7	0.6	0.6	0.5	[-0.1]	-0.4 sss	-44.9
Cigarettes	12.4	11.9	13.5	14.0	15.5	16.8	**16.9**	15.4	15.0	13.4	11.6	10.2	9.3	9.0	8.0	7.6	7.1	6.4	6.4	[0.0]	-10.6 sss	-62.5
1/2 pack+/day	6.5	6.1	6.9	7.2	7.9	**8.7**	8.6	7.9	7.6	6.4	5.7	4.9	4.5	4.1	3.7	3.4	3.0	2.7	2.6	[+0.1]	-6.1 sss	-70.1
Smokeless tobacco	—	**3.0**	2.7	2.9	2.5	2.3	2.5	2.1	1.7	1.9	2.0	1.4	1.6	1.7	1.6	1.5	1.6	1.6	1.8	[+0.4]	-1.2 ss	-39.7

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between classes: s = .05, ss = .01, sss = .001. Values in **bold** equal peak levels since 1991.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. "‡" indicates a change in the question text.

Underlined values equal peak level before wording change. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

[a] The proportional change is the percent by which the most recent year deviates from the peak year for the drug in question. So, if a drug was at 20% prevalence in the peak year and declined to 10% prevalence in the most recent year, that would reflect a proportional decline of 50%.

[b] For 8th and 10th graders only: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2 percentage points lower than the estimates previously reported. Those previous overestimates have been corrected in this table.

[bu] []" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change shown here was calculated by utilizing the matched half-sample of schools participating in both years rather than the full sample for 10th graders only.

TABLE 5
Trends in <u>Lifetime</u> Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 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	22.8	21.5	21.4	20.9	19.0	19.6	19.9	+0.3
10th Grade	30.6	29.8	32.8	37.4	40.9	45.4	47.3	44.9	46.2	45.6	45.6	44.6	41.4	39.8	38.2	36.1	35.6	34.1	36.0	[-0.3]
12th Grade	44.1	40.7	42.9	45.6	48.4	50.8	54.3	54.1	54.7	54.0	53.9	53.0	51.1	51.1	50.4	48.2	46.8	47.4	46.7	-0.7
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	13.6	12.2	12.1	12.2	11.1	11.2	10.4	-0.8
10th Grade	19.1	19.2	20.9	21.7	24.3	25.5	25.0	23.6	24.0	23.1‡	23.6	22.1	19.7	18.8	18.0	17.5	18.2	15.9	16.7	[+0.3]
12th Grade	26.9	25.1	26.7	27.6	28.1	28.5	30.0	29.4	29.4	29.0‡	30.7	29.5	27.7	28.7	27.4	26.9	25.5	24.9	24.0	-0.9
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	30.3	30.2	30.0	29.2	27.7	28.3	27.9	-0.4
10th Grade	36.1	36.2	38.7	42.7	45.9	49.8	50.9	49.3	49.9	49.3	48.8	47.7	44.9	43.1	42.1	40.1	39.8	38.7	40.0	[-0.1]
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	52.8	53.0	53.5	51.2	49.1	49.3	48.4	-1.0
Marijuana/Hashish																				
8th Grade	10.2	11.2	12.6	16.7	19.9	23.1	22.6	22.2	22.0	20.3	20.4	19.2	17.5	16.3	16.5	15.7	14.2	14.6	15.7	+1.2
10th Grade	23.4	21.4	24.4	30.4	34.1	39.8	42.3	39.6	40.9	40.3	40.1	38.7	36.4	35.1	34.1	31.8	31.0	29.9	32.3	[+0.5]
12th Grade	36.7	32.6	35.3	38.2	41.7	44.9	49.6	49.1	49.7	48.8	49.0	47.8	46.1	45.7	44.8	42.3	41.8	42.6	42.0	-0.7
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	15.8	17.3	17.1	16.1	15.6	15.7	14.9	-0.8
10th Grade	15.7	16.6	17.5	18.0	19.0	19.3	18.3	18.3	17.0	16.6	15.2	13.5	12.7	12.4	13.1	13.3	13.6	12.8	12.3	[+0.4]
12th Grade	17.6	16.6	17.4	17.7	17.4	16.6	16.1	15.2	15.4	14.2	13.0	11.7	11.2	10.9	11.4	11.1	10.5	9.9	9.5	-0.5
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	1.6	1.3	1.1	1.2	1.2	0.6	1.1	+0.5
Hallucinogens[b,f]																				
8th Grade	3.2	3.8	3.9	4.3	5.2	5.9	5.4	4.9	4.8	4.6‡	5.2	4.1	4.0	3.5	3.8	3.4	3.1	3.3	3.0	-0.3
10th Grade	6.1	6.4	6.8	8.1	9.3	10.5	10.5	9.8	9.7	8.9‡	8.9	7.8	6.9	6.4	5.8	6.1	6.4	5.5	6.1	[+0.3]
12th Grade	9.6	9.2	10.9	11.4	12.7	14.0	15.1	14.1	13.7	13.0‡	14.7	12.0	10.6	9.7	8.8	8.3	8.4	8.7	7.4	-1.3
LSD																				
8th Grade	2.7	3.2	3.5	3.7	4.4	5.1	4.7	4.1	4.1	3.9	3.4	2.5	2.1	1.8	1.9	1.6	1.6	1.9	1.7	-0.3
10th Grade	5.6	5.8	6.2	7.2	8.4	9.4	9.5	8.5	8.5	7.6	6.3	5.0	3.5	2.8	2.5	2.7	3.0	2.6	3.0	[+0.5]
12th Grade	8.8	8.6	10.3	10.5	11.7	12.6	13.6	12.6	12.2	11.1	10.9	8.4	5.9	4.6	3.5	3.3	3.4	4.0	3.1	-0.8
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	3.2	3.0	3.3	2.8	2.6	2.5	2.4	-0.1
10th Grade	2.2	2.5	2.8	3.8	3.9	4.7	4.8	5.0	4.7	4.8‡	6.6	6.3	5.9	5.8	5.2	5.5	5.7	4.8	5.4	[+0.2]
12th Grade	3.7	3.3	3.9	4.9	5.4	6.8	7.5	7.1	6.7	6.9‡	10.4	9.2	9.0	8.7	8.1	7.8	7.7	7.8	6.8	-1.0 s

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade,
the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
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	2.5	1.6	2.4	2.2	2.1	1.8	1.7	-0.1
Ecstasy (MDMA)[g]																				
8th Grade	—	—	—	—	—	3.4	3.2	2.7	2.7	4.3	5.2	4.3	3.2	2.8	2.8	2.5	2.3	2.4	2.2	-0.2
10th Grade	—	—	—	—	—	5.6	5.7	5.1	6.0	7.3	8.0	6.6	5.4	4.3	4.0	4.5	5.2	4.3	5.5	[+0.8]
12th Grade	—	—	—	—	—	6.1	6.9	5.8	8.0	11.0	11.7	10.5	8.3	7.5	5.4	6.5	6.5	6.2	6.5	+0.3
Cocaine																				
8th Grade	2.3	2.9	2.9	3.6	4.2	4.5	4.4	4.6	4.7	4.5	4.3	3.6	3.6	3.4	3.7	3.4	3.1	3.0	2.6	-0.5
10th Grade	4.1	3.3	3.6	4.3	5.0	6.5	7.1	7.2	7.7	6.9	5.7	6.1	5.1	5.4	5.2	4.8	5.3	4.5	4.6	[-0.1]
12th Grade	7.8	6.1	6.1	5.9	6.0	7.1	8.7	9.3	9.8	8.6	8.2	7.8	7.7	8.1	8.0	8.5	7.8	7.2	6.0	-1.2 s
Crack																				
8th Grade	1.3	1.6	1.7	2.4	2.7	2.9	2.7	3.2	3.1	3.1	3.0	2.5	2.5	2.4	2.4	2.3	2.1	2.0	1.7	-0.3
10th Grade	1.7	1.5	1.8	2.1	2.8	3.3	3.6	3.9	4.0	3.7	3.1	3.6	2.7	2.6	2.5	2.2	2.3	2.0	2.1	[0.0]
12th Grade	3.1	2.6	2.6	3.0	3.0	3.3	3.9	4.4	4.6	3.9	3.7	3.8	3.6	3.9	3.5	3.5	3.2	2.8	2.4	-0.4
Other Cocaine[h]																				
8th Grade	2.0	2.4	2.4	3.0	3.4	3.8	3.5	3.7	3.8	3.5	3.3	2.8	2.7	2.6	2.9	2.7	2.6	2.4	2.1	-0.3
10th Grade	3.8	3.0	3.3	3.8	4.4	5.5	6.1	6.4	6.8	6.0	5.0	5.2	4.5	4.8	4.6	4.3	4.8	4.0	4.1	[0.0]
12th Grade	7.0	5.3	5.4	5.2	5.1	6.4	8.2	8.4	8.8	7.7	7.4	7.0	6.7	7.3	7.1	7.9	6.8	6.5	5.3	-1.2
Heroin[i]																				
8th Grade	1.2	1.4	1.4	2.0	2.3	2.4	2.1	2.3	2.3	1.9	1.7	1.6	1.6	1.6	1.5	1.4	1.3	1.4	1.3	-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	1.5	1.5	1.5	1.4	1.5	1.2	1.5	[+0.5] ss
12th Grade	0.9	1.2	1.1	1.2	1.6	1.8	2.1	2.0	2.0	2.4	1.8	1.7	1.5	1.5	1.5	1.4	1.5	1.3	1.2	0.0
With a Needle[j]																				
8th Grade	—	—	—	—	1.5	1.6	1.3	1.4	1.6	1.1	1.2	1.0	1.0	1.1	1.0	1.0	0.9	0.9	0.9	0.0
10th Grade	—	—	—	—	1.0	1.1	1.1	1.2	1.3	1.0	0.8	1.0	0.9	0.8	0.8	0.9	0.9	0.7	0.9	[+0.3] s
12th Grade	—	—	—	—	0.7	0.8	0.9	0.8	0.9	0.8	0.7	0.8	0.7	0.7	0.9	0.8	0.7	0.7	0.6	-0.1
Without a Needle[j]																				
8th Grade	—	—	—	—	1.5	1.6	1.4	1.5	1.4	1.3	1.1	1.0	1.1	1.0	0.9	0.9	0.7	0.9	0.8	-0.2
10th Grade	—	—	—	—	1.1	1.7	1.7	1.7	1.6	1.7	1.3	1.3	1.0	1.1	1.1	1.0	1.1	0.8	1.0	[+0.1]
12th Grade	—	—	—	—	1.4	1.7	2.1	1.6	1.8	2.4	1.5	1.6	1.8	1.4	1.3	1.1	1.4	1.1	0.9	-0.2
Narcotics other than Heroin[k,l]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	6.6	6.1	6.4	6.6	7.2	8.2	9.7	9.8	10.2	10.6	9.9‡	13.5	13.2	13.5	12.8	13.4	13.1	13.2	13.2	0.0

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 5 (cont.)
Trends in <u>Lifetime</u> Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

							Lifetime													2008–2009
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	change
Amphetamines[k,m]																				
8th Grade	10.5	10.8	11.8	12.3	13.1	13.5	12.3	11.3	10.7	9.9	10.2	8.7	8.4	7.5	7.4	7.3	6.5	6.8	6.0	-0.9
10th Grade	13.2	13.1	14.9	15.1	17.4	17.7	17.0	16.0	15.7	15.7	16.0	14.9	13.1	11.9	11.1	11.2	11.1	9.0	10.3	[+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	14.4	15.0	13.1	12.4	11.4	10.5	9.9	-0.7
Methamphetamine[n,o]																				
8th Grade	—	—	—	—	—	—	—	—	4.5	4.2	4.4	3.5	3.9	2.5	3.1	2.7	1.8	2.3	1.6	-0.8 s
10th Grade	—	—	—	—	—	—	—	—	7.3	6.9	6.4	6.1	5.2	5.3	4.1	3.2	2.8	2.4	2.8	[-0.2]
12th Grade	—	—	—	—	—	—	—	—	8.2	7.9	6.9	6.7	6.2	6.2	4.5	4.4	3.0	2.8	2.4	-0.4
Crystal Methamphetamine (Ice)[o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	3.3	2.9	3.1	3.4	3.9	4.4	4.4	5.3	4.8	4.0	4.1	4.7	3.9	4.0	4.0	3.4	3.4	2.8	2.1	-0.8
Sedatives (Barbiturates)[k]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	6.2	5.5	6.3	7.0	7.4	7.6	8.1	8.7	8.9	9.2	8.7	9.5	8.8	9.9	10.5	10.2	9.3	8.5	8.2	-0.3
Methaqualone[e,k]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.3	1.6	0.8	1.4	1.2	2.0	1.7	1.6	1.8	0.8	1.1	1.5	1.0	1.3	1.3	1.2	1.0	0.8	0.7	0.0
Tranquilizers[b,k]																				
8th Grade	3.8	4.1	4.4	4.6	4.5	5.3	4.8	4.6	4.4	4.4‡	5.0	4.3	4.4	4.0	4.1	4.3	3.9	3.9	3.9	0.0
10th Grade	5.8	5.9	5.7	5.4	6.0	7.1	7.3	7.8	7.9	8.0‡	9.2	8.8	7.8	7.3	7.1	7.2	7.4	6.8	7.0	[+0.5]
12th Grade	7.2	6.0	6.4	6.6	7.1	7.2	7.8	8.5	9.3	8.9‡	10.3	11.4	10.2	10.6	9.9	10.3	9.5	8.9	9.3	+0.4
Rohypnol[p]																				
8th Grade	—	—	—	—	—	1.5	1.1	1.4	1.3	1.0	1.1	0.8	1.0	1.0	1.1	1.0	1.0	0.7	0.7	0.0
10th Grade	—	—	—	—	—	1.5	1.7	2.0	1.8	1.3	1.5	1.3	1.0	1.2	1.0	0.8	1.3	0.9	0.7	[0.0]
12th Grade	—	—	—	—	—	1.2	1.8	3.0	2.0	1.5	1.7	—	—	—	—	—	—	—	—	—
Alcohol[q]																				
Any Use																				
8th Grade	70.1	69.3‡	55.7	55.8	54.5	55.3	53.8	52.5	52.1	51.7	50.5	47.0	45.6	43.9	41.0	40.5	38.9	38.9	36.6	-2.4 s
10th Grade	83.8	82.3‡	71.6	71.1	70.5	71.8	72.0	69.8	70.6	71.4	70.1	66.9	66.0	64.2	63.2	61.5	61.7	58.3	59.1	[-0.4]
12th Grade	88.0	87.5‡	80.0	80.4	80.7	79.2	81.7	81.4	80.0	80.3	79.7	78.4	76.6	76.8	75.1	72.7	72.2	71.9	72.3	+0.4
Been Drunk[o]																				
8th Grade	26.7	26.8	26.4	25.9	25.3	26.8	25.2	24.8	24.8	25.1	23.4	21.3	20.3	19.9	19.5	19.5	17.9	18.0	17.4	-0.6
10th Grade	50.0	47.7	47.9	47.2	46.9	48.5	49.4	46.7	48.9	49.3	48.2	44.0	42.4	42.3	42.1	41.4	41.2	37.2	38.6	[-0.6]
12th Grade	65.4	63.4	62.5	62.9	63.2	61.8	64.2	62.4	62.3	62.3	63.9	61.6	58.1	60.3	57.5	56.4	55.1	54.7	56.5	+1.7

