

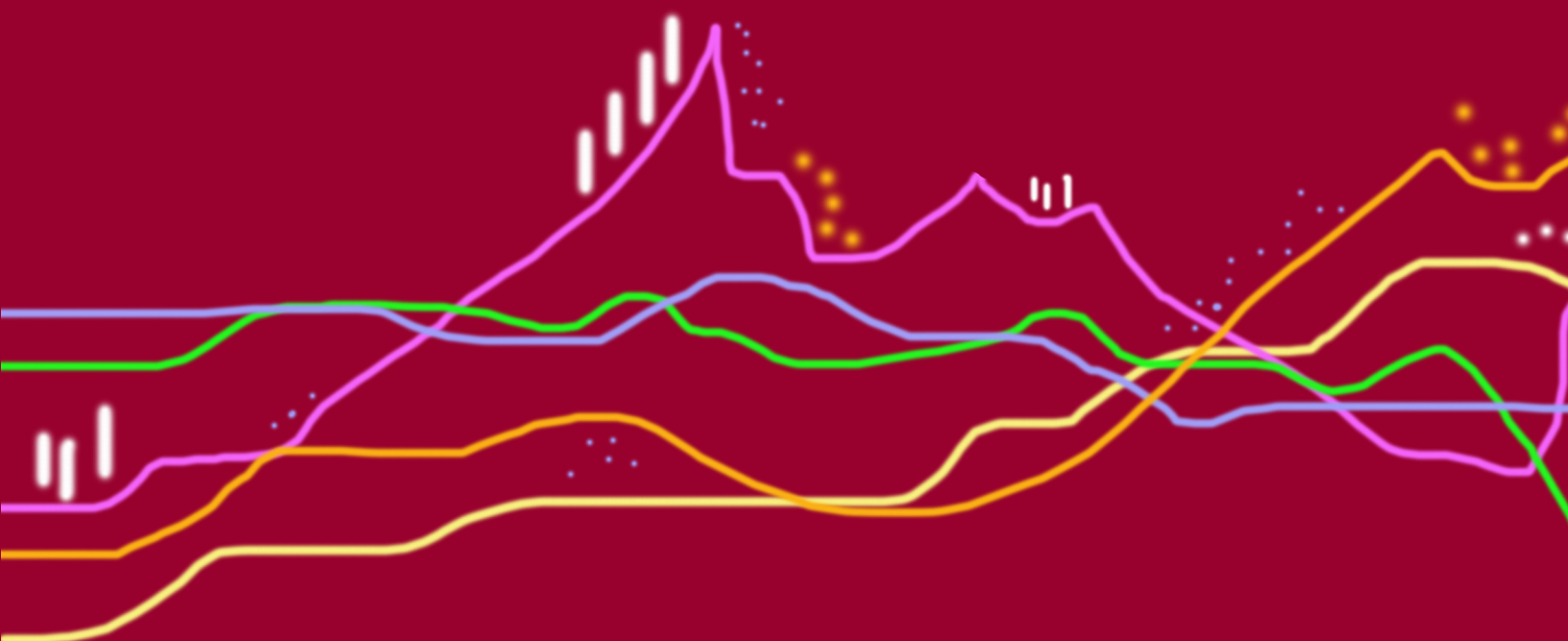
# MONITORING *the* FUTURE

NATIONAL SURVEY RESULTS  
ON DRUG USE  
1975–2013

## 2013 Overview

### Key Findings on Adolescent Drug Use

Lloyd D. Johnston  
Patrick M. O'Malley  
Richard A. Miech  
Jerald G. Bachman  
John E. Schulenberg



**Page intentionally left blank for printing.**

**MONITORING THE FUTURE**

**NATIONAL RESULTS ON  
DRUG USE**

**2013 Overview**

**Key Findings on Adolescent  
Drug Use**

by

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

The University of Michigan  
Institute for Social Research

Sponsored by:  
The National Institute on Drug Abuse  
National Institutes of Health

*This publication was written by the principal investigators and staff of the Monitoring the Future project at the Institute for Social Research, the University of Michigan, under Research Grant R01 DA 001411 from the National Institute on Drug Abuse.*

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

#### Public Domain Notice

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

#### Recommended Citation

Johnston, L. D., O'Malley, P. M., Miech, R. A., Bachman, J. G., & Schulenberg, J. E. (2014). *Monitoring the Future national results on drug use: 1975-2013: Overview, Key Findings on Adolescent Drug Use*. Ann Arbor: Institute for Social Research, The University of Michigan.

Institute for Social Research  
The University of Michigan  
Ann Arbor, Michigan  
Printed February 2014

# Contents

---

Click on any item below (in [blue](#)) to go directly to that page.

<a href="#">Introduction</a> .....	<a href="#">1</a>
<a href="#">Study Design and Methods</a> .....	<a href="#">3</a>
<a href="#">Summary of Key Findings</a> .....	<a href="#">5</a>
<a href="#">Specific Results by Drug</a>	
<a href="#">Any Illicit Drug</a> .....	<a href="#">9</a>
<a href="#">Marijuana</a> .....	<a href="#">11</a>
<a href="#">Synthetic Marijuana</a> .....	<a href="#">13</a>
<a href="#">Inhalants</a> .....	<a href="#">15</a>
<a href="#">LSD</a> .....	<a href="#">17</a>
<a href="#">Cocaine</a> .....	<a href="#">19</a>
<a href="#">Crack</a> .....	<a href="#">21</a>
<a href="#">Amphetamines</a> .....	<a href="#">23</a>
<a href="#">Methamphetamine and Crystal Methamphetamine (Ice)</a> .....	<a href="#">25</a>
<a href="#">Heroin</a> .....	<a href="#">27</a>
<a href="#">Other Narcotic Drugs, Including OxyContin and Vicodin</a> .....	<a href="#">29</a>
<a href="#">Tranquilizers</a> .....	<a href="#">31</a>
<a href="#">Sedatives (Barbiturates)</a> .....	<a href="#">33</a>
<a href="#">Ecstasy (MDMA) and Other “Club Drugs”</a> .....	<a href="#">35</a>
<a href="#">Alcohol</a> .....	<a href="#">37</a>
<a href="#">Cigarettes</a> .....	<a href="#">39</a>
<a href="#">Smokeless and Other Forms of Tobacco</a> .....	<a href="#">41</a>
<a href="#">Small Cigars and Tobacco Using a Hookah</a> .....	<a href="#">43</a>
<a href="#">Steroids</a> .....	<a href="#">45</a>
<a href="#">Subgroup Differences</a> .....	<a href="#">47</a>
<a href="#">Lessons Learned</a> .....	<a href="#">49</a>
<a href="#">Tables Covering All Drugs</a>	
1. <a href="#">Trends in Lifetime Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined</a> .....	<a href="#">51</a>
2. <a href="#">Trends in Annual Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined</a> .....	<a href="#">52</a>
3. <a href="#">Trends in 30-Day Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined</a> .....	<a href="#">53</a>
4. <a href="#">Trends in Daily Prevalence of Use of Selected Drugs for Grades 8, 10, and 12 Combined</a> .....	<a href="#">54</a>
5. <a href="#">Trends in Lifetime Prevalence of Use of Various Drugs in Grades 8, 10, and 12</a> .....	<a href="#">55</a>

## Contents (continued)

---

6.	Trends in Annual Prevalence of Use of Various Drugs in Grades 8, 10, and 12.....	59
7.	Trends in 30-Day Prevalence of Use of Various Drugs in Grades 8, 10, and 12.....	64
8.	Trends in 30-Day Prevalence of Daily Use of Various Drugs in Grades 8, 10, and 12.....	68
9.	Trends in Harmfulness of Drugs as Perceived by 8th Graders.....	72
10.	Trends in Harmfulness of Drugs as Perceived by 10th Graders.....	73
11.	Trends in Harmfulness of Drugs as Perceived by 12th Graders.....	74
12.	Trends in Disapproval of Drug Use in Grade 8.....	77
13.	Trends in Disapproval of Drug Use in Grade 10.....	78
14.	Trends in Disapproval of Drug Use in Grade 12.....	79
15.	Trends in Availability of Drugs as Perceived by 8th Graders.....	81
16.	Trends in Availability of Drugs as Perceived by 10th Graders.....	82
17.	Trends in Availability of Drugs as Perceived by 12th Graders.....	83

## Introduction

---

Monitoring the Future (MTF) is a long-term study of American adolescents, college students, and adults through age 55. It has been conducted annually by the University of Michigan's Institute for Social Research since its inception in 1975 and is supported under a series of investigator-initiated, competing research grants from the National Institute on Drug Abuse.

The need for a study such as 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, 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 uniquely designed to generate such data in order to provide an accurate picture of what is happening in this domain and why, and the study has served that function well for the past 39 years. Policy discussions in the media, in government, education, public health institutions, and elsewhere have been informed by the ready availability of extensive and consistently accurate information from the study relating to a large number of substances. Similarly, the work of organizations and agencies providing prevention and treatment services is informed by MTF.

The 2013 MTF survey encompassed about 41,700 8th-, 10th-, and 12th-grade students in 389 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 project 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

2013 survey follow this introductory section. These are in turn 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 it would be fairly or very easy to get 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.<sup>1</sup> For the sake of brevity, we present these prevalence statistics here only for the 1991–2013 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 2012 and 2013) are statistically significant (in the text below, 's' indicates  $p \leq .05$ , 'ss' indicates  $p \leq .01$ , 'sss' indicates  $p \leq .001$ , and 'ns' indicates not 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 2014.<sup>2</sup> *Volume I* 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 and of trends over time. The most recent such volume is always available on the MTF website,

<sup>1</sup>Prevalence refers to the proportion or percentage of the sample reporting use of the given substance on one or more occasions in a given time interval—e.g., lifetime, past 12 months, or past 30 days. For most drugs, the prevalence of daily use refers to reported 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 binge drinking, defined as having 5+ drinks on at least one occasion in the prior two weeks.

<sup>2</sup>The most recent publication in this series is Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2013). *Monitoring the Future national survey results on drug use, 1975–2012: Volume I, Secondary school students*. Ann Arbor: Institute for Social Research, The University of Michigan, 615 pp.

[www.monitoringthefuture.org](http://www.monitoringthefuture.org), listed under Publications.