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

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TABLE 5 (cont.)
Trends in <u>Lifetime</u> Prevalence of Use of Various Drugs in Grades 8, 10, and 12

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Flavored Alcoholic Beverages[e,n]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	37.9	35.5	35.5	34.0	32.8	29.4	-3.4 s
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	58.6	58.8	58.1	55.7	53.5	51.4	[-3.8]
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	71.0	73.6	69.9	68.4	65.5	67.4	+1.9
Cigarettes																				
Any Use																				
8th Grade	44.0	45.2	45.3	46.1	46.4	49.2	47.3	45.7	44.1	40.5	36.6	31.4	28.4	27.9	25.9	24.6	22.1	20.5	20.1	-0.3
10th Grade	55.1	53.5	56.3	56.9	57.6	61.2	60.2	57.7	57.6	55.1	52.8	47.4	43.0	40.7	38.9	36.1	34.6	31.7	32.7	[+1.4]
12th Grade	63.1	61.8	61.9	62.0	64.2	63.5	65.4	65.3	64.6	62.5	61.0	57.2	53.7	52.8	50.0	47.1	46.2	44.7	43.6	-1.1
Smokeless Tobacco[r]																				
8th Grade	22.2	20.7	18.7	19.9	20.0	20.4	16.8	15.0	14.4	12.8	11.7	11.2	11.3	11.0	10.1	10.2	9.1	9.8	9.6	-0.2
10th Grade	28.2	26.6	28.1	29.2	27.6	27.4	26.3	22.7	20.4	19.1	19.5	16.9	14.6	13.8	14.5	15.0	15.1	12.2	15.2	[+3.4] ss
12th Grade	—	32.4	31.0	30.7	30.9	29.8	25.3	26.2	23.4	23.1	19.7	18.3	17.0	16.7	17.5	15.2	15.1	15.6	16.3	+0.7
Steroids[k,s]																				
8th Grade	1.9	1.7	1.6	2.0	2.0	1.8	1.8	2.3	2.7	3.0	2.8	2.5	2.5	1.9	1.7	1.6	1.5	1.4	1.3	-0.1
10th Grade	1.8	1.7	1.7	1.8	2.0	1.8	2.0	2.0	2.7	3.5	3.5	3.5	3.0	2.4	2.0	1.8	1.8	1.4	1.3	[-0.2]
12th Grade	2.1	2.1	2.0	2.4	2.3	1.9	2.4	2.7	2.9	2.5	3.7	4.0	3.5	3.4	2.6	2.7	2.2	2.2	2.2	0.0

Source. The Monitoring the Future study, the University of Michigan.

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

Footnotes for Tables 5 through 8

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

Approximate Weighted *N*s	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
8th Graders	17,500	18,600	18,300	17,300	17,500	17,800	18,600	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	15,000
10th Graders	14,800	14,800	15,300	15,800	17,000	15,600	15,500	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	15,900
12th Graders	15,000	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	13,700

[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 narcotics other than heroin, amphetamines, sedatives (barbiturates), or tranquilizers not under a doctor's orders. For 8th and 10th graders only: The use of narcotics other than heroin and sedatives (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 age group. "Other psychedelics" was changed to "other hallucinogens" and "shrooms" was added to the list of examples. For the tranquilizer list of examples, Miltown was replaced with Xanax. For 8th, 10th, and 12th graders: The 2001 data presented here are based on the changed forms only; *N* is one half of *N* indicated. In 2002 the remaining forms were changed to the new wording. The data are based on all forms beginning in 2002. Data for any illicit drug other than marijuana and data for 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 1991–1998; *N* is five sixths of *N* indicated. Data based on three of six forms beginning in 1999; *N* is three sixths of *N* indicated.

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

[e]For 12th graders only: Data based on one of six forms; *N* is one sixth of *N* indicated.

[f]Hallucinogens are unadjusted for underreporting of PCP.

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

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

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

[j]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.

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

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

[m]For 8th, 10th, and 12th graders: In 2009, the question text was changed slightly in half of the forms. An examination of the data did not show any effect from the wording change.

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

[o]For 12th graders only: Data based on two of six forms; *N* is two sixths of *N* indicated. Bidis and kreteks based on one of six forms beginning in 2009; *N* is one third *N* indicated.

[p]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 1997–1998; *N* is two thirds of *N* indicated. Data based on two of four forms in 1999–2001; *N* is one third of *N* indicated. Data based on one of four forms beginning in 2002; *N* is one sixth of *N* indicated. For 12th graders only: Data based on one of six forms in 1996–2001; *N* is one sixth of *N* indicated. Data based on two of six forms beginning in 2002; *N* is two sixths of *N* indicated. Data for 2001 and 2002 are not comparable due to changes in the questionnaire forms.

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

[r]For 8th and 10th graders only: Data based on one of two forms for 1991–1996 and on two of four forms beginning in 1997; *N* is one half of *N* indicated. For 12th graders only: Data based on one of six forms; *N* is one sixth of *N* indicated.

[s]For 8th and 10th graders only: In 2006, the question text was changed slightly in half of the questionnaire forms. An examination of the data did not show any effect from the wording change. In 2007 the remaining forms were changed in a like manner. In 2008 the question text was changed slightly in half of the questionnaire forms. An examination of the data did not show any effect from the wording change. In 2009 the remaining forms were changed in a like manner. For 12th graders only: Data based on two of six forms in 1991–2005; *N* is two sixths of *N* indicated. Data based on three of six forms beginning in 2006; *N* is three sixths of *N* indicated. In 2006 a slightly altered version of the question was added to a third form. An examination of the data did not show any effect from the wording change. In 2007 the remaining forms were changed in a like manner. In 2008 the question text was changed slightly in two of the questionnaire forms. An examination of the data did not show any effect from the wording change. In 2009 the remaining form was changed in a like manner.

[t]For 12th graders only: Data based on two of six forms in 2002–2005; *N* is two sixths of *N* indicated. Data based on three of six forms beginning in 2006; *N* is three sixths of *N* indicated.

[u]For 12th graders only: Data based on two of six forms in 2000; *N* is two sixths of *N* indicated. Data based on three of six forms in 2001; *N* is three sixths of *N* indicated. Data based on one of six forms beginning in 2002; *N* is one sixth of *N* indicated.

[v]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.

(Footnotes continued on next page.)

Footnotes for Tables 5 through 8 (cont.)

[w]The 2003 flavored alcoholic beverage data were created by adjusting the 2004 data to reflect the change in the 2003 and 2004 "alcopops" data.

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

[y]For 12th graders only: Due to a coding error, previously released versions of this table contained values that were slightly off for the measure of five or more drinks in a row for 2005 and 2006. These have been corrected here. For 8th and 10th graders only: The 1991–2007 estimates for five or more drinks in a row differ slightly from some previous reports due to an error in the data editing process prior to 2008. The revised estimates average about 2% lower than previous estimates. These have been corrected here.

TABLE 6
**Trends in <u>Annual</u> Prevalence of Use of Various Drugs
in Grades 8, 10, and 12**

							Annual													2008–2009 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
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	16.1	15.2	15.5	14.8	13.2	14.1	14.5	+0.4
10th Grade	21.4	20.4	24.7	30.0	33.3	37.5	38.5	35.0	35.9	36.4	37.2	34.8	32.0	31.1	29.8	28.7	28.1	26.9	29.4	[+0.4]
12th Grade	29.4	27.1	31.0	35.8	39.0	40.2	42.4	41.4	42.1	40.9	41.4	41.0	39.3	38.8	38.4	36.5	35.9	36.6	36.5	0.0
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	8.8	7.9	8.1	7.7	7.0	7.4	7.0	-0.4
10th Grade	12.2	12.3	13.9	15.2	17.5	18.4	18.2	16.6	16.7	16.7‡	17.9	15.7	13.8	13.5	12.9	12.7	13.1	11.3	12.2	[+0.3]
12th Grade	16.2	14.9	17.1	18.0	19.4	19.8	20.7	20.2	20.7	20.4‡	21.6	20.9	19.8	20.5	19.7	19.2	18.5	18.3	17.0	-1.3
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	20.4	20.2	20.4	19.7	18.0	19.0	18.8	-0.2
10th Grade	23.9	23.5	27.4	32.5	35.6	39.6	40.3	37.1	37.7	38.0	38.7	36.1	33.5	32.9	31.7	30.7	30.2	28.8	31.2	[+0.7]
12th Grade	31.2	28.8	32.5	37.6	40.2	41.9	43.3	42.4	42.8	42.5	42.6	42.1	40.5	39.1	40.3	38.0	37.0	37.3	37.6	+0.2
Marijuana/Hashish																				
8th Grade	6.2	7.2	9.2	13.0	15.8	18.3	17.7	16.9	16.5	15.6	15.4	14.6	12.8	11.8	12.2	11.7	10.3	10.9	11.8	+0.9
10th Grade	16.5	15.2	19.2	25.2	28.7	33.6	34.8	31.1	32.1	32.2	32.7	30.3	28.2	27.5	26.6	25.2	24.6	23.9	26.7	[+1.0]
12th Grade	23.9	21.9	26.0	30.7	34.7	35.8	38.5	37.5	37.8	36.5	37.0	36.2	34.9	34.3	33.6	31.5	31.7	32.4	32.8	+0.4
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	8.7	9.6	9.5	9.1	8.3	8.9	8.1	-0.7
10th Grade	7.1	7.5	8.4	9.1	9.6	9.5	8.7	8.0	7.2	7.3	6.6	5.8	5.4	5.9	6.0	6.5	6.6	5.9	6.1	[+0.9]
12th Grade	6.6	6.2	7.0	7.7	8.0	7.6	6.7	6.2	5.6	5.9	4.5	4.5	3.9	4.2	5.0	4.5	3.7	3.8	3.4	-0.3
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	0.9	0.8	0.6	0.5	0.8	0.6	0.9	+0.3
Hallucinogens[b,f]																				
8th Grade	1.9	2.5	2.6	2.7	3.6	4.1	3.7	3.4	2.9	2.8‡	3.4	2.6	2.6	2.2	2.4	2.1	1.9	2.1	1.9	-0.2
10th Grade	4.0	4.3	4.7	5.8	7.2	7.8	7.6	6.9	6.9	6.1‡	6.2	4.7	4.1	4.1	4.0	4.1	4.4	3.9	4.1	[-0.1]
12th Grade	5.8	5.9	7.4	7.6	9.3	10.1	9.8	9.0	9.4	8.1‡	9.1	6.6	5.9	6.2	5.5	4.9	5.4	5.9	4.7	-1.2 s
LSD																				
8th Grade	1.7	2.1	2.3	2.4	3.2	3.5	3.2	2.8	2.4	2.4	2.2	1.5	1.3	1.1	1.2	0.9	1.1	1.3	1.1	-0.2
10th Grade	3.7	4.0	4.2	5.2	6.5	6.9	6.7	5.9	6.0	5.1	4.1	2.6	1.7	1.6	1.5	1.7	1.9	1.8	1.9	[+0.3]
12th Grade	5.2	5.6	6.8	6.9	8.4	8.8	8.4	7.6	8.1	6.6	6.6	3.5	1.9	2.2	1.8	1.7	2.1	2.7	1.9	-0.9 s
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	2.1	1.9	2.0	1.8	1.6	1.6	1.5	0.0
10th Grade	1.3	1.4	1.9	2.4	2.8	3.3	3.3	3.4	3.2	3.1‡	4.3	4.0	3.6	3.7	3.5	3.7	3.8	3.3	3.5	[-0.2]
12th Grade	2.0	1.7	2.2	3.1	3.8	4.4	4.6	4.6	4.3	4.4‡	5.9	5.4	5.4	5.6	5.0	4.6	4.8	5.0	4.2	-0.8 s

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 6 (cont.)
Trends in <u>Annual</u> Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 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	1.3	0.7	1.3	0.7	0.9	1.1	1.0	-0.1
Ecstasy (MDMA)[g]																				
8th Grade	—	—	—	—	—	2.3	2.3	1.8	1.7	3.1	3.5	2.9	2.1	1.7	1.7	1.4	1.5	1.7	1.3	-0.4
10th Grade	—	—	—	—	—	4.6	3.9	3.3	4.4	5.4	6.2	4.9	3.0	2.4	2.6	2.8	3.5	2.9	3.7	[+0.7]
12th Grade	—	—	—	—	—	4.6	4.0	3.6	5.6	8.2	9.2	7.4	4.5	4.0	3.0	4.1	4.5	4.3	4.3	0.0
Salvia[o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.7	—
Cocaine																				
8th Grade	1.1	1.5	1.7	2.1	2.6	3.0	2.8	3.1	2.7	2.6	2.5	2.3	2.2	2.0	2.2	2.0	2.0	1.8	1.6	-0.2
10th Grade	2.2	1.9	2.1	2.8	3.5	4.2	4.7	4.7	4.9	4.4	3.6	4.0	3.3	3.7	3.5	3.2	3.4	3.0	2.7	[-0.5]
12th Grade	3.5	3.1	3.3	3.6	4.0	4.9	5.5	5.7	6.2	5.0	4.8	5.0	4.8	5.3	5.1	5.7	5.2	4.4	3.4	-1.0 s
Crack																				
8th Grade	0.7	0.9	1.0	1.3	1.6	1.8	1.7	2.1	1.8	1.8	1.7	1.6	1.6	1.3	1.4	1.3	1.3	1.1	1.1	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	1.6	1.7	1.7	1.3	1.3	1.3	1.2	[-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	2.2	2.3	1.9	2.1	1.9	1.6	1.3	-0.3
Other Cocaine[h]																				
8th Grade	1.0	1.2	1.3	1.7	2.1	2.5	2.2	2.4	2.3	1.9	1.9	1.8	1.6	1.6	1.7	1.6	1.5	1.4	1.3	-0.1
10th Grade	2.1	1.7	1.8	2.4	3.0	3.5	4.1	4.0	4.4	3.8	3.0	3.4	2.8	3.3	3.0	2.9	3.1	2.6	2.3	[-0.4]
12th Grade	3.2	2.6	2.9	3.0	3.4	4.2	5.0	4.9	5.8	4.5	4.4	4.4	4.2	4.7	4.5	5.2	4.5	4.0	3.0	-1.1 s
Heroin[i]																				
8th Grade	0.7	0.7	0.7	1.2	1.4	1.6	1.3	1.3	1.4	1.1	1.0	0.9	0.9	1.0	0.8	0.8	0.8	0.9	0.7	-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	0.7	0.9	0.9	0.9	0.8	0.8	0.9	[+0.1]
12th Grade	0.4	0.6	0.5	0.6	1.1	1.0	1.2	1.0	1.1	1.5	0.9	1.0	0.8	0.9	0.8	0.8	0.9	0.7	0.7	0.0
With a Needle[j]																				
8th Grade	—	—	—	—	0.9	1.0	0.8	0.8	0.9	0.6	0.7	0.6	0.6	0.7	0.6	0.5	0.6	0.5	0.5	0.0
10th Grade	—	—	—	—	0.6	0.7	0.7	0.8	0.6	0.5	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	[+0.2]
12th Grade	—	—	—	—	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.3	-0.1
Without a Needle[j]																				
8th Grade	—	—	—	—	0.8	1.0	0.8	0.8	0.9	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.4	-0.2 ss
10th Grade	—	—	—	—	0.8	0.9	1.1	1.0	1.1	1.1	0.7	0.8	0.5	0.7	0.7	0.6	0.6	0.6	0.6	[-0.2]
12th Grade	—	—	—	—	1.0	1.0	1.2	0.8	1.0	1.6	0.8	0.8	0.8	0.7	0.8	0.6	1.0	0.5	0.6	+0.1
Narcotics other than Heroin[k,l]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	3.5	3.3	3.6	3.8	4.7	5.4	6.2	6.3	6.7	7.0	6.7‡	9.4	9.3	9.5	9.0	9.0	9.2	9.1	9.2	+0.1