MTF's findings on American college students and adults through age 55 are not covered in this early *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 2014.<sup>3</sup> 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 35 years old, was added to

the series in 2009.<sup>4</sup> For the publication years prior to 2010, the volumes in these annual series are available from the NIDA Drug Publications Research Dissemination Center at 877-NIDA-NIH (877-643-2644); or by e-mail at [http://drugpubs.drugabuse.gov](mailto:drugpubs@drugabuse.gov). Beginning with the 2010 publication date, the volumes are available electronically at the MTF website. 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 at [www.monitoringthefuture.org](http://www.monitoringthefuture.org).

<sup>3</sup>The most recent publication in this series is: Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2013). *Monitoring the Future national survey results on drug use, 1975–2012: Volume II, College students & adults ages 19–50*. Ann Arbor: Institute for Social Research, The University of Michigan, 400 pp.

<sup>4</sup>The most recent publication in this series is: Johnston, L. D., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2013). *HIV/AIDS: Risk and protective behaviors among American young adults, 2004–2012*. Ann Arbor: Institute for Social Research, The University of Michigan, 123 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 2013 marked the 39th national survey of 12th graders and the 23rd national survey of 8th and 10th graders.

### Sample Sizes

The 2013 sample sizes were about 15,200, 13,300, and 13,200 in 8th, 10th, and 12th grades, respectively. In all, about 41,700 students in 389 secondary schools participated. Because multiple questionnaire forms are administered randomly at each grade level to increase coverage of attitudinal and behavioral domains relevant to substance use, 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 the student classroom 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 are 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 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, OxyContin, Vicodin, and several other drugs.

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 (if any) 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 or use a drug—for example, ". . . try marijuana once or twice." The answer categories are "no risk," "slight risk," "moderate risk," "great risk," and "can't say, drug unfamiliar." Parallel questions refer to using marijuana "occasionally," and using it "regularly."

*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 calculation of percentages.

*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 calculation of percentages.

## Summary of Key Findings

---

As an ongoing study, MTF is designed to detect age effects, secular trends, and cohort effects in substance use and related attitudes and beliefs. Age effects are common during adolescence, and we typically find that use and positive attitudes and beliefs about use increase across 8th, 10th, and 12th grades. Changes over time in substance use and related attitudes and beliefs that cut across the three grades reflect secular trends, which are also common.

Cohort effects pertain to differences in substance use and related attitudes and behaviors among those born at different times that maintain as the cohorts age. Such cohort effects sometimes drive changes in substance use prevalence at the population level. For example, much of the decline in the prevalence of U.S. cigarette smoking has its roots in youth cohorts that did not take up smoking and then continued to resist smoking as they aged into adulthood. As subsequent youth cohorts continued to avoid smoking and then grew older, these cohorts contributed to a decline in the population prevalence of smoking. Cohort effects can also act in the opposite direction, with newer cohorts taking up a substance and continuing to use it as they get older. One important contribution of the MTF study has been the specification of cohort effects that have emerged since the early 1990s, when an increase in youth substance use occurred for many drugs.

MTF allows detection of cohort effects at an early age through comparison of substance use prevalence of 8th, 10th, and 12th graders relative to each other. Often 8th grade substance use is a bellwether, and year-to-year changes that are unique to 8th grade can signify an emerging increase or decrease in substance use at later ages with some time lag.

The analyses and associated tables that follow present substance trends for all three grades separately, as well as trends in key attitudes, in beliefs, and in perceived availability. In a number of cases we provide insight into the age and cohort effects and secular trends that underlie trends in use and in key attitudes and beliefs.

Since 2008, we include an additional set of tables to provide an overview of drug use trends for the three grades combined (Tables 1–4). This information gives

a summary of the general nature of historical trends over the last several years. Also, for trends that are in the same direction and magnitude across all three grades, combined analyses provide greater statistical power to detect trends that are statistically significant.

### Illicit Drugs Increasing in Use in 2013

Annual prevalence of using *any illicit drug* increased in all three grades: by 1.5 percentage points in 8th grade (s), 1.6 percentage points in 10th (ns), and 0.6 percentage points in 12th (ns). For the three grades combined the rate was up by 1.3 percentage points (s) in 2013.

These modest overall increases in the index of any illicit drug use are driven primarily by increases in marijuana use. Indeed, the index of using *any illicit drug other than marijuana* was fairly stable this year. Annual prevalence of *marijuana* was up in 8th and 10th grades, albeit by non-significant amounts, increasing by 1.2 and 1.8 percentage points respectively. In 12th grade, annual use of marijuana remained unchanged (0.0). For the three grades combined, annual prevalence of marijuana was up by 1.1 percentage points (ns).

Of particular importance, *perceived risk* associated with marijuana use continued to decline sharply in all three grades—a decline that began around 2005. Disapproval also declined somewhat in 2013. These changes often presage increases in marijuana prevalence in the future. Perceived availability remained relatively stable.

### Illicit Drugs Declining in Use in 2013

*Synthetic marijuana* use declined in 2013 by 3.4 percentage points (sss) to 7.9% among 12th graders, by 1.3 percentage points (ns) to 7.4% among 10th graders, and by 0.4 percentage points (ns) to 4.0% among 8th graders. This reflects nearly a one-third decline in use at 12th grade in a single year. For the three grades combined, the 1.6 percentage point decline from 8.0% to 6.4% is highly significant (sss).

Use of *inhalants* also declined in 2013. The sharpest decline occurred among 8th graders, the grade with the highest prevalence, and dropped by 1.1 percentage points to 5.2% (s). Annual prevalence also dropped in

the 10th and 12th grades, by -0.6% (ns) and -0.4% (ns).

*Vicodin* use for nonmedical purposes significantly declined in use among 12th graders; its annual prevalence fell from 7.5% in 2012 to 5.3% in 2013 (ss). However, the lower grades showed virtually no change, though use has declined significantly in all grades since 2008.

*Salvia divinorum*, an herb in the mint family with hallucinogenic effects, also showed declines in all three grades in 2013 (significant in 12th), with annual prevalence at 1.2%, 2.3%, and 3.4% in grades 8, 10, and 12, respectively.

### Illicit Drugs Holding Steady in 2013

The use of a number of drugs held steady in 2013. These include *cocaine* (both powder and ‘crack’ forms), *LSD*, *amphetamines*, *MDMA* (lately marketed as “molly,” a reputedly purer form of ecstasy), *crack*, *methamphetamine*, *crystal methamphetamine*, *heroin*, *Rohypnol*, *Ketamine*, *steroids*, and *sedatives*. Also holding steady was the nonmedical use of the prescription drugs *Adderall*, *Ritalin*, *Oxycontin* and the omnibus category *any prescription drug taken without medical supervision*.

The *psychotherapeutic drugs* warrant special attention, given that they now make up a significantly larger part of the overall U.S. drug problem than was true 10–15 years ago. In part this is because use increased for many prescription drugs over that period, and in part because use of a number of street drugs has declined substantially since the mid- to late-1990s. It seems likely that young people are less concerned about the dangers of using these prescription drugs outside of medical regimen 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 psychotherapeutic drugs are now being advertised directly to the consumer, which implies that they are both widely used and safe to use. Fortunately, the use of most of these drugs has either leveled or begun to decline in the past few years. The proportion of 12th graders misusing *any* of these prescription drugs (i.e., amphetamines, sedatives, tranquilizers, or narcotics other than heroin) in the prior year leveled at 15.0%—

about where it has been since 2008 and down slightly from 17.1% in 2005.

Use of *bath salts*, a class of synthetic drugs that have mostly been sold over the counter, showed a slight increase in 8th and 10th grades and some decline in 12th grade. In 2013 annual prevalence rose by 0.1 percentage points (ns) to 1.0% in 8th grade and by 0.3 percentage points (ns) to 0.9% in 10th grade. In 12th grade, where most of the use had been concentrated, it declined by 0.4 percentage points to 0.9% annual prevalence (ns). For the three grades combined there was 0.0% change.

*Perceived risk* of *bath salts* rose very sharply in all three grades in 2013, and was highest in 12th grade where the decline in use occurred. Word seems to be reaching teens about the dangers of synthetic drugs, which may well explain why bath salt use remained at quite low levels in all three grades and appeared to have fallen some in 12th grade. (Despite the nearly one-third decline in annual prevalence in 12th grade, it did not reach statistical significance due to the limited numbers of cases.)

*Ecstasy (MDMA)* is of particular interest this year because of the advent of “Molly,” reputed to be a purer form of ecstasy (though we do not know how many young people recognize it as such). There has been a considerable amount of mention of Molly in the media, but we have not observed any appreciable change in reported use of ecstasy. In 2013 annual prevalence was unchanged at 8th grade, up 0.6 percentage points (ns) to 3.6% in 10th grade, and up 0.2 percentage points (ns) to 4.0% in 12th grade (Table 12). Nor was there any perceptible change in *perceived risk*, *disapproval*, or *perceived availability* of ecstasy (Figure 12). In the forthcoming 2014 survey the questions on ecstasy use will give “Molly” as an example, in case some users do not realize that it is a form of ecstasy.

### Tobacco and Alcohol Use

*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 2013, current smoking fell very considerably in these grades (by 79% and 70%, respectively). However, the decline in use had decelerated in recent years, and in 2010 there was a suggestion of some increase in smoking rates among 8th and 10th graders (though not statistically

significant). In 2011, and again in 2012 and 2013, use decreased among 8th and 10th graders (the 2013 drop was significant for 10th graders). For 12th graders, peak use occurred in 1997 at 37%, and has shown a more modest decline since then, dropping to 16% in 2013. Because of the strong cohort effect that we have consistently observed for cigarette smoking, we expect use at 12th grade to continue to show declines, as the lighter using cohorts of 8th and 10th graders become 12th graders.

*Lifetime* prevalence of cigarette use also continues its long-term decline. It dropped in 2013 in all three grades: to 15% in 8th grade (-0.8, ns), to 26% in 10th grade (-2.1, s), and to 38% in 12th grade (-1.4, ns). For the three grades combined, it was down 1.4 percentage points (s). Fewer young people initiating smoking is an important reason for the large declines in current use. The proportion of students who have *ever tried* cigarettes has fallen from peak levels reached in 1996 or 1997 by 70%, 58%, and 42% in the three grades, respectively.

Overall increases in perceived risk and disapproval appear to have contributed to the downturn in cigarette use. Perceived risk increased substantially and steadily in all grades from 1995 through 2004, after which it leveled in 8th and 10th grades; however, it 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. All three grades showed slight increases in perceived risk and in disapproval in 2012, but in 2013 the increases in perceived risk and disapproval halted in all three grades.

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.

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 remained in 2013. Similar changes occurred in 10th and 12th grades. Thus, at the

present time, smoking is likely to make an adolescent less attractive to the great majority of potential romantic partners. However, most of the negative connotations of smoking and smokers have leveled off in the past few years. In addition to changes in attitudes and beliefs about smoking, price likely also played an important role in the decline in use. 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. More recently there was a significant increase in the federal tobacco tax passed in 2009, which may have contributed to the continuation of the decline in use since then.

***Smokeless tobacco.*** The mid-1990s to the early 2000s saw a substantial decline in smokeless tobacco use, but the declines ended and a rebound in use developed from the mid-2000s through 2010. Since 2010, there have been modest declines in all three grades. (The three-year declines are not statistically significant at any grade level, nor are the one-year or three-year declines for the three grades combined.) Perceived risk and disapproval appear to have played important roles in the earlier decline in smokeless tobacco use. In all three grades, perceived risk and disapproval rose fairly steadily from 1995 through 2004, as use was falling. However, there was not much change between 2004 and 2010, suggesting that other factors may have led to the increases in smokeless tobacco use during that time interval. These factors might include increased promotion of these products, a proliferation of types of smokeless tobacco products available, and increased restrictions on places where cigarette smoking is permitted. The decline or leveling in smokeless use since 2010 may be attributable, at least in part, to the 2009 increase in federal taxes on tobacco. Perceived risk declined significantly in 2012 among both 8th and 10th graders and among 10th graders again in 2013, which could portend a future rise in use.

***Alcohol*** remains the substance most widely used by today’s teenagers. Despite recent declining rates, seven out of every ten students (68%) have consumed alcohol (more than just a few sips) by the end of high school, and three out of ten (28%) have done so by 8th grade. In fact, about half (52%) of 12th graders and one eighth (12%) of 8th graders in 2013 reported having been drunk at least once in their life.

Alcohol use began a substantial decline in the 1980s. To some 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 to mid-1990s, though it was a proportionally smaller increase than was seen for cigarettes and most of the illicit drugs. Fortunately, binge drinking rates leveled off in the early 2000s,

just about when the illicit drug rates began to turn around, and in 2002 a drop in drinking and drunkenness resumed in all grades. Gradual declines continued into 2013, which marked the lowest levels for drunkenness and alcohol use in all three grades ever recorded by the survey.



## Any Illicit Drug

---

MTF routinely reports three different indexes of illicit drug use—any illicit drug, any illicit drug other than marijuana, and any illicit drug including inhalants.<sup>5</sup> 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 and measurement of these indexes constant. Levels would be little affected by the inclusion of newer substances, primarily because most individuals using newer ones 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 that includes inhalants was added.

### 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 shown in the first (upper left) panel on the facing page.<sup>6</sup> 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% by 1992—the low point. After 1992—in what we have called the “relapse phase” in the epidemic—the proportion rose considerably to a recent high point of 55% in 1999; it then declined gradually to 47% in 2009, before rising slightly to 50% by 2013.

Trends for *annual*, as opposed to lifetime, prevalence are shown in the second (upper right) panel. They are quite parallel to those for lifetime prevalence, but at a lower level. 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 the annual use rates in all three grades were higher in 2013 (including a significant increase for 8th graders).

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 also report an index that excludes marijuana and shows the proportions of students who use any of the other 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 over a decade 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 apparent upward shift in the estimate was an artifact due to a change in the question wording for “other hallucinogens” and tranquilizers.<sup>7</sup>) Lifetime prevalence among 12th graders then fell slightly, to 24% by 2009, about where it remained in 2012 (24%) and 2013 (25%). The fourth (lower right) 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. It has been dropping fairly steadily and gradually in all three grades in recent years, but leveled in 2013.

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.

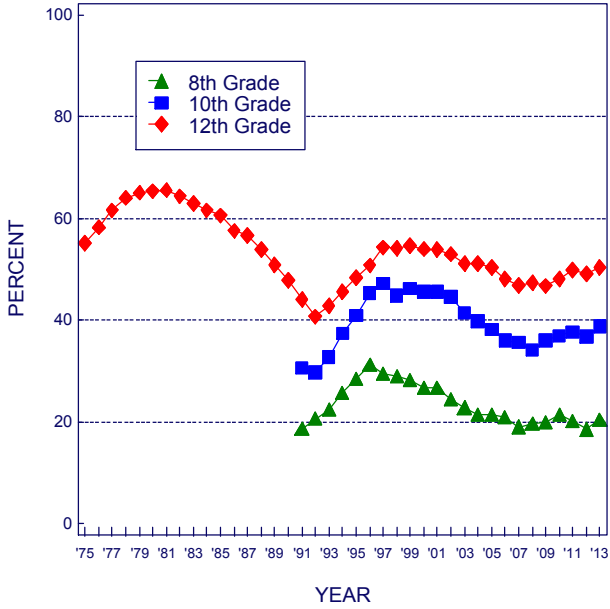
<sup>5</sup>Footnote ‘a’ to Tables 5 through 8 provides the exact definition of any illicit drug.

<sup>6</sup>This is the only set of figures in this *Overview* presenting lifetime use statistics. Lifetime statistics for all drugs may be found in Table 5.

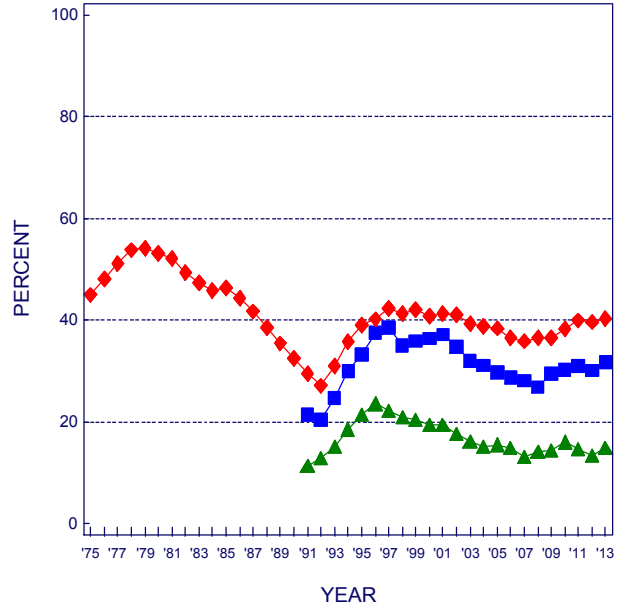
<sup>7</sup>The term psychedelics was replaced with hallucinogens, and shrooms was added to the list of examples, resulting in somewhat more respondents indicating use of this class of drugs. For tranquilizers, Xanax was added to the list of examples given, slightly raising the reported prevalence of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

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

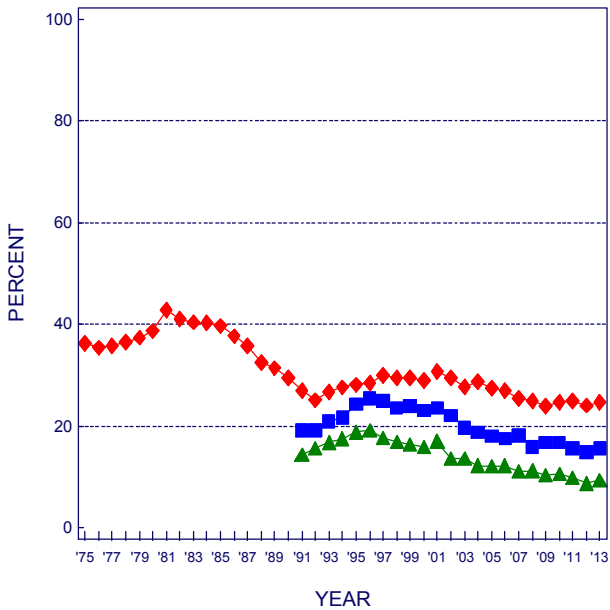
**% who used any illicit drug in lifetime**



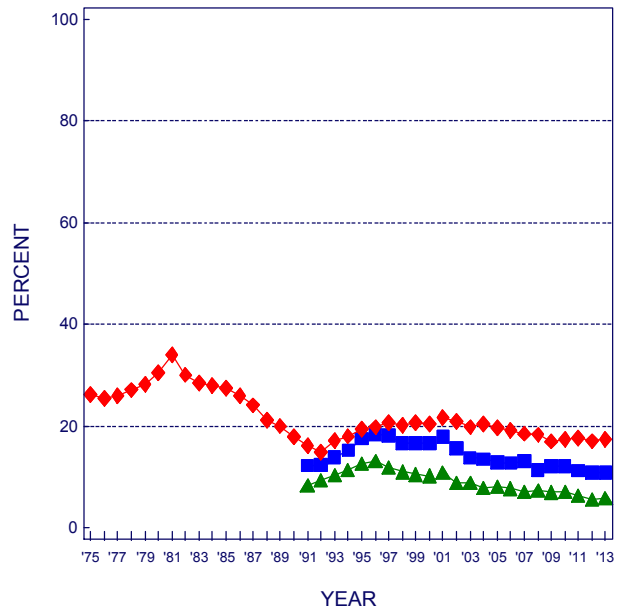
**% who used any illicit drug in last 12 months**



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



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



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

\*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.



# Marijuana

---

Marijuana has been the most widely used illicit drug throughout MTF's 39 year history. It can be taken orally, mixed with food, and smoked, including in a concentrated form as hashish—the use of which is much more common in Europe. The great majority of recreational use in the U.S. involves smoking it in rolled cigarettes (“joints”), in pipes or water pipes, or 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, 2007, or 2008; after the declines, an upturn occurred in use in all three grades, lasting for three years in the lower grades and longer in grade 12. Among 8th graders, there was some decline in use in 2011 and 2012, but an increase in 2013. Among 10th graders, use leveled in 2012 but increased in 2013. Among 12th graders, use leveled in 2012 and 2013. (None of the 1-year changes in 2013 were significant.) As shown in Table 8, *daily* use increased (significantly) in 2010 in all three grades, to 1.2% (8th), 3.3% (10th), and 6.1% (12th). For 2013, the corresponding figures were 1.1%, 4.0%, and 6.5%, reflecting little change since 2010 in 8th grade but slight increases in 10th and 12th.

## Perceived Risk

The proportion of students seeing great risk from using marijuana regularly 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 of use. 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 a bit in all grades through 2004 as use decreased. Since 2004 and 2005 in 8th and 12th grades respectively, (and since 2008 in 10th grade) perceived risk has fallen substantially, presaging the more recent resurgence in marijuana use; but no increase in perceived risk preceded the leveling of use in 2012. Perceived risk did decline some in all grades in 2012 and again in 2013 as use rose in 8th and 10th grades.