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 6 (cont.)
Trends in _Annual_ Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

									Annual											2008–2009 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
OxyContin[k,n,t]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	1.3	1.7	1.7	1.8	2.6	1.8	2.1	2.0	-0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	—	3.0	3.6	3.5	3.2	3.8	3.9	3.6	5.1	[+0.9]
12th Grade	—	—	—	—	—	—	—	—	—	—	—	4.0	4.5	5.0	5.5	4.3	5.2	4.7	4.9	+0.2
Vicodin[k,n,t]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	2.5	2.8	2.5	2.6	3.0	2.7	2.9	2.5	-0.3
10th Grade	—	—	—	—	—	—	—	—	—	—	—	6.9	7.2	6.2	5.9	7.0	7.2	6.7	8.1	[-0.3]
12th Grade	—	—	—	—	—	—	—	—	—	—	—	9.6	10.5	9.3	9.5	9.7	9.6	9.7	9.7	0.0
Amphetamines[k,m]																				
8th Grade	6.2	6.5	7.2	7.9	8.7	9.1	8.1	7.2	6.9	6.5	6.7	5.5	5.5	4.9	4.9	4.7	4.2	4.5	4.1	-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	9.0	8.5	7.8	7.9	8.0	6.4	7.1	[+0.6]
12th Grade	8.2	7.1	8.4	9.4	9.3	9.5	10.2	10.1	10.2	10.5	10.9	11.1	9.9	10.0	8.6	8.1	7.5	6.8	6.6	-0.2
Ritalin[k,n,o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	2.9	2.8	2.6	2.5	2.4	2.6	2.1	1.6	1.8	+0.2
10th Grade	—	—	—	—	—	—	—	—	—	—	4.8	4.8	4.1	3.4	3.4	3.6	2.8	2.9	3.6	[-0.1]
12th Grade	—	—	—	—	—	—	—	—	—	—	5.1	4.0	4.0	5.1	4.4	4.4	3.8	3.4	2.1	-1.3 s
Adderall[k,n,o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.0	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.7	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.4	—
Provigil[k,o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.8	—
Methamphetamine[n,o]																				
8th Grade	—	—	—	—	—	—	—	—	3.2	2.5	2.8	2.2	2.5	1.5	1.8	1.8	1.1	1.2	1.0	-0.2
10th Grade	—	—	—	—	—	—	—	—	4.6	4.0	3.7	3.9	3.3	3.0	2.9	1.8	1.6	1.5	1.6	[-0.1]
12th Grade	—	—	—	—	—	—	—	—	4.7	4.3	3.9	3.6	3.2	3.4	2.5	2.5	1.7	1.2	1.2	0.0
Crystal Methamphetamine (Ice)[o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.4	1.3	1.7	1.8	2.4	2.8	2.3	3.0	1.9	2.2	2.5	3.0	2.0	2.1	2.3	1.9	1.6	1.1	0.9	-0.1
Sedatives (Barbiturates)[k]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	3.4	2.8	3.4	4.1	4.7	4.9	5.1	5.5	5.8	6.2	5.7	6.7	6.0	6.5	7.2	6.6	6.2	5.8	5.2	-0.6
Methaqualone[e,k]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.5	0.6	0.2	0.8	0.7	1.1	1.0	1.1	1.1	0.3	0.8	0.9	0.6	0.8	0.9	0.8	0.5	0.5	0.6	0.0

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 6 (cont.)
Trends in <u>Annual</u> Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

<u>Annual</u>

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Tranquilizers[b,k]																				
8th Grade	1.8	2.0	2.1	2.4	2.7	3.3	2.9	2.6	2.5	2.6‡	2.8	2.6	2.7	2.5	2.8	2.6	2.4	2.4	2.6	+0.2
10th Grade	3.2	3.5	3.3	3.3	4.0	4.6	4.9	5.1	5.4	5.6‡	7.3	6.3	5.3	5.1	4.8	5.2	5.3	4.6	5.0	[+0.4]
12th Grade	3.6	2.8	3.5	3.7	4.4	4.6	4.7	5.5	5.8	5.7‡	6.9	7.7	6.7	7.3	6.8	6.6	6.2	6.2	6.3	+0.1
OTC Cough/Cold Medicines[n,o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.2	4.0	3.6	3.8	+0.2
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	5.4	5.3	6.0	[+0.3]
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.9	5.8	5.5	5.9	+0.3
Rohypnol[p]																				
8th Grade	—	—	—	—	—	1.0	0.8	0.8	0.5	0.5	0.7	0.3	0.5	0.6	0.7	0.5	0.7	0.5	0.4	-0.1
10th Grade	—	—	—	—	—	1.1	1.3	1.2	1.0	0.8	1.0	0.7	0.6	0.7	0.5	0.5	0.7	0.4	0.4	[0.0]
12th Grade	—	—	—	—	—	1.1	1.2	1.4	1.0	0.8	0.9‡	1.6	1.3	1.6	1.2	1.1	1.0	1.3	1.0	-0.3
GHB[n,u]																				
8th Grade	—	—	—	—	—	—	—	—	—	1.2	1.1	0.8	0.9	0.7	0.5	0.8	0.7	1.1	0.7	-0.4
10th Grade	—	—	—	—	—	—	—	—	—	1.1	1.0	1.4	1.4	0.8	0.8	0.7	0.6	0.5	1.0	[+0.3]
12th Grade	—	—	—	—	—	—	—	—	—	1.9	1.6	1.5	1.4	2.0	1.1	1.1	0.9	1.2	1.1	-0.1
Ketamine[n,v]																				
8th Grade	—	—	—	—	—	—	—	—	—	1.6	1.3	1.3	1.1	0.9	0.6	0.9	1.0	1.2	1.0	-0.2
10th Grade	—	—	—	—	—	—	—	—	—	2.1	2.1	2.2	1.9	1.3	1.0	1.0	0.8	1.0	1.3	[-0.1]
12th Grade	—	—	—	—	—	—	—	—	—	2.5	2.5	2.6	2.1	1.9	1.6	1.4	1.3	1.5	1.7	+0.2
Alcohol[q]																				
Any Use																				
8th Grade	54.0	53.7‡	45.4	46.8	45.3	46.5	45.5	43.7	43.5	43.1	41.9	38.7	37.2	36.7	33.9	33.6	31.8	32.1	30.3	-1.8
10th Grade	72.3	70.2‡	63.4	63.9	63.5	65.0	65.2	62.7	63.7	65.3	63.5	60.0	59.3	58.2	56.7	55.8	56.3	52.5	52.8	[-0.8]
12th Grade	77.7	76.8‡	72.7	73.0	73.7	72.5	74.8	74.3	73.8	73.2	73.3	71.5	70.1	70.6	68.6	66.5	66.4	65.5	66.2	+0.7
Been Drunk[o]																				
8th Grade	17.5	18.3	18.2	18.2	18.4	19.8	18.4	17.9	18.5	18.5	16.6	15.0	14.5	14.5	14.1	13.9	12.6	12.7	12.2	-0.6
10th Grade	40.1	37.0	37.8	38.0	38.5	40.1	40.7	38.3	40.9	41.6	39.9	35.4	34.7	35.1	34.2	34.5	34.4	30.0	31.2	[-0.4]
12th Grade	52.7	50.3	49.6	51.7	52.5	51.9	53.2	52.0	53.2	51.8	53.2	50.4	48.0	51.8	47.7	47.9	46.1	45.6	47.0	+1.5
Flavored Alcoholic Beverages[e,n,w]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	27.9	26.8	26.0	25.0	22.2	-2.8 s
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	49.7	48.5	48.8	45.9	43.4	41.5	[-5.0] s
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	55.2	55.8	58.4	54.7	53.6	51.8	53.4	+1.7
Bidis[n,o]																				
8th Grade	—	—	—	—	—	—	—	—	—	3.9	2.7	2.7	2.0	1.7	1.6	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	6.4	4.9	3.1	2.8	2.1	1.6	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	9.2	7.0	5.9	4.0	3.6	3.3	2.3	1.7	1.9	1.5	-0.4

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 6 (cont.)
Trends in <u>Annual</u> Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

										Annual										2008–2009 change
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	
Kreteks[n,o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	2.6	2.6	2.0	1.9	1.4	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	6.0	4.9	3.8	3.7	2.8	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	10.1	8.4	6.7	6.5	7.1	6.2	6.8	6.8	5.5	-1.4
Steroids[k,s]																				
8th Grade	1.0	1.1	0.9	1.2	1.0	0.9	1.0	1.2	1.7	1.7	1.6	1.5	1.4	1.1	1.1	0.9	0.8	0.9	0.8	-0.1
10th Grade	1.1	1.1	1.0	1.1	1.2	1.2	1.2	1.2	1.7	2.2	2.1	2.2	1.7	1.5	1.3	1.2	1.1	0.9	0.8	[-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	2.1	2.5	1.5	1.8	1.4	1.5	1.5	0.0

Source. The Monitoring the Future study, the University of Michigan.

Notes. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

See relevant footnotes at the end of Table 1.

TABLE 7
Trends in <u>30-Day</u> Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

<div align="center">30-Day</div>

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Any Illicit Drug[a]																				
8th Grade	5.7	6.8	8.4	10.9	12.4	14.6	12.9	12.1	12.2	11.9	11.7	10.4	9.7	8.4	8.5	8.1	7.4	7.6	8.1	+0.5
10th Grade	11.6	11.0	14.0	18.5	20.2	23.2	23.0	21.5	22.1	22.5	22.7	20.8	19.5	18.3	17.3	16.8	16.9	15.8	17.8	[+0.6]
12th Grade	16.4	14.4	18.3	21.9	23.8	24.6	26.2	25.6	25.9	24.9	25.7	25.4	24.1	23.4	23.1	21.5	21.9	22.3	23.3	+0.9
Any Illicit Drug other than Marijuana[a,b]																				
8th Grade	3.8	4.7	5.3	5.6	6.5	6.9	6.0	5.5	5.5	5.6‡	5.5	4.7	4.7	4.1	4.1	3.8	3.6	3.8	3.5	-0.3
10th Grade	5.5	5.7	6.5	7.1	8.9	8.9	8.8	8.6	8.6	8.5‡	8.7	8.1	6.9	6.9	6.4	6.3	6.9	5.3	5.7	[0.0]
12th Grade	7.1	6.3	7.9	8.8	10.0	9.5	10.7	10.7	10.4	10.4‡	11.0	11.3	10.4	10.8	10.3	9.8	9.5	9.3	8.6	-0.6
Any Illicit Drug including Inhalants[a,c]																				
8th Grade	8.8	10.0	12.0	14.3	16.1	17.5	16.0	14.9	15.1	14.4	14.0	12.6	12.1	11.2	11.2	10.9	10.1	10.4	10.6	+0.2
10th Grade	13.1	12.6	15.5	20.0	21.6	24.5	24.1	22.5	23.1	23.6	23.6	21.7	20.5	19.3	18.4	17.7	18.1	16.8	18.8	[+0.9]
12th Grade	17.8	15.5	19.3	23.0	24.8	25.5	26.9	26.6	26.4	26.4	26.5	25.9	24.6	23.3	24.2	22.1	22.8	22.8	24.1	+1.3
Marijuana/Hashish																				
8th Grade	3.2	3.7	5.1	7.8	9.1	11.3	10.2	9.7	9.7	9.1	9.2	8.3	7.5	6.4	6.6	6.5	5.7	5.8	6.5	+0.7
10th Grade	8.7	8.1	10.9	15.8	17.2	20.4	20.5	18.7	19.4	19.7	19.8	17.8	17.0	15.9	15.2	14.2	14.2	13.8	15.9	[+0.9]
12th Grade	13.8	11.9	15.5	19.0	21.2	21.9	23.7	22.8	23.1	21.6	22.4	21.5	21.2	19.9	19.8	18.3	18.8	19.4	20.6	+1.2
Inhalants[c,d]																				
8th Grade	4.4	4.7	5.4	5.6	6.1	5.8	5.6	4.8	5.0	4.5	4.0	3.8	4.1	4.5	4.2	4.1	3.9	4.1	3.8	-0.2
10th Grade	2.7	2.7	3.3	3.6	3.5	3.3	3.0	2.9	2.6	2.6	2.4	2.4	2.2	2.4	2.2	2.3	2.5	2.1	2.2	[+0.8] ss
12th Grade	2.4	2.3	2.5	2.7	3.2	2.5	2.5	2.3	2.0	2.2	1.7	1.5	1.5	1.5	2.0	1.5	1.2	1.4	1.2	-0.2
Nitrites[e]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.4	0.3	0.6	0.4	0.4	0.7	0.7	1.0	0.4	0.3	0.5	0.6	0.7	0.7	0.5	0.3	0.5	0.3	0.6	+0.3
Hallucinogens[b,f]																				
8th Grade	0.8	1.1	1.2	1.3	1.7	1.9	1.8	1.4	1.3	1.2‡	1.6	1.2	1.2	1.0	1.1	0.9	1.0	0.9	0.9	-0.1
10th Grade	1.6	1.8	1.9	2.4	3.3	2.8	3.3	3.2	2.9	2.3‡	2.1	1.6	1.5	1.6	1.5	1.5	1.7	1.3	1.4	[0.0]
12th Grade	2.2	2.1	2.7	3.1	4.4	3.5	3.9	3.8	3.5	2.6‡	3.3	2.3	1.8	1.9	1.9	1.5	1.7	2.2	1.6	-0.6 s
LSD																				
8th Grade	0.6	0.9	1.0	1.1	1.4	1.5	1.5	1.1	1.1	1.0	1.0	0.7	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.0
10th Grade	1.5	1.6	1.6	2.0	3.0	2.4	2.8	2.7	2.3	1.6	1.5	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.5	[0.0]
12th Grade	1.9	2.0	2.4	2.6	4.0	2.5	3.1	3.2	2.7	1.6	2.3	0.7	0.6	0.7	0.7	0.6	0.6	1.1	0.5	-0.6 sss
Hallucinogens other than LSD[b]																				
8th Grade	0.3	0.4	0.5	0.7	0.8	0.9	0.7	0.7	0.6	0.6‡	1.1	1.0	1.0	0.8	0.9	0.7	0.7	0.7	0.7	-0.1
10th Grade	0.4	0.5	0.7	1.0	1.0	1.0	1.2	1.4	1.2	1.2‡	1.4	1.4	1.2	1.4	1.3	1.3	1.4	1.0	1.1	[0.0]
12th Grade	0.7	0.5	0.8	1.2	1.3	1.6	1.7	1.6	1.6	1.7‡	1.9	2.0	1.5	1.7	1.6	1.3	1.4	1.6	1.4	-0.3