## Disapproval

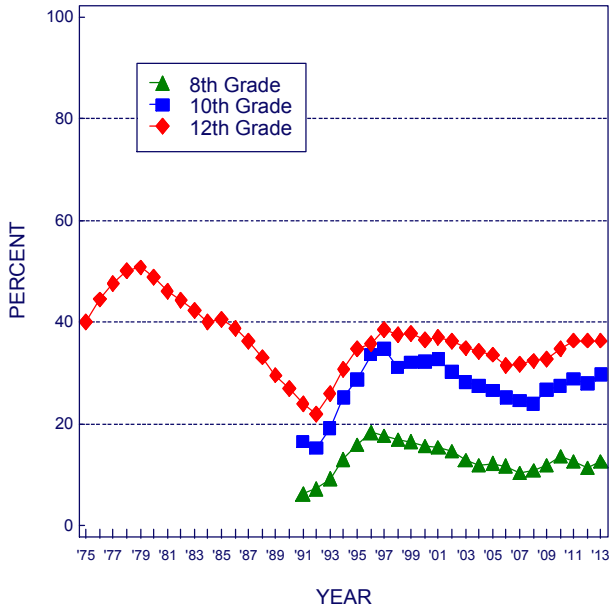
Personal disapproval of trying marijuana fell considerably among 8th graders between 1991 and 1996 and among 10th and 12th graders between 1992 and 1997—by 17, 21, and 19 percentage points, respectively, over those intervals of increasing use. After that there was some modest increase in disapproval among 8th graders, but not much among 10th and 12th graders until 2004, when the lower grades showed increases. From 2003 to 2007 (2008 in the case of 10th graders) disapproval increased in all three grades, but declined some since then as use rose. As is often the case, perceived risk fell before disapproval.

## Availability

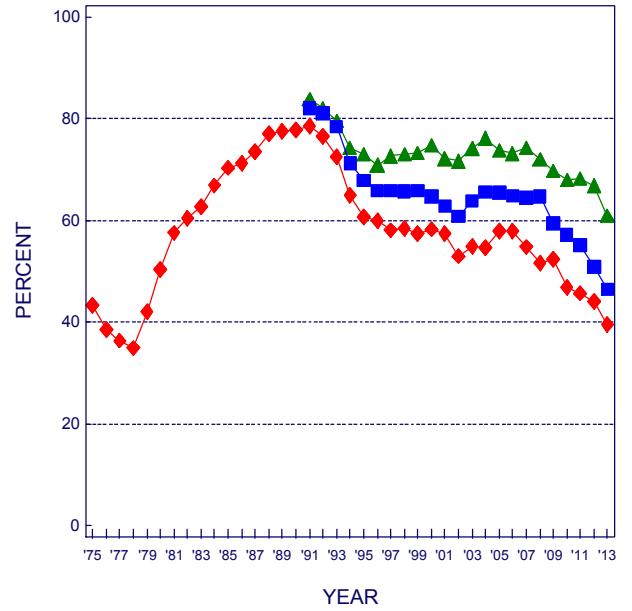
Ever since the MTF study began in 1975, between 81% and 90% of 12th graders each year have said that they could get marijuana fairly easily or very easily if they wanted some. It has been considerably less accessible to younger adolescents. Still, in 2013, 39% of 8th graders, 70% of 10th graders, and 81% of 12th graders reported it as being fairly or very easy to get. It thus seems clear that marijuana has remained highly accessible to the older teens.

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

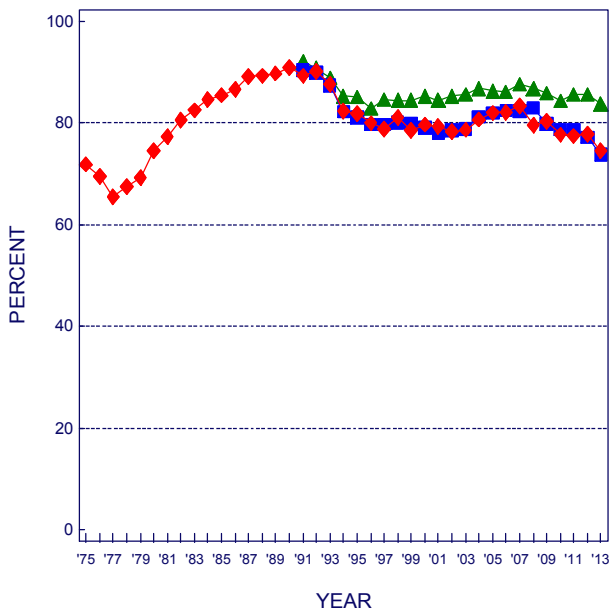
**Use**  
 % who used in last 12 months



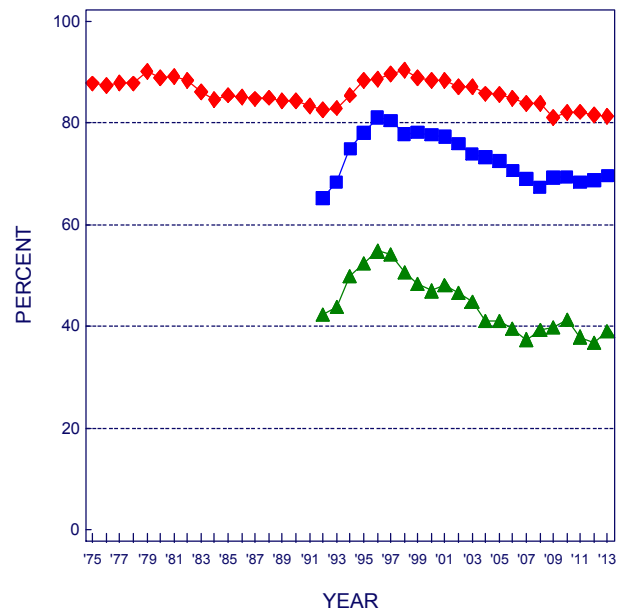
**Risk**  
 % seeing "great risk" in using regularly



**Disapproval**  
 % disapproving of using regularly



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



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

# Synthetic Marijuana

---

Synthetic marijuana has generally been sold over-the-counter under such labels as Spice and K-2. It usually contains some herbal materials that have been sprayed with one or more of the designer chemicals that fall into the cannabinoid family. Until March of 2011 these drugs were not scheduled by the Drug Enforcement Administration, so they were readily and legally available on the Internet and in head shops, gas stations, etc. However, the DEA scheduled some of the most widely used chemicals beginning March 1, 2011, making their possession and sale no longer legal; a subsequent law in July 2012 expanded the list of banned chemicals.

## Trends in Use

MTF first addressed the use of synthetic marijuana in its 2011 survey, by asking 12th graders about their use in the prior 12 months (which would have covered a considerable period of time prior to the drugs being scheduled). Annual prevalence was found to be 11.4%, making synthetic marijuana the second most widely used class of illicit drug after marijuana among 12th graders. Despite the DEA's intervention, use among 12th graders remained unchanged in 2012 at 11.3%, which suggests either that compliance with the new scheduling has been limited or that

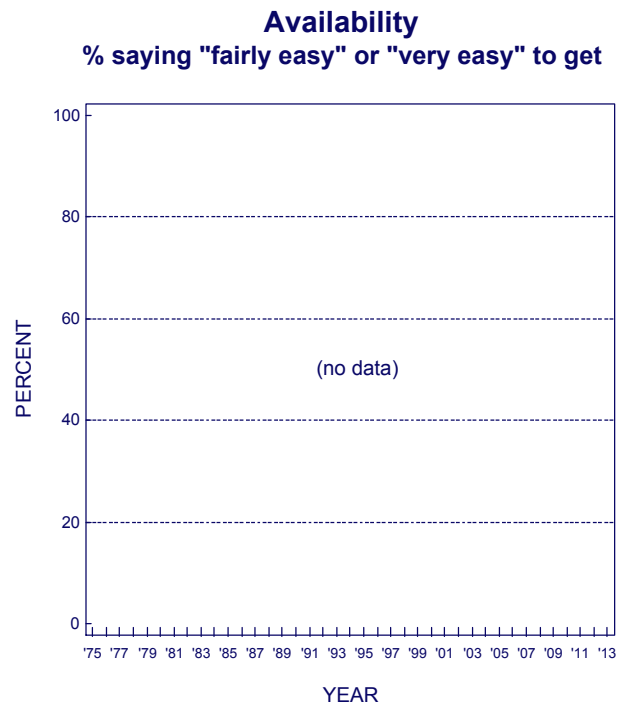
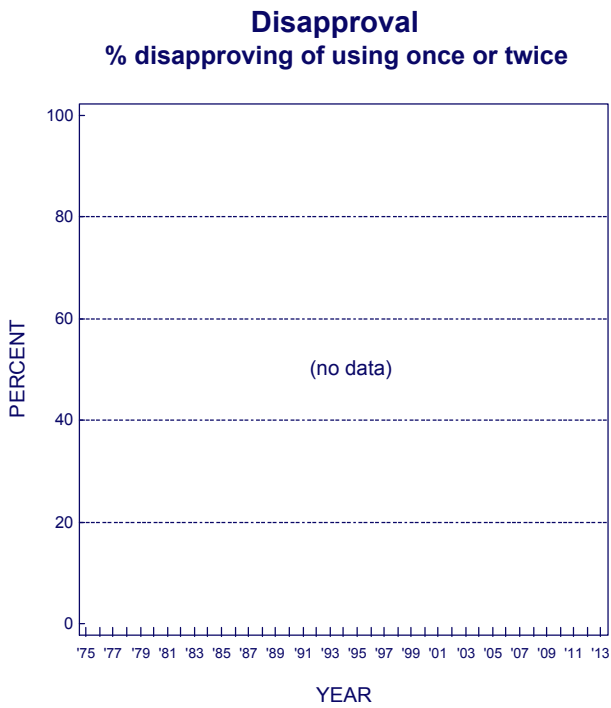
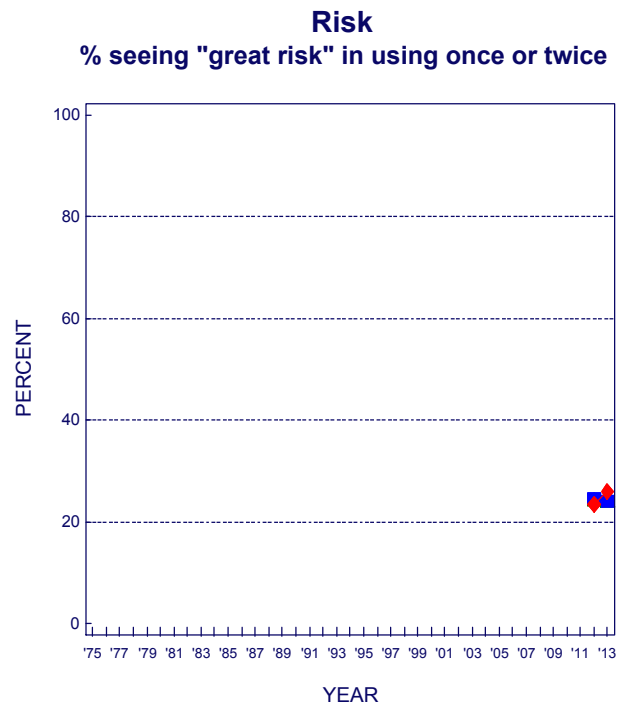
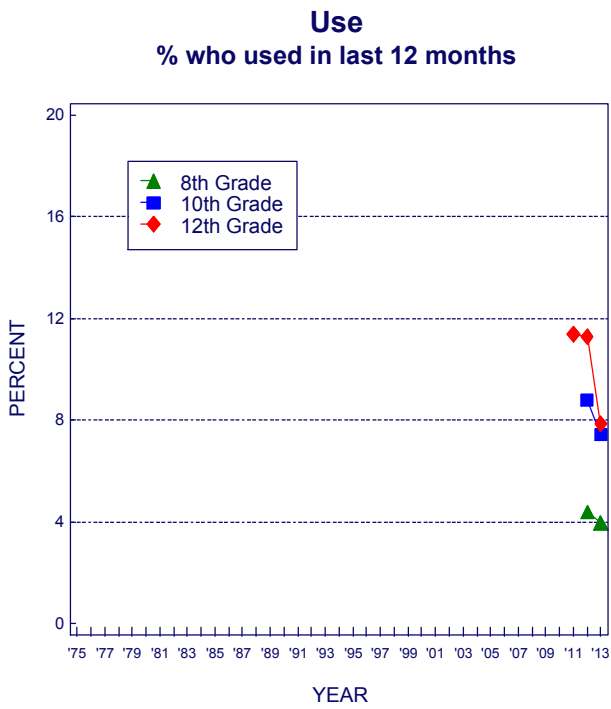
producers of these products have succeeded in continuing to change their chemical formulas to avoid using the ingredients that have been scheduled. In 2012 for the first time 8th and 10th graders were asked about their use of synthetic marijuana; annual prevalence rates were 4.4% and 8.8%, respectively. Use in all 3 grades dropped in 2013, but the decline was significant only among 12th graders. The 2013 rates were 4.0%, 7.4%, and 7.9% for 8th, 10th, and 12th graders, respectively. Among 8th graders, this was the third highest category of illicit drug being used after marijuana and inhalants.

## Perceived Risk

All three grades were asked about whether they associate great risk with trying synthetic marijuana once or twice, and as can be seen on the facing page, there is a quite low level of perceived risk obtained (between 24% and 26%) for experimental use. Likely the availability of these drugs over the counter has had the effect of communicating to teens that they must be safe, though they are not.<sup>8</sup>

<sup>8</sup> No questions have been asked about personal disapproval or perceived availability of synthetic marijuana.

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



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

## 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 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 use of inhalants at an early age 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

Inhalant use (excluding the use of nitrite inhalants) by 12th graders rose gradually from 1976 to 1987, which was somewhat unusual because most other forms of illicit drug use were in decline during the 1980s. Use of inhalants rose among 8th and 10th graders from 1991, when they were first included in the study, through 1995, and among 12th graders from 1992 to 1995. All grades then exhibited a fairly steady and substantial decline in use through 2001 or 2002. After 2001 the grades diverged somewhat in their trends: 8th graders showed a significant increase in use for two years, followed by a decline from 2004 to 2013, including a significant decline in annual use in 2013; 10th graders showed an increase after 2002 but a considerable decline since 2007; and 12th graders showed a brief increase from 2003 to 2005 but also a considerable decline since then. For the three grades combined, annual use declined significantly in both 2012 and 2013, by 0.6 and 0.7 percentage points, respectively.

### 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, and no other drugs showed a turnaround in use at that point. However, the degree of risk associated with inhalant use declined steadily between 2001 and 2008 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 generational forgetting of those hazards has likely taken place as replacement cohorts who were too young to get that earlier message have entered adolescence. The decline in perceived risk is worrisome, though the decline did halt as of 2008, and perceived risk has not changed much since then. In this case, the decline in perceived risk (between 2002 and 2008) did not translate into a surge in use.

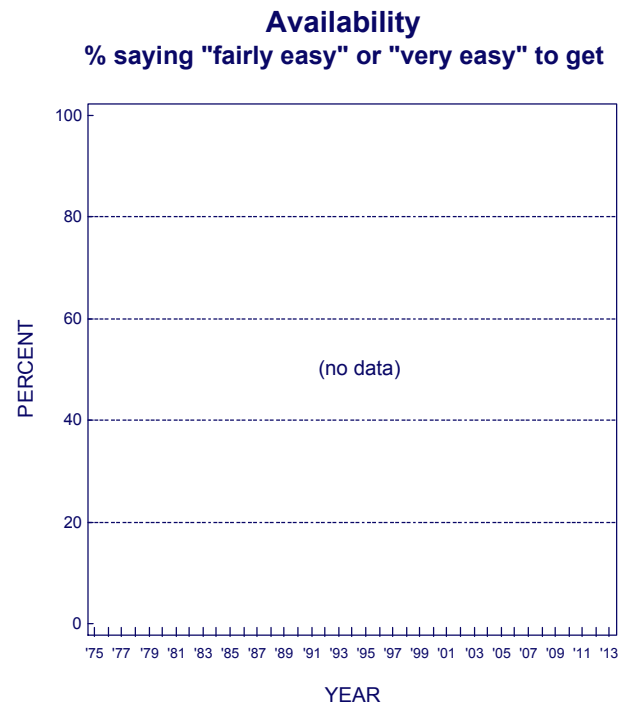
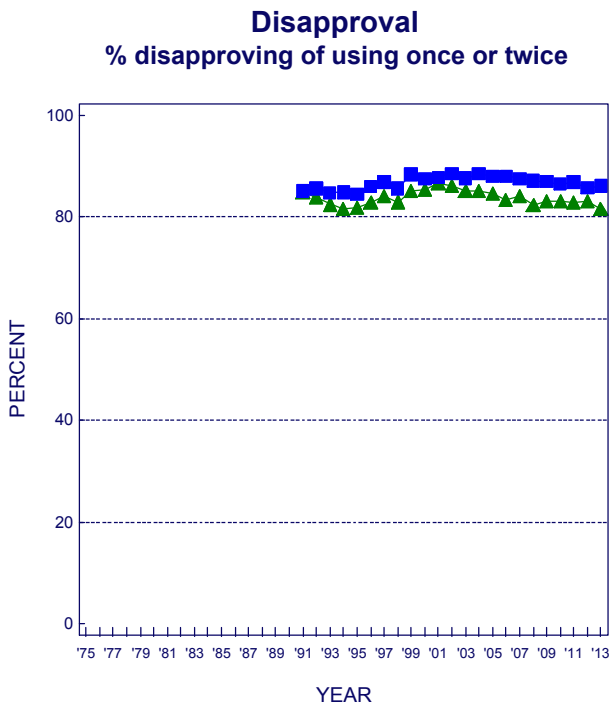
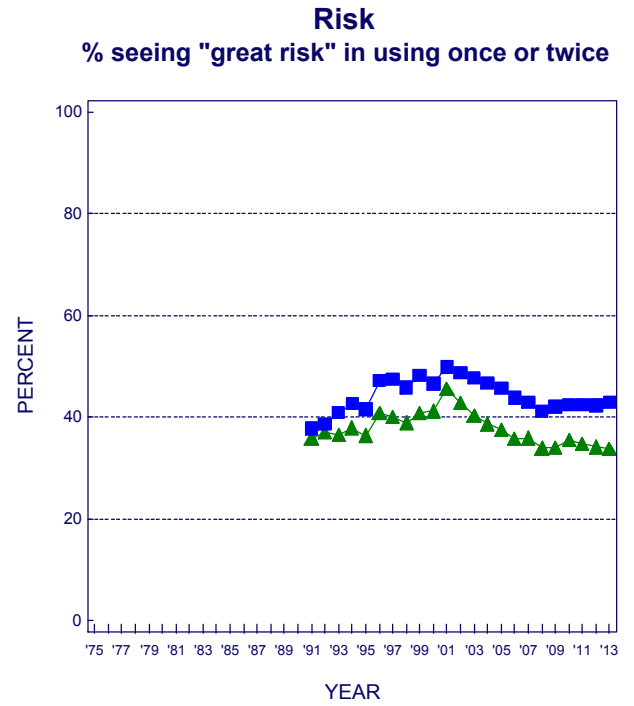
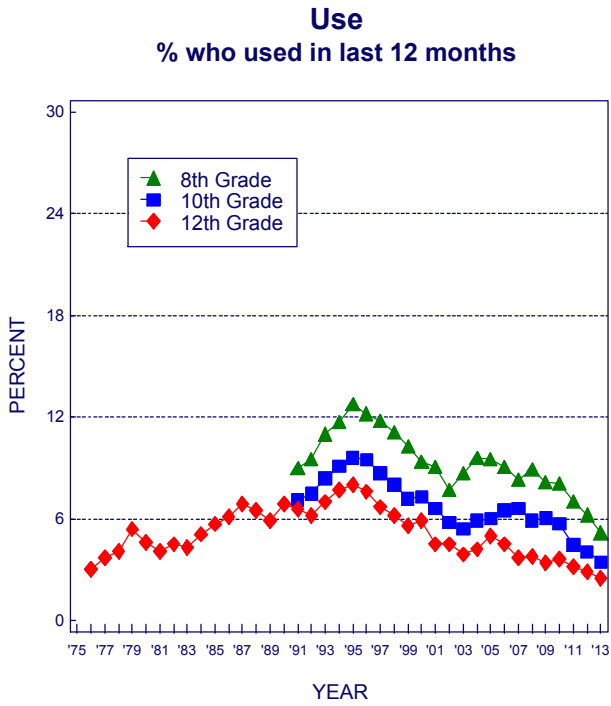
### Disapproval

Over 80% of 8th and 10th grade students say that they would disapprove of even trying an inhalant. (The question was not asked of 12th graders.) 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 in both grades, although the decrease appears to have halted.