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 7 (cont.)
Trends in <u>30-Day</u> Prevalence of Use of Various Drugs in Grades 8, 10, and 12

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
PCP[e]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.5	0.6	1.0	0.7	0.6	1.3	0.7	1.0	0.8	0.9	0.5	0.4	0.6	0.4	0.7	0.4	0.5	0.6	0.5	0.0
Ecstasy (MDMA)[g]																				
8th Grade	—	—	—	—	—	1.0	1.0	0.9	0.8	1.4	1.8	1.4	0.7	0.8	0.6	0.7	0.6	0.8	0.6	-0.2
10th Grade	—	—	—	—	—	1.8	1.3	1.3	1.8	2.6	2.6	1.8	1.1	0.8	1.0	1.2	1.2	1.1	1.3	[+0.3]
12th Grade	—	—	—	—	—	2.0	1.6	1.5	2.5	3.6	2.8	2.4	1.3	1.2	1.0	1.3	1.6	1.8	1.8	0.0
Cocaine																				
8th Grade	0.5	0.7	0.7	1.0	1.2	1.3	1.1	1.4	1.3	1.2	1.2	1.1	0.9	0.9	1.0	1.0	0.9	0.8	0.8	0.0
10th Grade	0.7	0.7	0.9	1.2	1.7	1.7	2.0	2.1	1.8	1.8	1.3	1.6	1.3	1.7	1.5	1.5	1.3	1.2	0.9	[-0.4] s
12th Grade	1.4	1.3	1.3	1.5	1.8	2.0	2.3	2.4	2.6	2.1	2.1	2.3	2.1	2.3	2.3	2.5	2.0	1.9	1.3	-0.6 s
Crack																				
8th Grade	0.3	0.5	0.4	0.7	0.7	0.8	0.7	0.9	0.8	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.0
10th Grade	0.3	0.4	0.5	0.6	0.9	0.8	0.9	1.1	0.8	0.9	0.7	1.0	0.7	0.8	0.7	0.7	0.5	0.5	0.4	[-0.1]
12th Grade	0.7	0.6	0.7	0.8	1.0	1.0	0.9	1.0	1.1	1.0	1.1	1.2	0.9	1.0	1.0	0.9	0.9	0.8	0.6	-0.2
Other Cocaine[h]																				
8th Grade	0.5	0.5	0.6	0.9	1.0	1.0	0.8	1.0	1.1	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.0
10th Grade	0.6	0.6	0.7	1.0	1.4	1.3	1.6	1.8	1.6	1.6	1.2	1.3	1.1	1.5	1.3	1.3	1.1	1.0	0.8	[-0.2]
12th Grade	1.2	1.0	1.2	1.3	1.3	1.6	2.0	2.0	2.5	1.7	1.8	1.9	1.8	2.2	2.0	2.4	1.7	1.7	1.1	-0.6 s
Heroin[i]																				
8th Grade	0.3	0.4	0.4	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.4	0.5	0.5	0.3	0.4	0.4	0.4	-0.1
10th Grade	0.2	0.2	0.3	0.4	0.6	0.5	0.6	0.7	0.7	0.5	0.3	0.5	0.3	0.5	0.5	0.5	0.4	0.4	0.4	[0.0]
12th Grade	0.2	0.3	0.2	0.3	0.6	0.5	0.5	0.5	0.5	0.7	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.0
With a Needle[j]																				
8th Grade	—	—	—	—	0.4	0.5	0.4	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.0
10th Grade	—	—	—	—	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	[+0.1]
12th Grade	—	—	—	—	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.1	-0.1
Without a Needle[j]																				
8th Grade	—	—	—	—	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	-0.1
10th Grade	—	—	—	—	0.3	0.3	0.4	0.5	0.5	0.4	0.2	0.4	0.2	0.3	0.3	0.3	0.2	0.3	0.2	[-0.1]
12th Grade	—	—	—	—	0.6	0.4	0.6	0.4	0.4	0.7	0.3	0.5	0.4	0.3	0.5	0.3	0.4	0.2	0.3	+0.1
Narcotics other than Heroin[k,l]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.1	1.2	1.3	1.5	1.8	2.0	2.3	2.4	2.6	2.9	3.0‡	4.0	4.1	4.3	3.9	3.8	3.8	3.8	4.1	+0.2
Amphetamines[k,m]																				
8th Grade	2.6	3.3	3.6	3.6	4.2	4.6	3.8	3.3	3.4	3.4	3.2	2.8	2.7	2.3	2.3	2.1	2.0	2.2	1.9	-0.3
10th Grade	3.3	3.6	4.3	4.5	5.3	5.5	5.1	5.1	5.0	5.4	5.6	5.2	4.3	4.0	3.7	3.5	4.0	2.8	3.3	[+0.4]
12th Grade	3.2	2.8	3.7	4.0	4.0	4.1	4.8	4.6	4.5	5.0	5.6	5.5	5.0	4.6	3.9	3.7	3.7	2.9	3.0	+0.2

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 7 (cont.)
Trends in 30-Day Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Methamphetamine[n,o]																				
8th Grade	—	—	—	—	—	—	—	—	1.1	0.8	1.3	1.1	1.2	0.6	0.7	0.6	0.6	0.7	0.5	-0.2
10th Grade	—	—	—	—	—	—	—	—	1.8	2.0	1.5	1.8	1.4	1.3	1.1	0.7	0.4	0.7	0.6	[+0.1]
12th Grade	—	—	—	—	—	—	—	—	1.7	1.9	1.5	1.7	1.7	1.4	0.9	0.9	0.6	0.6	0.5	0.0
Crystal Methamphetamine (Ice)[o]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.6	0.5	0.6	0.7	1.1	1.1	0.8	1.2	0.8	1.0	1.1	1.2	0.8	0.8	0.9	0.7	0.6	0.6	0.5	0.0
Sedatives (Barbiturates)[k]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	1.4	1.1	1.3	1.7	2.2	2.1	2.1	2.6	2.6	3.0	2.8	3.2	2.9	2.9	3.3	3.0	2.7	2.8	2.5	-0.3
Methaqualone[e,k]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.2	0.4	0.1	0.4	0.4	0.6	0.3	0.6	0.4	0.2	0.5	0.3	0.4	0.5	0.5	0.4	0.4	0.2	0.3	0.0
Tranquilizers[b,k]																				
8th Grade	0.8	0.8	0.9	1.1	1.2	1.5	1.2	1.2	1.1	1.4‡	1.2	1.2	1.4	1.2	1.3	1.3	1.1	1.2	1.2	0.0
10th Grade	1.2	1.5	1.1	1.5	1.7	1.7	2.2	2.2	2.2	2.5‡	2.9	2.9	2.4	2.3	2.3	2.4	2.6	1.9	2.0	[-0.1]
12th Grade	1.4	1.0	1.2	1.4	1.8	2.0	1.8	2.4	2.5	2.6‡	2.9	3.3	2.8	3.1	2.9	2.7	2.6	2.6	2.7	0.0
Rohypnol[p]																				
8th Grade	—	—	—	—	—	0.5	0.3	0.4	0.3	0.3	0.4	0.2	0.1	0.2	0.2	0.4	0.3	0.1	0.2	+0.1
10th Grade	—	—	—	—	—	0.5	0.5	0.4	0.5	0.4	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.3	[0.0]
12th Grade	—	—	—	—	—	0.5	0.3	0.3	0.3	0.4	0.3	—	—	—	—	—	—	—	—	—
Alcohol[q]																				
Any Use																				
8th Grade	25.1	26.1‡	24.3	25.5	24.6	26.2	24.5	23.0	24.0	22.4	21.5	19.6	19.7	18.6	17.1	17.2	15.9	15.9	14.9	-1.0
10th Grade	42.8	39.9‡	38.2	39.2	38.8	40.4	40.1	38.8	40.0	41.0	39.0	35.4	35.4	35.2	33.2	33.8	33.4	28.8	30.4	[+0.5]
12th Grade	54.0	51.3‡	48.6	50.1	51.3	50.8	52.7	52.0	51.0	50.0	49.8	48.6	47.5	48.0	47.0	45.3	44.4	43.1	43.5	+0.3
Been Drunk[o]																				
8th Grade	7.6	7.5	7.8	8.7	8.3	9.6	8.2	8.4	9.4	8.3	7.7	6.7	6.7	6.2	6.0	6.2	5.5	5.4	5.4	0.0
10th Grade	20.5	18.1	19.8	20.3	20.8	21.3	22.4	21.1	22.5	23.5	21.9	18.3	18.2	18.5	17.6	18.8	18.1	14.4	15.5	[0.0]
12th Grade	31.6	29.9	28.9	30.8	33.2	31.3	34.2	32.9	32.9	32.3	32.7	30.3	30.9	32.5	30.2	30.0	28.7	27.6	27.4	-0.2
Flavored Alcoholic Beverages[e,n]																				
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	14.6	12.9	13.1	12.2	10.2	9.5	-0.7
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	25.1	23.1	24.7	21.8	20.2	19.0	[-2.1]
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	31.1	30.5	29.3	29.1	27.4	27.4	+0.1

Note. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

(Table continued on next page.)

TABLE 7 (cont.)
Trends in 30-Day Prevalence of Use of Various Drugs
in Grades 8, 10, and 12

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Cigarettes																				
Any Use																				
8th Grade	14.3	15.5	16.7	18.6	19.1	21.0	19.4	19.1	17.5	14.6	12.2	10.7	10.2	9.2	9.3	8.7	7.1	6.8	6.5	-0.4
10th Grade	20.8	21.5	24.7	25.4	27.9	30.4	29.8	27.6	25.7	23.9	21.3	17.7	16.7	16.0	14.9	14.5	14.0	12.3	13.1	[+1.1]
12th Grade	28.3	27.8	29.9	31.2	33.5	34.0	36.5	35.1	34.6	31.4	29.5	26.7	24.4	25.0	23.2	21.6	21.6	20.4	20.1	-0.3
Smokeless Tobacco[r]																				
8th Grade	6.9	7.0	6.6	7.7	7.1	7.1	5.5	4.8	4.5	4.2	4.0	3.3	4.1	4.1	3.3	3.7	3.2	3.5	3.7	+0.3
10th Grade	10.0	9.6	10.4	10.5	9.7	8.6	8.9	7.5	6.5	6.1	6.9	6.1	5.3	4.9	5.6	5.7	6.1	5.0	6.5	[+2.0] ss
12th Grade	—	11.4	10.7	11.1	12.2	9.8	9.7	8.8	8.4	7.6	7.8	6.5	6.7	6.7	7.6	6.1	6.6	6.5	8.4	+1.8
Steroids[k,s]																				
8th Grade	0.4	0.5	0.5	0.5	0.6	0.4	0.5	0.5	0.7	0.8	0.7	0.8	0.7	0.5	0.5	0.5	0.4	0.5	0.4	-0.1
10th Grade	0.6	0.6	0.5	0.6	0.6	0.5	0.7	0.6	0.9	1.0	0.9	1.0	0.8	0.8	0.6	0.6	0.5	0.5	0.5	[+0.1]
12th Grade	0.8	0.6	0.7	0.9	0.7	0.7	1.0	1.1	0.9	0.8	1.3	1.4	1.3	1.6	0.9	1.1	1.0	1.0	1.0	0.0

Source. The Monitoring the Future study, the University of Michigan.

Notes. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

See relevant footnotes at the end of Table 1.

TABLE 8
Trends in 30-Day Prevalence of <u>Daily</u> Use of Various Drugs in Grades 8, 10, and 12

<center>Daily</center>

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Marijuana/Hashish																				
Daily[x]																				
8th Grade	0.2	0.2	0.4	0.7	0.8	1.5	1.1	1.1	1.4	1.3	1.3	1.2	1.0	0.8	1.0	1.0	0.8	0.9	1.0	+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	3.6	3.2	3.1	2.8	2.8	2.7	2.8	[+0.1]
12th Grade	2.0	1.9	2.4	3.6	4.6	4.9	5.8	5.6	6.0	6.0	5.8	6.0	6.0	5.6	5.0	5.0	5.1	5.4	5.2	-0.2
Alcohol[q,x]																				
Any Daily Use																				
8th Grade	0.5	0.6‡	1.0	1.0	0.7	1.0	0.8	0.9	1.0	0.8	0.9	0.7	0.8	0.6	0.5	0.5	0.6	0.7	0.5	-0.2 s
10th Grade	1.3	1.2‡	1.8	1.7	1.7	1.6	1.7	1.9	1.9	1.8	1.9	1.8	1.5	1.3	1.3	1.4	1.4	1.0	1.1	[+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	3.2	2.8	3.1	3.0	3.1	2.8	2.5	-0.3
Been Drunk																				
Daily[o,x]																				
8th Grade	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
10th Grade	0.2	0.3	0.4	0.4	0.6	0.4	0.6	0.6	0.7	0.5	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.3	0.4	[0.0]
12th Grade	0.9	0.8	0.9	1.2	1.3	1.6	2.0	1.5	1.9	1.7	1.4	1.2	1.6	1.8	1.5	1.6	1.3	1.4	1.1	-0.4
5+ Drinks in a Row																				
in Last 2 Weeks[y]																				
8th Grade	10.9	11.3	11.3	12.1	12.3	13.3	12.3	11.5	13.1	11.7	11.0	10.3	9.8	9.4	8.4	8.7	8.3	8.1	7.8	-0.3
10th Grade	21.0	19.1	21.0	21.9	22.0	22.8	23.1	22.4	23.5	24.1	22.8	20.3	20.0	19.9	19.0	19.9	19.6	16.0	17.5	[+0.8]
12th Grade	29.8	27.9	27.5	28.2	29.8	30.2	31.3	31.5	30.8	30.0	29.7	28.6	27.9	29.2	27.1	25.4	25.9	24.6	25.2	+0.6
Cigarettes																				
Any Daily Use																				
8th Grade	7.2	7.0	8.3	8.8	9.3	10.4	9.0	8.8	8.1	7.4	5.5	5.1	4.5	4.4	4.0	4.0	3.0	3.1	2.7	-0.4
10th Grade	12.6	12.3	14.2	14.6	16.3	18.3	18.0	15.8	15.9	14.0	12.2	10.1	8.9	8.3	7.5	7.6	7.2	5.9	6.3	[+0.6]
12th Grade	18.5	17.2	19.0	19.4	21.6	22.2	24.6	22.4	23.1	20.6	19.0	16.9	15.8	15.6	13.6	12.2	12.3	11.4	11.2	-0.2
1/2 Pack+/Day																				
8th Grade	3.1	2.9	3.5	3.6	3.4	4.3	3.5	3.6	3.3	2.8	2.3	2.1	1.8	1.7	1.7	1.5	1.1	1.2	1.0	-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	4.1	3.3	3.1	3.3	2.7	2.0	2.4	[+0.4]
12th Grade	10.7	10.0	10.9	11.2	12.4	13.0	14.3	12.6	13.2	11.3	10.3	9.1	8.4	8.0	6.9	5.9	5.7	5.4	5.0	-0.4
Smokeless Tobacco																				
Daily[r]																				
8th Grade	1.6	1.8	1.5	1.9	1.2	1.5	1.0	1.0	0.9	0.9	1.2	0.8	0.8	1.0	0.7	0.7	0.8	0.8	0.8	0.0
10th Grade	3.3	3.0	3.3	3.0	2.7	2.2	2.2	2.2	1.5	1.9	2.2	1.7	1.8	1.6	1.9	1.7	1.6	1.4	1.9	[+0.8] s
12th Grade	—	4.3	3.3	3.9	3.6	3.3	4.4	3.2	2.9	3.2	2.8	2.0	2.2	2.8	2.5	2.2	2.8	2.7	2.9	+0.2

Source. The Monitoring the Future study, the University of Michigan.

Notes. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

See relevant footnotes at the end of Table 1.

TABLE 9
Trends in <u>Harmfulness</u> of Drugs as Perceived by <u>8th Graders</u>

Percentage saying "great risk"[a]

8th Graders

How much do you think people risk harming themselves (physically or in other ways), if they . . .	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 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	30.2	31.9	31.4	32.2	32.8	31.1	29.5	-1.6
Smoke marijuana occasionally	57.9	56.3	53.8	48.6	45.9	44.3	43.1	45.0	45.7	47.4	46.3	46.0	48.6	50.5	48.9	48.9	50.2	48.1	44.8	-3.2 ss
Smoke marijuana regularly	83.8	82.0	79.6	74.3	73.0	70.9	72.7	73.0	73.3	74.8	72.2	71.7	74.2	76.2	73.9	73.2	74.3	72.0	69.8	-2.2 s
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	40.3	38.7	37.5	35.8	35.9	33.9	34.1	+0.2
Take 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	67.4	66.4	64.1	62.1	61.9	59.2	58.1	-1.0
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	27.9	26.8	25.8	23.8	22.8	21.9	21.4	-0.6
Take LSD regularly[c]	—	—	68.3	65.8	64.4	63.6	64.1	59.6	58.8	57.5	52.9	49.3	48.2	45.2	44.0	40.0	38.5	36.9	37.0	0.0
Try ecstasy (MDMA) once or twice[d]	—	—	—	—	—	—	—	—	—	—	35.8	38.9	41.9	42.5	40.0	32.8	30.4	28.6	26.0	-2.6
Take ecstasy (MDMA) occasionally[d]	—	—	—	—	—	—	—	—	—	—	55.5	61.8	65.8	65.1	60.8	52.0	48.6	46.8	43.9	-2.9
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	48.7	49.0	49.6	47.6	47.3	47.1	46.6	-0.6
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	70.3	70.4	69.4	68.7	68.3	67.9	66.6	-1.2
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	43.7	44.4	44.2	43.5	43.5	42.7	42.3	-0.3
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	65.8	66.0	65.3	64.0	64.2	62.7	62.3	-0.4
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	62.7	61.6	61.4	60.4	60.3	60.8	60.0	-0.8
Take heroin occasionally without using a needle[c]	—	—	—	—	76.8	76.6	79.2	79.0	78.9	78.6	78.5	78.5	77.8	77.5	76.8	75.3	76.4	75.5	74.0	-1.5
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	11.0	12.1	12.4	11.6	11.6	11.8	10.4	12.1	11.6	11.9	12.2	12.5	12.6	13.7	13.9	14.2	14.9	13.5	14.4	+0.9
Take one or two drinks nearly every day	31.8	32.4	32.6	29.9	30.5	28.6	29.1	30.3	29.7	30.4	30.0	29.6	29.9	31.0	31.4	31.3	32.6	31.5	31.5	0.0
Have five or more drinks once or twice each weekend	59.1	58.0	57.7	54.7	54.1	51.8	55.6	56.0	55.3	55.9	56.1	56.4	56.5	56.9	57.2	56.4	57.9	57.0	55.8	-1.2
Smoke one to five cigarettes per day[d]	—	—	—	—	—	—	—	—	26.9	28.9	30.5	32.8	33.4	37.0	37.5	37.0	38.6	38.6	38.6	0.0
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	57.7	62.4	61.5	59.4	61.1	59.8	59.1	-0.7
Use smokeless tobacco regularly	35.1	35.1	36.9	35.5	33.5	34.0	35.2	36.5	37.1	39.0	38.2	39.4	39.7	41.3	40.8	39.5	41.8	41.0	40.8	-0.2
Take steroids[f]	64.2	69.5	70.2	67.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Approximate weighted N =	17,400	18,700	18,400	17,400	17,500	17,900	18,800	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	15,000	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001 . "—" indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

[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 1993–1996; *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.

[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 10
Trends in <u>Harmfulness</u> of Drugs as Perceived by <u>10th Graders</u>

Percentage saying "great risk"[a]

10th Graders

How much do you think people risk harming themselves (physically or in other ways), if they . . .	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Try marijuana once or twice	30.0	31.9	29.7	24.4	21.5	20.0	18.8	19.6	19.2	18.5	17.9	19.9	21.1	22.0	22.3	22.2	22.2	23.1	20.5	[+0.2]
Smoke marijuana occasionally	48.6	48.9	46.1	38.9	35.4	32.8	31.9	32.5	33.5	32.4	31.2	32.0	34.9	36.2	36.6	35.6	36.0	37.0	32.9	[-0.7]
Smoke marijuana regularly	82.1	81.1	78.5	71.3	67.9	65.9	65.9	65.8	65.9	64.7	62.8	60.8	63.9	65.6	65.5	64.9	64.5	64.8	59.5	[-3.8] ss
Try inhalants once or twice[b]	37.8	38.7	40.9	42.7	41.6	47.2	47.5	45.8	48.2	46.6	49.9	48.7	47.7	46.7	45.7	43.9	43.0	41.2	42.0	[+0.6]
Take inhalants regularly[b]	69.8	67.9	69.6	71.5	71.8	75.8	74.5	73.3	76.3	75.0	76.4	73.4	72.2	73.0	71.2	70.2	68.6	66.8	66.8	[-0.9]
Take LSD once or twice[c]	—	—	48.7	46.5	44.7	45.1	44.5	43.5	45.0	43.0	41.3	40.1	40.8	40.6	40.3	38.8	35.4	34.6	34.9	[-0.1]
Take LSD regularly[c]	—	—	78.9	75.9	75.5	75.3	73.8	72.3	73.9	72.0	68.8	64.9	63.0	63.1	60.8	60.7	56.8	55.7	56.7	[-2.2]
Try ecstasy (MDMA) once or twice[d]	—	—	—	—	—	—	—	—	—	—	39.4	43.5	49.7	52.0	51.4	48.4	45.3	43.2	38.9	[-4.0] s
Take ecstasy (MDMA) occasionally[d]	—	—	—	—	—	—	—	—	—	—	64.8	67.3	71.7	74.6	72.8	71.3	68.2	66.4	62.1	[-5.3] sss
Try crack once or twice[b]	70.4	69.6	66.6	64.7	60.9	60.9	59.2	58.0	57.8	56.1	57.1	57.4	57.6	56.7	57.0	56.6	56.4	56.5	57.7	[+2.4]
Take crack occasionally[b]	87.4	86.4	84.4	83.1	81.2	80.3	78.7	77.5	79.1	76.9	77.3	75.7	76.4	76.7	76.9	76.2	76.0	76.5	75.9	[-1.2]
Try cocaine powder once or twice[b]	59.1	59.2	57.5	56.4	53.5	53.6	52.2	50.9	51.6	48.8	50.6	51.3	51.8	50.7	51.3	50.2	49.5	49.8	50.8	[+1.5]
Take cocaine powder occasionally[b]	82.2	80.1	79.1	77.8	75.6	75.0	73.9	71.8	73.6	70.9	72.3	71.0	71.4	72.2	72.4	71.3	70.9	71.1	71.0	[-1.1]
Try heroin once or twice without using a needle[c]	—	—	—	—	70.7	72.1	73.1	71.7	73.7	71.7	72.0	72.2	70.6	72.0	72.4	70.0	70.5	70.8	72.2	[+2.2]
Take heroin occasionally without using a needle[c]	—	—	—	—	85.1	85.8	86.5	84.9	86.5	85.2	85.4	83.4	83.5	85.4	85.2	83.6	84.2	83.1	83.3	[+1.3]
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	9.0	10.1	10.9	9.4	9.3	8.9	9.0	10.1	10.5	9.6	9.8	11.5	11.5	10.8	11.5	11.1	11.6	12.6	11.9	[+0.5]
Take one or two drinks nearly every day	36.1	36.8	35.9	32.5	31.7	31.2	31.8	31.9	32.9	32.3	31.5	31.0	30.9	31.3	32.6	31.7	33.3	35.0	33.8	[+0.6]
Have five or more drinks once or twice each weekend	54.7	55.9	54.9	52.9	52.0	50.9	51.8	52.5	51.9	51.0	50.7	51.7	51.6	51.7	53.3	52.4	54.1	56.6	54.2	[-1.2]
Smoke one to five cigarettes per day[d]	—	—	—	—	—	—	—	—	28.4	30.2	32.4	35.1	38.1	39.7	41.0	41.3	41.7	43.5	42.8	[+0.2]
Smoke one or more packs of cigarettes per day[e]	60.3	59.3	60.7	59.0	57.0	57.9	59.9	61.9	62.7	65.9	64.7	64.3	65.7	68.4	68.1	67.7	68.2	69.1	67.3	[-1.3]
Use smokeless tobacco regularly	40.3	39.6	44.2	42.2	38.2	41.0	42.2	42.8	44.2	46.7	46.2	46.9	48.0	47.8	46.1	45.9	46.7	48.0	44.7	[-0.9]
Take steroids[f]	67.1	72.7	73.4	72.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Approximate weighted N =	14,700	14,800	15,300	15,900	17,000	15,700	15,600	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	15,900	

Source. The Monitoring the Future study, the University of Michigan.

Notes. "[" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

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 estimates for the two most recent years is due to rounding.

[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 1993–1996; 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.

[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 11
Trends in Harmfulness of Drugs as Perceived by 12th Graders

Percentage saying "great risk"[na]

12th Graders

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	1990	1991
Try marijuana once or twice	15.1	11.4	9.5	8.1	9.4	10.0	13.0	11.5	12.7	14.7	14.8	15.1	18.4	19.0	23.6	23.1	27.1
Smoke marijuana occasionally	18.1	15.0	13.4	12.4	13.5	14.7	19.1	18.3	20.6	22.6	24.5	25.0	30.4	31.7	36.5	36.9	40.6
Smoke marijuana regularly	43.3	38.6	36.4	34.9	42.0	50.4	57.6	60.4	62.8	66.9	70.4	71.3	73.5	77.0	77.5	77.8	78.6
Try LSD once or twice	49.4	45.7	43.2	42.7	41.6	43.9	45.5	44.9	44.7	45.4	43.5	42.0	44.9	45.7	46.0	44.7	46.6
Take LSD regularly	81.4	80.8	79.1	81.1	82.4	83.0	83.5	83.5	83.2	83.8	82.9	82.6	83.8	84.2	84.3	84.5	84.3
Try PCP once or twice	—	—	—	—	—	—	—	—	—	—	—	—	55.6	58.8	56.6	55.2	51.7
Try ecstasy (MDMA) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try cocaine once or twice	42.6	39.1	35.6	33.2	31.5	31.3	32.1	32.8	33.0	35.7	34.0	33.5	47.9	51.2	54.9	59.4	59.4
Take cocaine occasionally	—	—	—	—	—	—	—	—	—	—	—	54.2	66.8	69.2	71.8	73.9	75.5
Take cocaine regularly	73.1	72.3	68.2	68.2	69.5	69.2	71.2	73.0	74.3	78.8	79.0	82.2	88.5	89.2	90.2	91.1	90.4
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	57.0	62.1	62.9	64.3	60.6
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	70.4	73.2	75.3	80.4	76.5
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.8	85.6	91.6	90.1
Try cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	45.3	51.7	53.8	53.9	53.6
Take cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	56.8	61.9	65.8	71.1	69.8
Take cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	81.4	82.9	83.9	90.2	88.9
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	55.4	55.2
Take heroin occasionally	75.6	75.6	71.9	71.4	70.9	70.9	72.2	69.8	71.8	70.7	69.8	68.2	74.6	73.8	75.5	76.6	74.9
Take heroin regularly	87.2	88.6	86.1	86.6	87.5	86.2	87.5	86.0	86.1	87.2	86.0	87.1	88.7	88.8	89.5	90.2	89.6
Try heroin once or twice without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take heroin occasionally without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try amphetamines once or twice	35.4	33.4	30.8	29.9	29.7	29.7	26.4	25.3	24.7	25.4	25.2	25.1	29.1	29.6	32.8	32.2	36.3
Take amphetamines regularly	69.0	67.3	66.6	67.1	69.9	69.1	66.1	64.7	64.8	67.1	67.2	67.3	69.4	69.8	71.2	71.2	74.1
Try crystal methamphetamine (ice) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61.6
Try sedatives (barbiturates) once or twice[b]	34.8	32.5	31.2	31.3	30.7	30.9	28.4	27.5	27.0	27.4	26.1	25.4	30.9	29.7	32.2	32.4	35.1
Take sedatives (barbiturates) regularly[b]	69.1	67.7	68.6	68.4	71.6	72.2	69.9	67.6	67.7	68.5	68.3	67.2	69.4	69.6	70.5	70.2	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	8.3	9.1
Take one or two drinks nearly every day	21.5	21.2	18.5	19.6	22.6	20.3	21.6	21.6	21.6	23.0	24.4	25.1	26.2	27.3	28.5	31.3	32.7
Take four or five drinks nearly every day	63.5	61.0	62.9	63.1	66.2	65.7	64.5	65.5	66.8	68.4	69.8	66.5	69.7	68.5	69.8	70.9	69.5
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	34.5	34.9	35.9	36.3	36.0	38.6	41.7	43.0	39.1	41.9	42.6	44.0	47.1	48.6
Smoke one or more packs of cigarettes per day	51.3	56.4	58.4	59.0	63.0	63.7	63.3	60.5	61.2	63.8	66.5	66.0	68.6	68.0	67.2	68.2	69.4
Use smokeless tobacco regularly	—	—	—	—	—	—	—	—	—	—	—	25.8	30.0	33.2	32.9	34.2	37.4
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63.8	69.9	65.6
Approximate weighted N =	2,804	2,918	3,052	3,770	3,250	3,234	3,604	3,557	3,305	3,262	3,250	3,020	3,315	3,276	2,796	2,553	2,549