### Availability

Respondents have not been asked about the availability of inhalants, because we assume 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



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

## LSD

---

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. Between 1996 and 2006 or so, use declined in all three grades, with particularly sharp declines between 2001 and 2003. Since then use has remained at historically low levels.

### 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 declined steadily and substantially among 8th graders until 2007, when it leveled; it declined considerably among 10th graders before leveling around 2002, dropping through 2007 and then leveling after that. Among 12th graders, perceived risk has held fairly steady since 2002. 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 percentages who respond “can’t say, drug unfamiliar” to questions about LSD have risen in recent years, consistent with the notion of “generational forgetting.”)

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 were contributing to the downturn—prior to 2001 some displacement by ecstasy may have been a factor, while more recently a decline in availability (discussed below) likely is a factor.

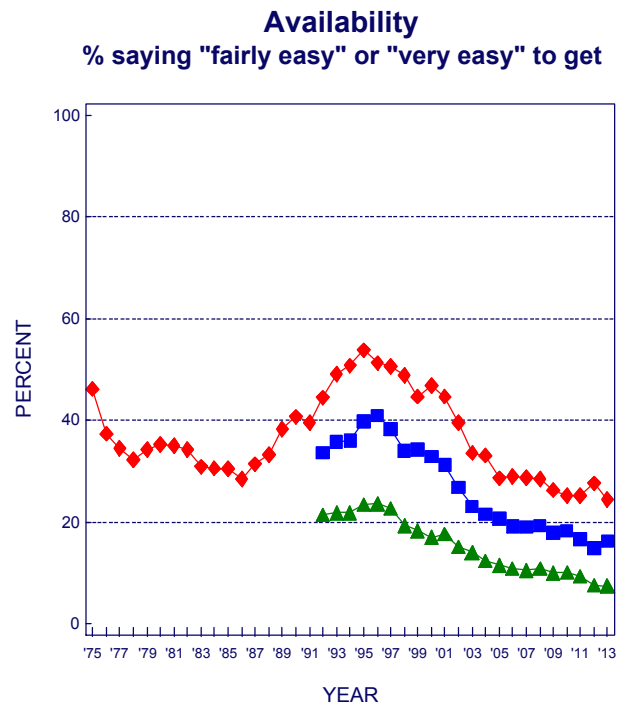
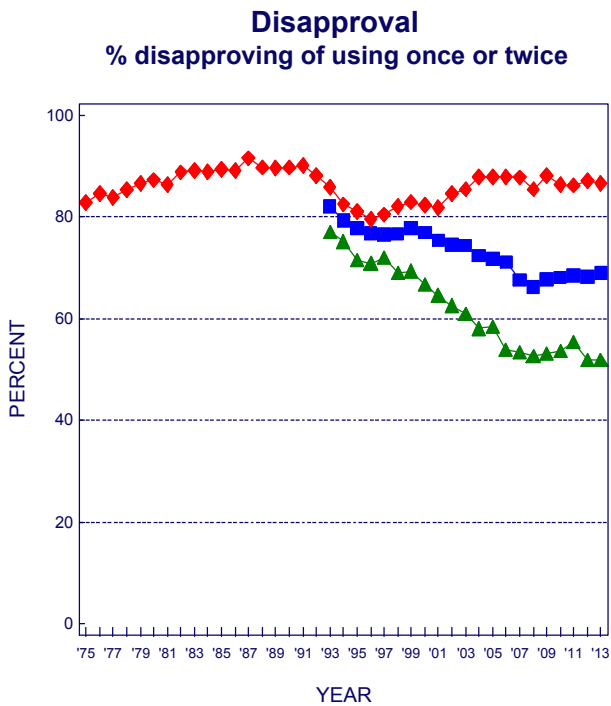
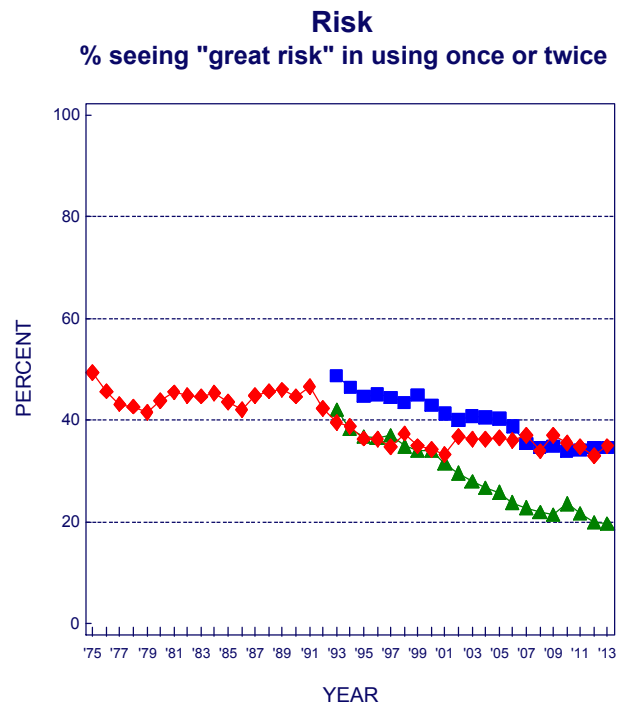
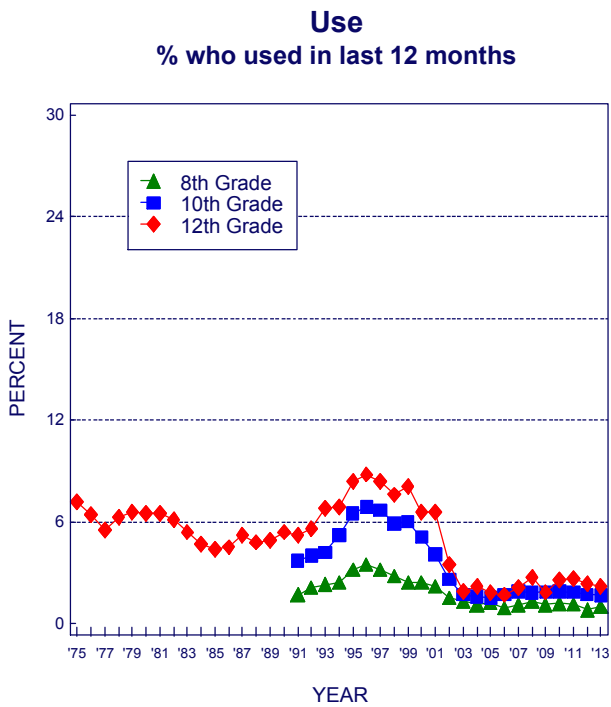
### Disapproval

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 through 2008; thus the base for disapproval has shrunk, suggesting that the real decline of disapproval among the younger students is less than it appears here. All three grades remained fairly level in 2013.

### 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 availability in all three grades, including a significant decrease for 8th and 10th graders in 2012, quite possibly in part because fewer students have LSD-using friends from whom they could gain access. There was also very likely a decrease in supply due to the closing of a major LSD-producing lab by the Drug Enforcement Administration 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



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



# Cocaine

---

Cocaine was used almost exclusively in powder form for some years, though “freebasing” emerged for a while. Then the early 1980s brought the advent of crack cocaine. Our original questions did not distinguish among different forms of cocaine or modes of administration. Since 1987, though, we have asked separate questions about the use of crack and “cocaine other than crack,” which has consisted 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 during the relapse phase of the overall drug epidemic and doubled before declining by 2000. Use also rose among 8th and 10th graders after 1992 before reaching peak levels in 1998 and 1999. Over the last decade, use declined in all three grades; 12th-grade use stands at an historical low of just 2.6% in 2013, with use by 8th and 10th graders still lower.

## Perceived Risk

Questions about the dangers of cocaine in general (without specifying any particular form 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 latter half of the 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.<sup>9</sup> Perceived risk continued to rise through 1991 as the fall in use continued. a Perceived risk declined modestly from 1991 to 2000, and use rose from 1992–2000. Perceived risk has leveled in recent years at far higher levels than existed prior to 1987, and there has been a gradual upward drift over the past five years in the upper grades. There is as yet little evidence of generational forgetting of cocaine’s risks. For 12th graders, both risk and disapproval referred to cocaine in general, until 1990. After that they referred to cocaine powder, as did the questions asked of 8th and 10th graders. The question change seemed to matter rather little in the results.

## Disapproval

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, followed by a period of stability. In recent years there has been a gradual drift upwards in disapproval in all three grades.