Source. The Monitoring the Future study, the University of Michigan.

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

"—" indicates data not available. "‡" indicates some change in the question. See relevant footnote for that drug.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

(Table continued on next page.)

Cont.

TABLE 11 (cont.)
Trends in Harmfulness of Drugs as Perceived by 12th Graders

Percentage saying "great risk"[a]

12th Graders

How much do you think people risk harming themselves (physically or in other ways), if they . . .	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Try marijuana once or twice	24.5	21.9	19.5	16.3	15.6	14.9	16.7	15.7	13.7	15.3	16.1	16.1	15.9	16.1	17.8	18.6	17.4	18.5	+1.1
Smoke marijuana occasionally	39.6	35.6	30.1	25.6	25.9	24.7	24.4	23.9	23.4	23.5	23.2	26.6	25.4	25.8	25.9	27.1	25.8	27.4	+1.6
Smoke marijuana regularly	76.5	72.5	65.0	60.8	59.9	58.1	58.5	57.4	58.3	57.4	53.0	54.9	54.6	58.0	57.9	54.8	51.7	52.4	+0.7
Try LSD once or twice	42.3	39.5	38.8	36.4	36.2	34.7	37.4	34.9	34.3	33.2	36.7	36.2	36.2	36.5	36.1	37.0	33.9	37.1	+3.2
Take LSD regularly	81.8	79.4	79.1	78.1	77.8	76.6	76.5	76.1	75.9	74.1	73.9	72.3	70.2	69.9	69.3	67.3	63.6	67.8	+4.2 s
Try PCP once or twice	54.8	50.8	51.5	49.1	51.0	48.8	46.8	44.8	45.0	46.2	48.3	45.2	47.1	46.6	47.0	48.0	47.4	49.7	+2.3
Try ecstasy (MDMA) once or twice	—	—	—	—	—	33.8	34.5	35.0	37.9	45.7	52.2	56.3	57.7	60.1	59.3	58.1	57.0	53.3	-3.7 s
Try cocaine once or twice	56.8	57.6	57.2	53.7	54.2	53.6	54.6	52.1	51.1	50.7	51.2	51.0	50.7	50.5	52.5	51.3	50.3	53.1	+2.8
Take cocaine occasionally	75.1	73.3	73.7	70.8	72.1	72.4	70.1	70.1	69.5	69.9	68.3	69.1	67.2	66.7	69.8	68.8	67.1	71.4	+4.4 ss
Take cocaine regularly	90.2	90.1	89.3	87.9	88.3	87.1	86.3	85.8	86.2	84.1	84.5	83.0	82.2	82.8	84.6	83.3	80.7	84.4	+3.7 ss
Try crack once or twice	62.4	57.6	58.4	54.6	56.0	54.0	52.2	48.2	48.4	49.4	50.8	47.3	47.8	48.4	47.8	47.3	47.5	48.4	+0.9
Take crack occasionally	76.3	73.9	73.8	72.8	71.4	70.3	68.7	67.3	65.8	65.4	65.6	64.0	64.5	63.8	64.8	63.6	65.2	64.7	-0.5
Take crack regularly	89.3	87.5	89.6	88.6	88.0	86.2	85.3	85.4	85.3	85.8	84.1	83.2	83.5	83.3	82.8	82.6	83.4	84.0	+0.5
Try cocaine powder once or twice	57.1	53.2	55.4	52.0	53.2	51.4	48.5	46.1	47.0	49.0	49.5	46.2	45.4	46.2	45.8	45.1	45.1	46.5	+1.4
Take cocaine powder occasionally	70.8	68.6	70.6	69.1	68.8	67.7	65.4	64.2	64.7	63.2	64.4	61.4	61.6	60.8	61.9	59.9	61.6	62.6	+1.0
Take cocaine powder regularly	88.4	87.0	88.6	87.8	86.8	86.0	84.1	84.6	85.5	84.4	84.2	82.3	81.7	82.7	82.1	81.5	82.5	83.4	+0.9
Try heroin once or twice	50.9	50.7	52.8	50.9	52.5	56.7	57.8	56.0	54.2	55.6	56.0	58.0	56.6	55.2	59.1	58.4	55.5	59.3	+3.8 s
Take heroin occasionally	74.2	72.0	72.1	71.0	74.8	76.3	76.9	77.3	74.6	75.9	76.6	78.5	75.7	76.0	79.1	76.2	75.3	79.7	+4.4 ss
Take heroin regularly	89.2	88.3	88.0	87.2	89.5	88.9	89.1	89.9	89.2	88.3	88.5	89.3	86.8	87.5	89.7	87.8	86.4	89.9	+3.5 ss
Try heroin once or twice without using a needle	—	—	—	55.6	58.6	60.5	59.6	58.5	61.6	60.7	60.6	58.9	61.2	60.5	62.6	60.2	60.8	61.5	+0.7
Take heroin occasionally without using a needle	—	—	—	71.2	71.0	74.3	73.4	73.6	74.7	74.4	74.7	73.0	76.1	73.3	76.2	73.9	73.2	74.8	+1.6
Try amphetamines once or twice	32.6	31.3	31.4	28.8	30.8	31.0	35.3	32.2	32.6	34.7	34.4	36.8	35.7	37.7	39.5	41.3	39.2	41.9	+2.7
Take amphetamines regularly	72.4	69.9	67.0	65.9	66.8	66.0	67.7	66.4	66.3	67.1	64.8	65.6	63.9	67.1	68.1	68.1	65.4	69.0	+3.6 s
Try crystal methamphetamine (ice) once or twice	61.9	57.5	58.3	54.4	55.3	54.4	52.7	51.2	51.3	52.7	53.8	51.2	52.4	54.6	59.1	60.2	62.2	63.4	+1.3
Try sedatives (barbiturates) once or twice[b]	32.2	29.2	29.9	26.3	29.1	26.9	29.0	26.1	25.0	25.7	26.2	27.9‡	24.9	24.7	28.0	27.9	25.9	29.6	+3.7 s
Take sedatives (barbiturates) regularly[b]	70.2	66.1	63.3	61.6	60.4	56.8	56.3	54.1	52.3	50.3	49.3	49.6‡	54.0	54.1	56.8	55.1	50.2	54.7	+4.5 s
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	8.6	8.2	7.6	5.9	7.3	6.7	8.0	8.3	6.4	8.7	7.6	8.4	8.6	8.5	9.3	10.5	10.0	9.4	-0.5
Take one or two drinks nearly every day	30.6	28.2	27.0	24.8	25.1	24.8	24.3	21.8	21.7	23.4	21.0	20.1	23.0	23.7	25.3	25.1	24.2	23.7	-0.5
Take four or five drinks nearly every day	70.5	67.8	66.2	62.8	65.6	63.0	62.1	61.1	59.9	60.7	58.8	57.8	59.2	61.8	63.4	61.8	60.8	62.4	+1.6
Have five or more drinks once or twice each weekend	49.0	48.3	46.5	45.2	49.5	43.0	42.8	43.1	42.7	43.6	42.2	43.5	43.6	45.0	47.6	45.8	46.3	48.0	+1.7
Smoke one or more packs of cigarettes per day	69.2	69.5	67.6	65.6	68.2	68.7	70.8	70.8	73.1	73.3	74.2	72.1	74.0	76.5	77.6	77.3	74.0	74.9	+1.0
Use smokeless tobacco regularly	35.5	38.9	36.6	33.2	37.4	38.6	40.9	41.1	42.2	45.4	42.6	43.3	45.0	43.6	45.9	44.0	42.9	40.8	-2.1
Take steroids	70.7	69.1	66.1	66.4	67.6	67.2	68.1	62.1	57.9	58.9	57.1	55.0	55.7	56.8	60.2	57.4	60.8	60.2	-0.5
Approximate weighted N =	2,684	2,759	2,591	2,603	2,449	2,579	2,564	2,306	2,130	2,173	2,198	2,466	2,491	2,512	2,407	2,450	2,389	2,290	

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

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

TABLE 12
Trends in Disapproval of Drug Use in Grade 8

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

8th Graders

Do you disapprove of people who . . .	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 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	73.8	75.9	75.3	76.0	78.7	76.6	75.3	-1.3
Smoke marijuana occasionally	89.5	88.1	85.7	80.9	79.7	76.5	78.1	78.4	79.3	80.6	80.6	80.9	81.5	83.1	82.4	82.2	84.5	82.6	81.9	-0.7
Smoke marijuana regularly	92.1	90.8	88.9	85.3	85.1	82.8	84.6	84.5	84.5	85.3	84.5	85.3	85.7	86.8	86.3	86.1	87.7	86.8	85.9	-0.9
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	85.1	85.1	84.6	83.4	84.1	82.3	83.1	+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	89.8	90.1	89.8	89.0	89.5	88.5	88.4	-0.1
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	61.0	58.1	58.5	53.9	53.5	52.6	53.2	+0.6
Take LSD regularly[c]	—	—	79.8	78.4	75.8	75.3	76.3	72.5	72.5	69.3	67.0	65.5	63.5	60.5	60.7	55.8	55.6	54.7	55.7	+1.0
Try ecstasy (MDMA) once or twice[d]	—	—	—	—	—	—	—	—	—	—	69.0	74.3	77.7	76.3	75.0	66.7	65.7	63.5	62.3	-1.3
Take ecstasy (MDMA) occasionally[d]	—	—	—	—	—	—	—	—	—	—	73.6	78.6	81.3	79.4	77.9	69.8	68.3	66.5	65.7	-0.8
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	86.4	87.4	87.6	87.2	88.6	87.2	88.4	+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	89.8	90.3	90.5	90.0	91.2	90.3	91.0	+0.7
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	85.6	86.8	87.0	86.5	88.2	86.8	88.1	+1.3
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	89.8	90.3	90.7	90.2	91.0	90.1	90.7	+0.6
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	86.9	86.6	86.9	87.2	88.4	86.9	88.6	+1.7
Take heroin occasionally without using a needle[c]	—	—	—	—	88.5	87.7	90.1	89.7	90.2	88.9	88.9	89.6	89.0	88.6	88.5	88.5	89.7	88.2	90.1	+1.9
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	51.7	52.2	50.9	47.8	48.0	45.5	45.7	47.5	48.3	48.7	49.8	51.1	49.7	51.1	51.2	51.3	54.0	52.5	52.7	+0.2
Take one or two drinks nearly every day	82.2	81.0	79.6	76.7	75.9	74.1	76.6	76.9	77.0	77.8	77.4	78.3	77.1	78.6	78.7	78.7	80.4	79.2	78.5	-0.8
Have five or more drinks once or twice each weekend	85.2	83.9	83.3	80.7	80.7	79.1	81.3	81.0	80.3	81.2	81.6	81.9	81.9	82.3	82.9	82.0	83.8	83.2	83.2	0.0
Smoke one to five cigarettes per day[d]	—	—	—	—	—	—	—	—	75.1	79.1	80.4	81.1	81.4	83.1	82.9	83.5	85.3	85.0	83.6	-1.3
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	84.6	85.7	85.3	85.6	87.0	86.7	87.1	+0.4
Use smokeless tobacco regularly	79.1	77.2	77.1	75.1	74.0	74.1	76.5	76.3	78.0	79.2	79.4	80.6	80.7	81.0	82.0	81.0	82.3	82.1	81.5	-0.5
Take steroids[f]	89.8	90.3	89.9	87.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Approximate weighted N =	17,400	18,500	18,400	17,400	17,600	18,000	18,800	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500	16,100	15,700	15,000	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

[a] Answer alternatives were: (1) Don't disapprove, (2) Disapprove, (3) Strongly disapprove, and (4) Can't say, drug unfamiliar. Percentages are shown for categories (2) and (3) combined.

[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 1993–1996; 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.