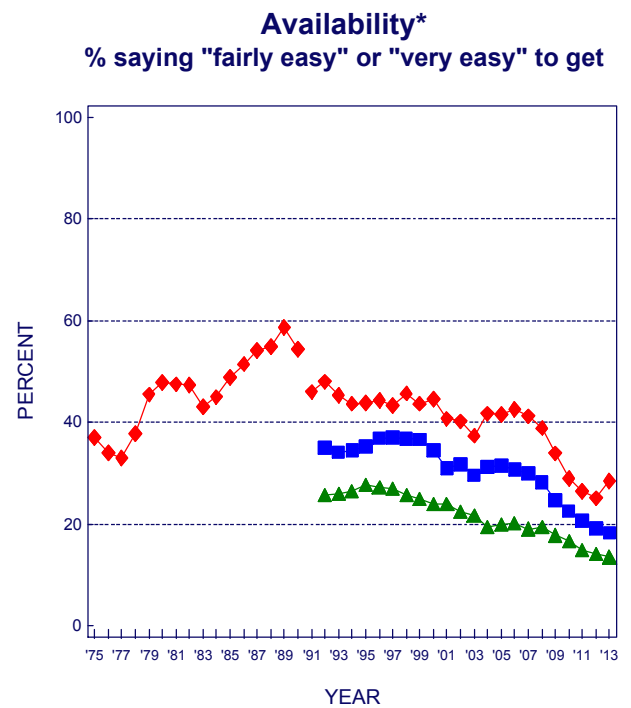
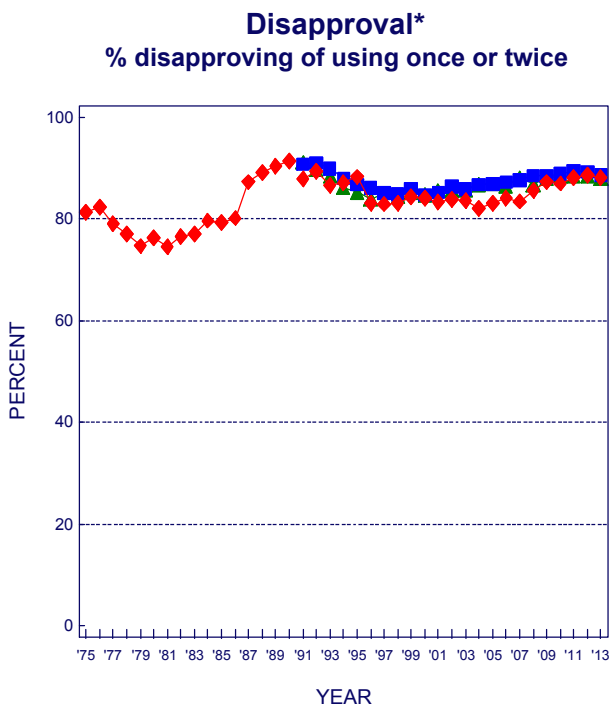
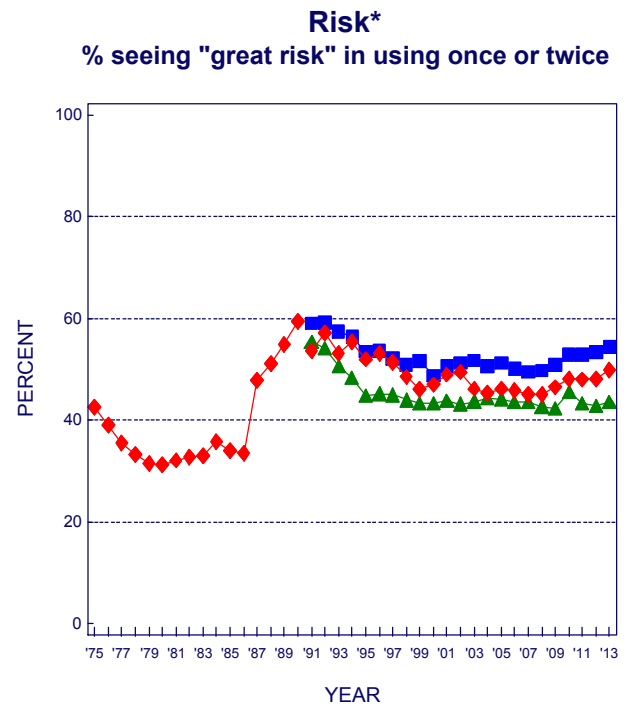
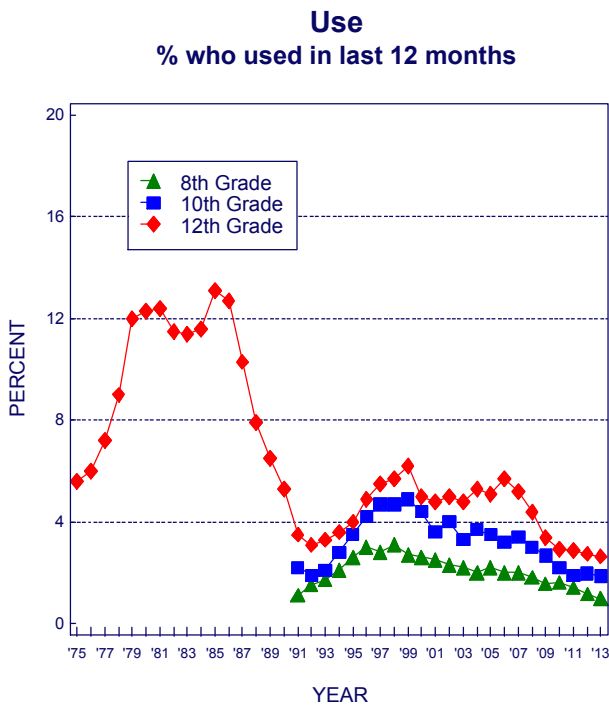
## Availability

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; it increased steadily to 59% by 1989 (in a period of rapidly declining use). Perceived availability then fell back to about 47% by 1994. Since around 1997, perceived availability of cocaine has fallen considerably in all three grades. Among 12th graders it stood at 31% in 2013—about half of its peak level in 1989. 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

<sup>9</sup>Trends in perceived risk in Table 11 show a particularly sharp rise from 34% in 1986 to 48% in 1987 for trying cocaine once or twice.

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

Grades 8, 10, 12



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

\*Prior to 1991, data reported here is based on questions on use of cocaine in general. Starting in 1991, data based on questions on use of cocaine powder specifically.

# 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, three questions about crack use covering the usual three prevalence periods were introduced into several questionnaire forms.

## Trends in Use

Clearly crack use rose rapidly in the early 1980s, judging by the 4% prevalence reached in 1986; but, 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 during the relapse phase of the drug epidemic. Since 1999, annual prevalence dropped by roughly seven tenths in 8th and 10th grades and by about half in 12th grade so that today use of crack is near historic lows. As with many drugs, the decline at 12th grade 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; nevertheless, it is still seen as a relatively dangerous drug.

## Disapproval

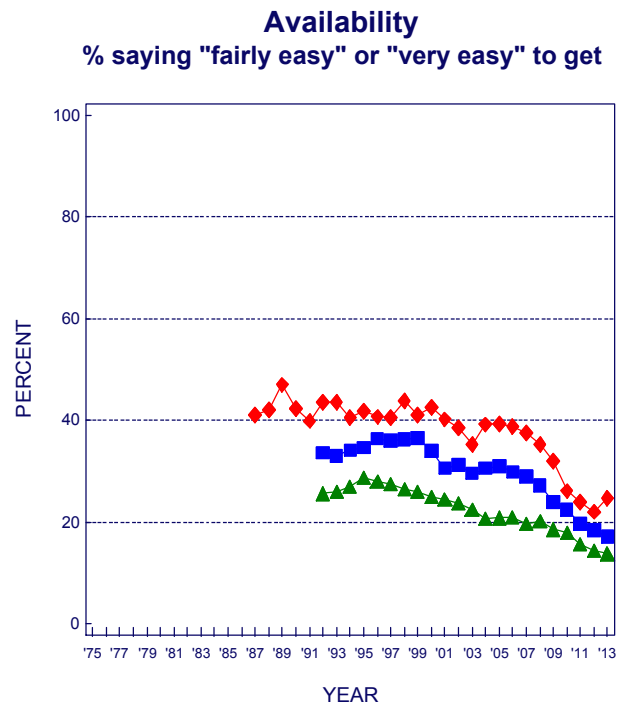
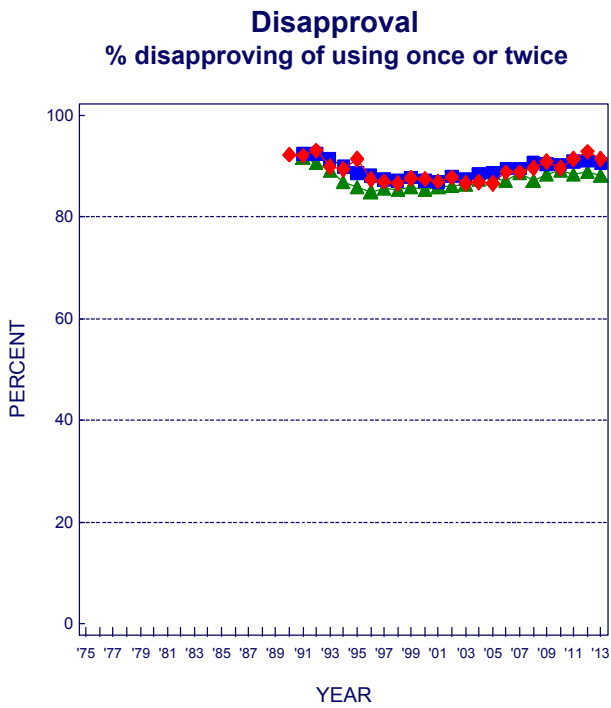
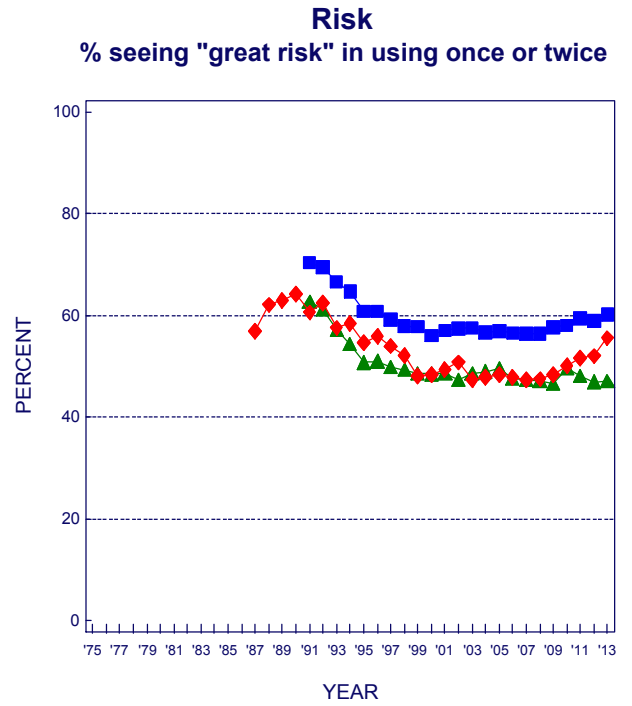
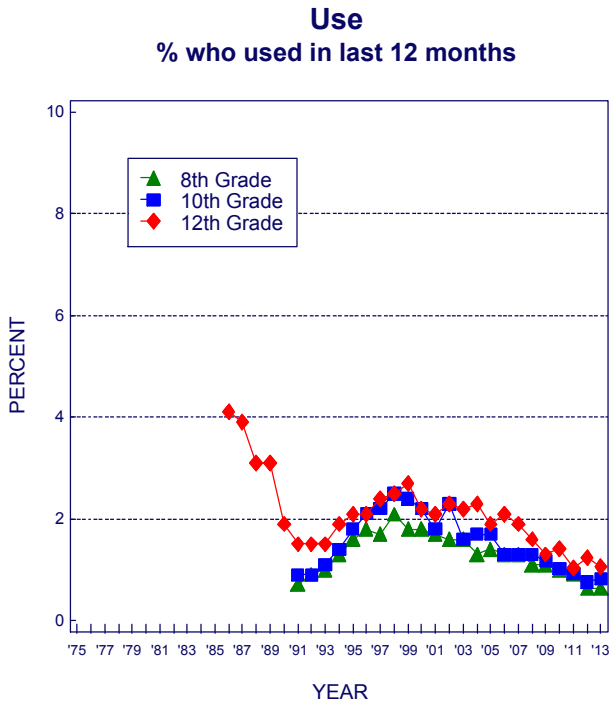
Disapproval of crack use was not included in MTF until 1990, by which time it was also at a very high level, with 92% of 12th graders saying that they disapproved of even trying it. Disapproval of crack use declined slightly but steadily in all three grades from 1991 through about 1997. Since 1997, disapproval has increased slightly in all three grades, by 2 to 4 percentage points by 2013.