[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 13
Trends in <u>Disapproval</u> of Drug Use in <u>Grade 10</u>

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

<u>10th Graders</u>

Do you disapprove of people who . . .	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Try marijuana once or twice	74.6	74.8	70.3	62.4	59.8	55.5	54.1	56.0	56.2	54.9	54.8	57.8	58.1	60.4	61.3	62.5	63.9	64.5	60.1	[-2.0]
Smoke marijuana occasionally	83.7	83.6	79.4	72.3	70.0	66.9	66.2	67.3	68.2	67.2	66.2	68.3	68.4	70.8	71.9	72.6	73.3	73.6	69.2	[-3.2] s
Smoke marijuana regularly	90.4	90.0	87.4	82.2	81.1	79.7	79.7	80.1	79.8	79.1	78.0	78.6	78.8	81.3	82.0	82.5	82.4	83.0	79.9	[-3.7] sss
Try inhalants once or twice[b]	85.2	85.6	84.8	84.9	84.5	86.0	86.9	85.6	88.4	87.5	87.8	88.6	87.7	88.5	88.1	88.1	87.6	87.1	87.0	[-0.3]
Take inhalants regularly[b]	91.0	91.5	90.9	91.0	90.9	91.7	91.7	91.1	92.4	91.8	91.3	91.8	91.0	92.3	91.9	92.2	91.8	91.6	91.1	[-0.6]
Take LSD once or twice[c]	—	—	82.1	79.3	77.9	76.8	76.6	76.7	77.8	77.0	75.4	74.6	74.4	72.4	71.8	71.2	67.7	66.3	67.8	[-0.1]
Take LSD regularly[c]	—	—	86.8	85.6	84.8	84.5	83.4	82.9	84.3	82.1	80.8	79.4	77.6	75.9	75.0	74.9	71.5	69.8	72.2	[+0.2]
Try ecstasy (MDMA) once or twice[d]	—	—	—	—	—	—	—	—	—	—	72.6	77.4	81.0	83.7	83.1	81.6	80.0	78.1	76.5	[-0.7]
Take ecstasy (MDMA) occasionally[d]	—	—	—	—	—	—	—	—	—	—	81.0	84.6	86.3	88.0	87.4	86.0	84.3	83.0	81.3	[-1.7]
Try crack once or twice[b]	92.5	92.5	91.4	89.9	88.7	88.2	87.4	87.1	87.8	87.1	86.9	88.0	87.6	88.6	88.8	89.5	89.5	90.8	90.4	[-0.7]
Take crack occasionally[b]	94.3	94.4	93.6	92.5	91.7	91.9	91.0	90.6	91.5	90.9	90.6	91.0	91.0	91.8	91.8	92.0	92.7	92.9	92.8	[-0.8]
Try cocaine powder once or twice[b]	90.8	91.1	90.0	88.1	86.8	86.1	85.1	84.9	86.0	84.8	85.3	86.4	85.9	86.8	86.9	87.3	87.7	88.6	88.4	[-0.7]
Take cocaine powder occasionally[b]	94.0	94.0	93.2	92.1	91.4	91.1	90.4	89.7	90.7	89.9	90.2	89.9	90.4	91.2	91.2	91.4	92.0	92.1	92.1	[-0.9]
Try heroin once or twice without using a needle[c]	—	—	—	—	89.7	89.5	89.1	88.6	90.1	90.1	89.1	89.2	89.3	90.1	90.3	91.1	90.7	91.4	91.6	[+0.5]
Take heroin occasionally without using a needle[c]	—	—	—	—	91.6	91.7	91.4	90.5	91.8	92.3	90.8	90.7	90.6	91.8	92.0	92.5	92.5	92.5	93.0	[+0.7]
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	37.6	39.9	38.5	36.5	36.1	34.2	33.7	34.7	35.1	33.4	34.7	37.7	36.8	37.6	38.5	37.8	39.5	41.8	39.7	[+0.4]
Take one or two drinks nearly every day	81.7	81.7	78.6	75.2	75.4	73.8	75.4	74.6	75.4	73.8	73.8	74.9	74.2	75.1	76.9	76.4	77.1	79.1	77.6	[-1.7]
Have five or more drinks once or twice each weekend	76.7	77.6	74.7	72.3	72.2	70.7	70.2	70.5	69.9	68.2	69.2	71.5	71.6	71.8	73.7	72.9	74.1	77.2	75.1	[-1.9]
Smoke one to five cigarettes per day[d]	—	—	—	—	—	—	—	—	67.8	69.1	71.2	74.3	76.2	77.5	79.3	80.2	79.7	82.5	80.0	[-2.0]
Smoke one or more packs of cigarettes per day[e]	79.4	77.8	76.5	73.9	73.2	71.6	73.8	75.3	76.1	76.7	78.2	80.6	81.4	82.7	84.3	83.2	84.7	85.2	84.5	[-1.4]
Use smokeless tobacco regularly	75.4	74.6	73.8	71.2	71.0	71.0	72.3	73.2	75.1	75.8	76.1	78.7	79.4	80.2	80.5	80.5	80.9	81.8	79.5	[-2.1] s
Take steroids[f]	90.0	91.0	91.2	90.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Approximate weighted N =	14,800	14,800	15,300	15,900	17,000	15,700	15,600	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100	15,900	

Source. The Monitoring the Future study, the University of Michigan.

Notes. "[]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

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 estimates for the two most recent years is due to rounding.

[a] Answer alternatives were: (1) Don't disapprove, (2) Disapprove, (3) Strongly disapprove, and (4) Can't say, drug unfamiliar. Percentages are shown for categories (2) and (3) combined.

[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 1993–1996; 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.

[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 14
Trends in Disapproval of Drug Use in Grade 12

Percentage "disapproving"[b]

12th Graders

Do you disapprove of people (who are 18 or older) doing each of the following?[a]	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Trying marijuana once or twice	47.0	38.4	33.4	33.4	34.2	39.0	40.0	45.5	46.3	49.3	51.4	54.6	56.6	60.8	64.6	67.8	68.7
Smoking marijuana occasionally	54.8	47.8	44.3	43.5	45.3	49.7	52.6	59.1	60.7	63.5	65.8	69.0	71.6	74.0	77.2	80.5	79.4
Smoking marijuana regularly	71.9	69.5	65.5	67.5	69.2	74.6	77.4	80.6	82.5	84.7	85.5	86.6	89.2	89.3	89.8	91.0	89.3
Trying LSD once or twice	82.8	84.6	83.9	85.4	86.6	87.3	86.4	88.8	89.1	88.9	89.5	89.2	91.6	89.8	89.7	89.8	90.1
Taking LSD regularly	94.1	95.3	95.8	96.4	96.9	96.7	96.8	96.7	97.0	96.8	97.0	96.6	97.8	96.4	96.4	96.3	96.4
Trying ecstasy (MDMA) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Trying cocaine once or twice	81.3	82.4	79.1	77.0	74.7	76.3	74.6	76.6	77.0	79.7	79.3	80.2	87.3	89.1	90.5	91.5	93.6
Taking cocaine regularly	93.3	93.9	92.1	91.9	90.8	91.1	90.7	91.5	93.2	94.5	93.8	94.3	96.7	96.2	96.4	96.7	97.3
Trying crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.3	92.1
Taking crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.3	94.2
Taking crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.9	95.0
Trying cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	87.9	88.0
Taking cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.1	93.0
Taking cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.7	94.4
Trying heroin once or twice	91.5	92.6	92.5	92.0	93.4	93.5	93.5	94.6	94.3	94.0	94.0	93.3	96.2	95.0	95.4	95.1	96.0
Taking heroin occasionally	94.8	96.0	96.0	96.4	96.8	96.7	97.2	96.9	96.9	97.1	96.8	96.6	97.9	96.9	97.2	96.7	97.3
Taking heroin regularly	96.7	97.5	97.2	97.8	97.9	97.6	97.8	97.5	97.7	98.0	97.6	97.6	98.1	97.2	97.4	97.5	97.8
Trying heroin once or twice without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Taking heroin occasionally without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Trying amphetamines once or twice	74.8	75.1	74.2	74.8	75.1	75.4	71.1	72.6	72.3	72.8	74.9	76.5	80.7	82.5	83.3	85.3	86.5
Taking amphetamines regularly	92.1	92.8	92.5	93.5	94.4	93.0	91.7	92.0	92.6	93.6	93.3	93.5	95.4	94.2	94.2	95.5	96.0
Trying sedatives (barbiturates) once or twice[c]	77.7	81.3	81.1	82.4	84.0	83.9	82.4	84.4	83.1	84.1	84.9	86.8	89.6	89.4	89.3	90.5	90.6
Taking sedatives (barbiturates) regularly[c]	93.3	93.6	93.0	94.3	95.2	95.4	94.2	94.4	95.1	95.1	95.5	94.9	96.4	95.3	95.3	96.4	97.1
Trying one or two drinks of an alcoholic beverage (beer, wine, liquor)	21.6	18.2	15.6	15.6	15.8	16.0	17.2	18.2	18.4	17.4	20.3	20.9	21.4	22.6	27.3	29.4	29.8
Taking one or two drinks nearly every day	67.6	68.9	66.8	67.7	68.3	69.0	69.1	69.9	68.9	72.9	70.9	72.8	74.2	75.0	76.5	77.9	76.5
Taking four or five drinks nearly every day	88.7	90.7	88.4	90.2	91.7	90.8	91.8	90.9	90.0	91.0	92.0	91.4	92.2	92.8	91.6	91.9	90.6
Having five or more drinks once or twice each weekend	60.3	58.6	57.4	56.2	56.7	55.6	55.5	58.8	56.6	59.6	60.4	62.4	62.0	65.3	66.5	68.9	67.4
Smoking one or more packs of cigarettes per day	67.5	65.9	66.4	67.0	70.3	70.8	69.9	69.4	70.8	73.0	72.3	75.4	74.3	73.1	72.4	72.8	71.4
Taking steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.8	90.5
Approximate weighted N =	2,677	2,957	3,085	3,686	3,221	3,261	3,610	3,651	3,341	3,254	3,265	3,113	3,302	3,311	2,799	2,566	2,547

Source.   The Monitoring the Future study, the University of Michigan.

Notes.   Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. "‡" indicates some change in the question. See relevant footnote for that drug.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

TABLE 14 (cont.)

Trends in Disapproval of Drug Use in Grade 12

Percentage "disapproving" [b]

12th Graders

Do you disapprove of people (who are 18 or older) doing each of the following? [a]	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Trying marijuana once or twice	69.9	63.3	57.6	56.7	52.5	51.0	51.6	48.8	52.5	49.1	51.6	53.4	52.7	55.0	55.6	58.6	55.5	54.8	-0.8
Smoking marijuana occasionally	79.7	75.5	68.9	66.7	62.9	63.2	64.4	62.5	65.8	63.2	63.4	64.2	65.4	67.8	69.3	70.2	67.3	65.6	-1.7
Smoking marijuana regularly	90.1	87.6	82.3	81.9	80.0	78.8	81.2	78.6	79.7	79.3	78.3	78.7	80.7	82.0	82.2	83.3	79.6	80.3	+0.7
Trying LSD once or twice	88.1	85.9	82.5	81.1	79.6	80.5	82.1	83.0	82.4	81.8	84.6	85.5	87.9	87.9	88.0	87.8	85.5	88.2	+2.8 s
Taking LSD regularly	95.5	95.8	94.3	92.5	93.2	92.9	93.5	94.3	94.2	94.0	94.0	94.4	94.6	95.6	95.9	94.9	93.5	95.3	+1.8 s
Trying ecstasy (MDMA) once or twice	—	—	—	—	—	82.2	82.5	82.1	81.0	79.5	83.6	84.7	87.7	88.4	89.0	87.8	88.2	88.2	0.0
Trying cocaine once or twice	93.0	92.7	91.6	90.3	90.0	88.0	89.5	89.1	88.2	88.1	89.0	89.3	88.6	88.9	89.1	89.6	89.2	90.8	+1.6
Taking cocaine regularly	96.9	97.5	96.6	96.1	95.6	96.0	95.6	94.9	95.5	94.9	95.0	95.8	95.4	96.0	96.1	96.2	94.8	96.5	+1.7 s
Trying crack once or twice	93.1	89.9	89.5	91.4	87.4	87.0	86.7	87.6	87.5	87.0	87.8	86.6	86.9	86.7	88.8	88.8	89.6	90.9	+1.3
Taking crack occasionally	95.0	92.8	92.8	94.0	91.2	91.3	90.9	92.3	91.9	91.6	91.5	90.8	92.1	91.9	92.9	92.4	93.3	94.0	+0.6
Taking crack regularly	95.5	93.4	93.1	94.1	93.0	92.3	91.9	93.2	92.8	92.2	92.4	91.2	93.1	92.1	93.8	93.6	93.5	94.3	+0.7
Trying cocaine powder once or twice	89.4	86.6	87.1	88.3	83.1	83.0	83.1	84.3	84.1	83.3	83.8	83.6	82.2	83.2	84.1	83.5	85.7	87.3	+1.6
Taking cocaine powder occasionally	93.4	91.2	91.0	92.7	89.7	89.3	88.7	90.0	90.3	89.8	90.2	88.9	90.0	89.4	90.4	90.6	91.7	92.3	+0.6
Taking cocaine powder regularly	94.3	93.0	92.5	93.8	92.9	91.5	91.1	92.3	92.6	92.5	92.2	90.7	92.6	92.0	93.2	92.6	92.8	93.9	+1.1
Trying heroin once or twice	94.9	94.4	93.2	92.8	92.1	92.3	93.7	93.5	93.0	93.1	94.1	94.1	94.2	94.3	93.8	94.8	93.3	94.7	+1.4
Taking heroin occasionally	96.8	97.0	96.2	95.7	95.0	95.4	96.1	95.7	96.0	95.4	95.6	95.9	96.4	96.3	96.2	96.8	95.3	96.9	+1.6 s
Taking heroin regularly	97.2	97.5	97.1	96.4	96.3	96.4	96.6	96.4	96.6	96.2	96.2	97.1	97.1	96.7	96.9	97.1	95.9	97.4	+1.6 s
Trying heroin once or twice without using a needle	—	—	—	92.9	90.8	92.3	93.0	92.6	94.0	91.7	93.1	92.2	93.1	93.2	93.7	93.6	94.2	94.7	+0.4
Taking heroin occasionally without using a needle	—	—	—	94.7	93.2	94.4	94.3	93.8	95.2	93.5	94.4	93.5	94.4	95.0	94.5	94.9	95.3	95.5	+0.1
Trying amphetamines once or twice	86.9	84.2	81.3	82.2	79.9	81.3	82.5	81.9	82.1	82.3	83.8	85.8	84.1	86.1	86.3	87.3	87.2	88.2	+1.1
Taking amphetamines regularly	95.6	96.0	94.1	94.3	93.5	94.3	94.0	93.7	94.1	93.4	93.5	94.0	93.9	94.8	95.3	95.4	94.2	95.6	+1.4
Trying sedatives (barbiturates) once or twice [c]	90.3	89.7	87.5	87.3	84.9	86.4	86.0	86.6	85.9	85.9	86.6	87.8‡	83.7	85.4	85.3	86.5	86.1	87.7	+1.6
Taking sedatives (barbiturates) regularly [c]	96.5	97.0	96.1	95.2	94.8	95.3	94.6	94.7	95.2	94.5	94.7	94.4‡	94.2	95.2	95.1	94.6	94.3	95.8	+1.5
Trying one or two drinks of an alcoholic beverage (beer, wine, liquor)	33.0	30.1	28.4	27.3	26.5	26.1	24.5	24.6	25.2	26.6	26.3	27.2	26.0	26.4	29.0	31.0	29.8	30.6	+0.7
Taking one or two drinks nearly every day	75.9	77.8	73.1	73.3	70.8	70.0	69.4	67.2	70.0	69.2	69.1	68.9	69.5	70.8	72.8	73.3	74.5	70.5	-4.1 s
Taking four or five drinks nearly every day	90.8	90.6	89.8	88.8	89.4	88.6	86.7	86.9	88.4	86.4	87.5	86.3	87.8	89.4	90.6	90.5	89.8	89.7	-0.1
Having five or more drinks once or twice each weekend	70.7	70.1	65.1	66.7	64.7	65.0	63.8	62.7	65.2	62.9	64.7	64.2	65.7	66.5	68.5	68.8	68.9	67.6	-1.3
Smoking one or more packs of cigarettes per day	73.5	70.6	69.8	68.2	67.2	67.1	68.8	69.5	70.1	71.6	73.6	74.8	76.2	79.8	81.5	80.7	80.5	81.8	+1.2
Taking steroids	92.1	92.1	91.9	91.0	91.7	91.4	90.8	88.9	88.8	86.4	86.8	86.0	87.9	88.8	89.4	89.2	90.9	90.3	-0.5
Approximate weighted N =	2,645	2,723	2,588	2,603	2,399	2,601	2,545	2,310	2,150	2,144	2,160	2,442	2,455	2,460	2,377	2,450	2,314	2,233	

[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.

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

TABLE 15
Trends in <u>Availability</u> of Drugs as Perceived by <u>8th Graders</u>

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 Graders

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Marijuana	42.3	43.8	49.9	52.4	54.8	54.2	50.6	48.4	47.0	48.1	46.6	44.8	41.0	41.1	39.6	37.4	39.3	39.8	+0.5
LSD	21.5	21.8	21.8	23.5	23.6	22.7	19.3	18.3	17.0	17.6	15.2	14.0	12.3	11.5	10.8	10.5	10.9	10.0	-0.9
PCP[b]	18.0	18.5	17.7	19.0	19.6	19.2	17.5	17.1	16.0	15.4	14.1	13.7	11.4	11.0	10.5	9.5	10.1	9.1	-0.9
Ecstasy (MDMA)[b]	—	—	—	—	—	—	—	—	—	23.8	22.8	21.6	16.6	15.6	14.5	13.4	14.1	13.1	-1.1
Crack	25.6	25.9	26.9	28.7	27.9	27.5	26.5	25.9	24.9	24.4	23.7	22.5	20.6	20.8	20.9	19.7	20.2	18.6	-1.7 s
Cocaine powder	25.7	25.9	26.4	27.8	27.2	26.9	25.7	25.0	23.9	23.9	22.5	21.6	19.4	19.9	20.2	19.0	19.5	17.8	-1.7 s
Heroin	19.7	19.8	19.4	21.1	20.6	19.8	18.0	17.5	16.5	16.9	16.0	15.6	14.1	13.2	13.0	12.6	13.3	12.0	-1.3
Narcotics other than heroin[b]	19.8	19.0	18.3	20.3	20.0	20.6	17.1	16.2	15.6	15.0	14.7	15.0	12.4	12.9	13.0	11.7	12.1	11.8	-0.2
Amphetamines	32.2	31.4	31.0	33.4	32.6	30.6	27.3	25.9	25.5	26.2	24.4	24.4	21.9	21.0	20.7	19.9	21.3	20.2	-1.1
Crystal methamphetamine (ice)[b]	16.0	15.1	14.1	16.0	16.3	15.7	16.0	14.7	14.9	13.9	13.3	14.1	11.9	13.5	14.5	12.1	12.8	11.9	-0.9
Sedatives (barbiturates)	27.4	26.1	25.3	26.5	25.6	24.4	21.1	20.8	19.7	20.7	19.4	19.3	18.0	17.6	17.3	16.8	17.5	15.9	-1.6 s
Tranquilizers	22.9	21.4	20.4	21.3	20.4	19.6	18.1	17.3	16.2	17.8	16.9	17.3	15.8	14.8	14.4	14.4	15.4	14.1	-1.3
Alcohol	76.2	73.9	74.5	74.9	75.3	74.9	73.1	72.3	70.6	70.6	67.9	67.0	64.9	64.2	63.0	62.0	64.1	61.8	-2.3 ss
Cigarettes	77.8	75.5	76.1	76.4	76.9	76.0	73.6	71.5	68.7	67.7	64.3	63.1	60.3	59.1	58.0	55.6	57.4	55.3	-2.1 s
Steroids	24.0	22.7	23.1	23.8	24.1	23.6	22.3	22.6	22.3	23.1	22.0	21.7	19.7	18.1	17.1	17.0	16.8	15.2	-1.6 s
Approximate weighted N =	*8,355*	*16,775*	*16,119*	*15,496*	*16,318*	*16,482*	*16,208*	*15,397*	*15,180*	*14,804*	*13,972*	*15,583*	*15,944*	*15,730*	*15,502*	*15,043*	*14,482*	*13,989*	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

[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 one of two forms; *N* is one half of *N* indicated.

TABLE 16
Trends in Availability of Drugs as Perceived by 10th 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]

10th Graders

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
Marijuana	65.2	68.4	75.0	78.1	81.1	80.5	77.9	78.2	77.7	77.4	75.9	73.9	73.3	72.6	70.7	69.0	67.4	69.3	[-0.5]
LSD	33.6	35.8	36.1	39.8	41.0	38.3	34.0	34.3	32.9	31.2	26.8	23.1	21.6	20.7	19.2	19.0	19.3	17.8	[-2.2] ss
PCP[b]	23.7	23.4	23.8	24.7	26.8	24.8	23.9	24.5	25.0	21.6	20.8	19.4	18.0	18.1	15.8	15.4	14.4	13.4	[-1.7]
Ecstasy (MDMA)[b]	—	—	—	—	—	—	—	—	—	41.4	41.0	36.3	31.2	30.2	27.4	27.7	26.7	25.6	[-1.0]
Crack	33.7	33.0	34.2	34.6	36.4	36.0	36.3	36.5	34.0	30.6	31.3	29.6	30.6	31.0	29.9	29.0	27.2	23.9	[-3.2] ss
Cocaine powder	35.0	34.1	34.5	35.3	36.9	37.1	36.8	36.7	34.5	31.0	31.8	29.6	31.2	31.5	30.7	30.0	28.2	24.7	[-3.4] sss
Heroin	24.3	24.3	24.7	24.6	24.8	24.4	23.0	23.7	22.3	20.1	19.9	18.8	18.7	19.3	17.4	17.3	17.2	15.0	[-1.9] s
Narcotics other than heroin[b]	26.9	24.9	26.9	27.8	29.4	29.0	26.1	26.6	27.2	25.8	25.4	23.5	23.1	23.6	22.2	21.5	20.3	18.8	[-1.2]
Amphetamines	43.4	46.4	46.6	47.7	47.2	44.6	41.0	41.3	40.9	40.6	39.6	36.1	35.7	35.6	34.7	33.3	32.0	31.8	[-0.5]
Crystal methamphetamine (ice)[b]	18.8	16.4	17.8	20.7	22.6	22.9	22.1	21.8	22.8	19.9	20.5	19.0	19.5	21.6	20.8	18.8	15.8	14.0	[-2.8] s
Sedatives (barbiturates)	38.0	38.8	38.3	38.8	38.1	35.6	32.7	33.2	32.4	32.8	32.4	28.8	30.0	29.7	29.9	28.2	26.9	25.5	[-1.4]
Tranquilizers	31.6	30.5	29.8	30.6	30.3	28.7	26.5	26.8	27.6	28.5	28.3	25.6	25.6	25.4	25.1	24.9	24.1	22.3	[-1.6]
Alcohol	88.6	88.9	89.8	89.7	90.4	89.0	88.0	88.2	87.7	87.7	84.8	83.4	84.3	83.7	83.1	82.6	81.1	80.9	[-1.2]
Cigarettes	89.1	89.4	90.3	90.7	91.3	89.6	88.1	88.3	86.8	86.3	83.3	80.7	81.4	81.5	79.5	78.2	76.5	76.1	[-1.3]
Steroids	37.6	33.6	33.6	34.8	34.8	34.2	33.0	35.9	35.4	33.1	33.2	30.6	29.6	29.7	30.2	27.7	24.5	20.8	[-3.0] sss
Approximate weighted N =	7,014	14,652	15,192	16,209	14,887	14,856	14,423	13,112	13,690	13,518	13,694	15,255	15,806	15,636	15,804	15,511	14,634	15,451	

Source. The Monitoring the Future study, the University of Michigan.

Notes. "[ ]" indicates that because we believe the 2008–2009 observed changes based on the total samples to be inaccurate for this variable for 10th grade, the change derived from the matched half-sample of schools participating in both years has been substituted here. See text.

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 estimates for the two most recent years is due to rounding.

[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 one of two of forms; *N* is one half of *N* indicated.

TABLE 17
Trends in <u>Availability</u> of Drugs as Perceived by <u>12th Graders</u>

Percentage saying "fairly easy" or "very easy" to get[a]

12th Graders

How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
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
Amyl/butyl nitrites	—	—	—	—	—	—	—	—	—	—	—	—	23.9	25.9	26.8	24.4	22.7
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
Some other 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
PCP	—	—	—	—	—	—	—	—	—	—	—	—	22.8	24.9	28.9	27.7	27.6
Ecstasy (MDMA)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.7	22.0	22.1
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
Crack	—	—	—	—	—	—	—	—	—	—	—	—	41.1	42.1	47.0	42.4	39.9
Cocaine powder	—	—	—	—	—	—	—	—	—	—	—	—	52.9	50.3	53.7	49.0	46.0
Heroin	24.2	18.4	17.9	16.4	18.9	21.2	19.2	20.8	19.3	19.9	21.0	22.0	23.7	28.0	31.4	31.9	30.6
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
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
Crystal methamphetamine (ice)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.1	24.3
Sedatives (barbiturates)[c]	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
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
Alcohol	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46.7
Approximate weighted N =	*2,627*	*2,865*	*3,065*	*3,598*	*3,172*	*3,240*	*3,578*	*3,602*	*3,385*	*3,269*	*3,274*	*3,077*	*3,271*	*3,231*	*2,806*	*2,549*	*2,476*

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. "‡" indicates some change in the question. See relevant footnote for that drug.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

[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.

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

TABLE 17 (cont.)
Trends in Availability of Drugs as Perceived by 12th Graders

Percentage saying "fairly easy" or "very easy" to get[a]

How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2008–2009 change
									12th Graders										
Marijuana	82.7	83.0	85.5	88.5	88.7	89.6	90.4	88.9	88.5	88.5	87.2	87.1	85.8	85.6	84.9	83.9	83.9	81.1	-2.7 s
Amyl/butyl nitrites	25.9	25.9	26.7	26.0	23.9	23.8	25.1	21.4	23.3	22.5	22.3	19.7	20.0	19.7	18.4	18.1	16.9	15.7	-1.3
LSD	44.5	49.2	50.8	53.8	51.3	50.7	48.8	44.7	46.9	44.7	39.6	33.6	33.1	28.6	29.0	28.7	28.5	26.3	-2.2
Some other hallucinogen[b]	29.9	33.5	33.8	35.8	33.9	33.9	35.1	29.5	34.5‡	48.5	47.7	47.2	49.4	45.0	43.9	43.7	42.8	40.5	-2.3
PCP	31.7	31.7	31.4	31.0	30.5	30.0	30.7	26.7	28.8	27.2	25.8	21.9	24.2	23.2	23.1	21.0	20.6	19.2	-1.4
Ecstasy (MDMA)	24.2	28.1	31.2	34.2	36.9	38.8	38.2	40.1	51.4	61.5	59.1	57.5	47.9	40.3	40.3	40.9	41.9	35.1	-6.9 sss
Cocaine	52.7	48.5	46.6	47.7	48.1	48.5	51.3	47.6	47.8	46.2	44.6	43.3	47.8	44.7	46.5	47.1	42.4	39.4	-3.0
Crack	43.5	43.6	40.5	41.9	40.7	40.6	43.8	41.1	42.6	40.2	38.5	35.3	39.2	39.3	38.8	37.5	35.2	31.9	-3.3
Cocaine powder	48.0	45.4	43.7	43.8	44.4	43.3	45.7	43.7	44.6	40.7	40.2	37.4	41.7	41.6	42.5	41.2	38.9	33.9	-5.0 ss
Heroin	34.9	33.7	34.1	35.1	32.2	33.8	35.6	32.1	33.5	32.3	29.0	27.9	29.6	27.3	27.4	29.7	25.4	27.4	+1.9
Some other narcotic (including methadone)	37.1	37.5	38.0	39.8	40.0	38.9	42.8	40.8	43.9	40.5	44.0	39.3	40.2	39.2	39.6	37.3	34.9	36.1	+1.2
Amphetamines	58.8	61.5	62.0	62.8	59.4	59.8	60.8	58.1	57.1	57.1	57.4	55.0	55.4	51.2	52.9	49.6	47.9	47.1	-0.8
Crystal methamphetamine (ice)	26.0	26.6	25.6	27.0	26.9	27.6	29.8	27.6	27.8	28.3	28.3	26.1	26.7	27.2	26.7	25.1	23.3	22.3	-1.1
Sedatives (barbiturates)[c]	44.0	44.5	43.3	42.3	41.4	40.0	40.7	37.9	37.4	35.7	36.6	35.3‡	46.3	44.4	43.8	41.7	38.8	37.9	-0.9
Tranquilizers	40.9	41.1	39.2	37.8	36.0	35.4	36.2	32.7	33.8	33.1	32.9	29.8	30.1	25.7	24.4	23.6	22.4	21.2	-1.2
Alcohol	—	—	—	—	—	—	—	95.0	94.8	94.3	94.7	94.2	94.2	93.0	92.5	92.2	92.2	92.1	-0.2
Steroids	46.8	44.8	42.9	45.5	40.3	41.7	44.5	44.6	44.8	44.4	45.5	40.7	42.6	39.7	41.1	40.1	35.2	30.3	-4.9 ss
Approximate weighted N =	2,586	2,670	2,526	2,552	2,340	2,517	2,520	2,215	2,095	2,120	2,138	2,391	2,169	2,161	2,131	2,420	2,276	2,243	

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001. "—" indicates data not available. "‡" indicates some change in the question. See relevant footnote for that drug.

Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding.

[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.

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

monitoring the future

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