## Availability

Crack availability did not change dramatically across most of 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 2000, availability has declined considerably, 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 relative availability has varied (see Tables 15 through 17).

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



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

# 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 among 12th graders 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. Starting in 1981 there was a steady and substantial decline in 12th graders’ use of amphetamines, which ended in 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 paused in 2008, but has since continued. In 10th grade there was a pause in the decline in 2009 and 2010, but the decline resumed in 2011. In 12th grade a decline began in 2003, but reversed from 2009 and continued to rise in 2013. Since the aforementioned peaks in use, annual prevalence is down by about seven tenths in 8th grade, by about half in 10th grade, but only by a fifth in 12th grade; for 12th graders, the recent rise in use may well be due to use intended to enhance studying.

## 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 was occurring among 12th graders after 2002; but it appears to have leveled since 2007. In 2011 the examples of specific amphetamines provided in the text of the questions on perceived risk, disapproval, and availability were updated with the inclusion of Adderall and Ritalin. This led to some discontinuities in the trend lines in 2011. (The inclusion of these drugs lowered the levels of perceived risk and disapproval.) Based on the revised question, no significant change has occurred since 2011.

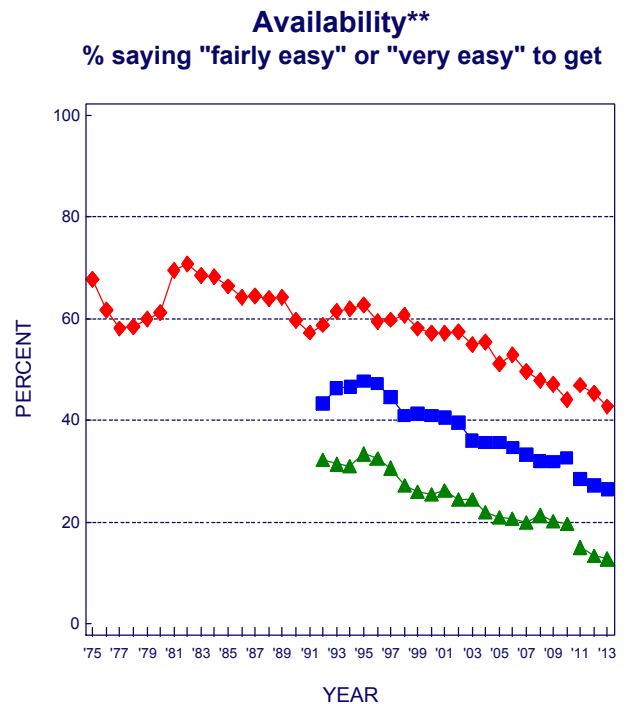
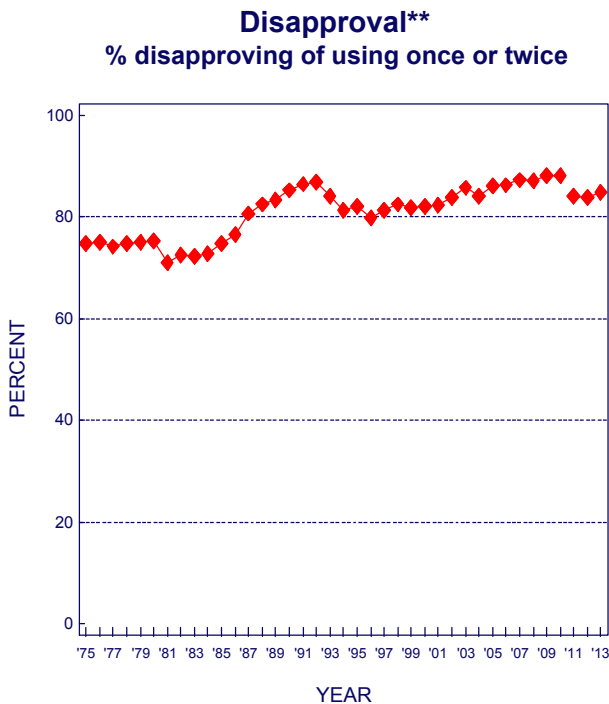
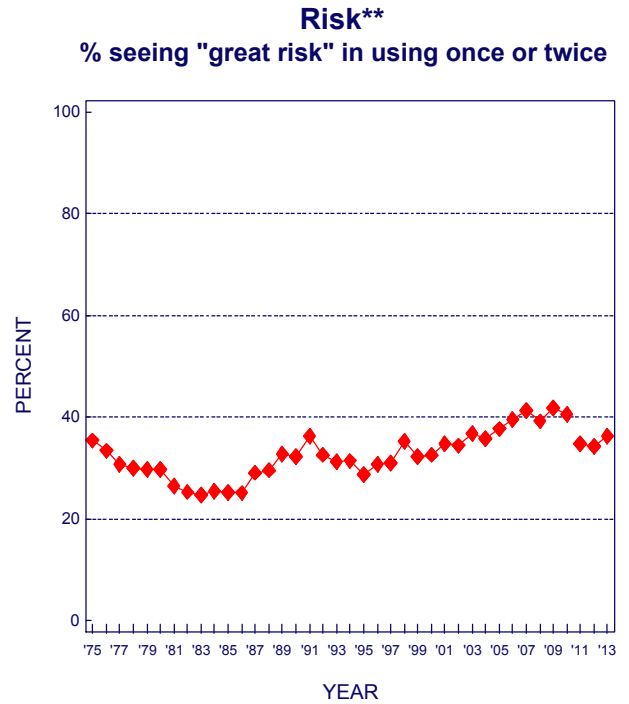
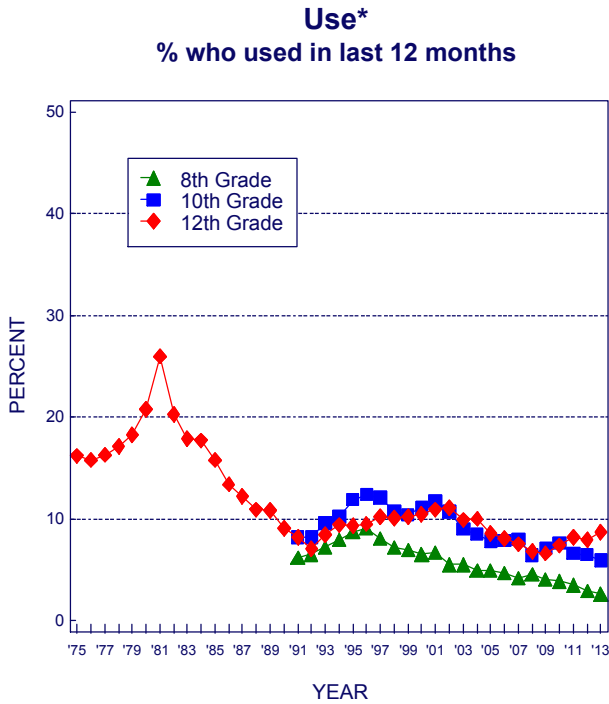
## Disapproval

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 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. In the mid-1990s it declined along with perceived risk, but it increased fairly steadily from 1996 through 2009, before leveling.

## 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 a long-term decline after that. Some further decline occurred in all grades through 2013, taking into account the rise in 2011 caused by the change in question wording. (See Table 6 for the trends in annual use of two of the major classes of amphetamines—Ritalin and Adderall). Since it was first measured in 2001, *Ritalin* use has declined in use by about one half among 12th graders and by more in the lower grades. *Adderall* declined in use in the lower grades since it was first measured in 2009; but annual prevalence increased significantly in 12th grade between 2009 (6.5%) and 2013 (7.4%).

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



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

\*In 2013, for the questions on the use of amphetamines, the text was changed on two of the questionnaire forms for 8th and 10th graders and four of the questionnaire forms for 12th graders. Data presented here for 2013 include only the unchanged forms.

\*\*In 2011 the list of examples was changed from uppers, pep pills, bennies, speed to uppers, speed, Adderall, Ritalin, etc. These changes likely explain the discontinuity in the 2011 results.



## 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. (The rates are not graphed here until 1990.) In 1976, annual prevalence on this measure 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 and in recent years appears to have levelled at about 1%. 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, branching 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 likely that the shape of the trend curve was not distorted, however.

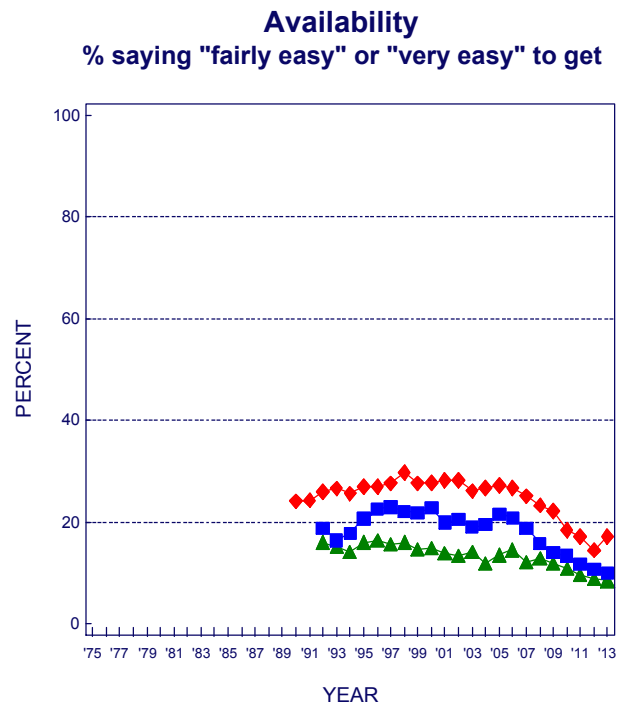
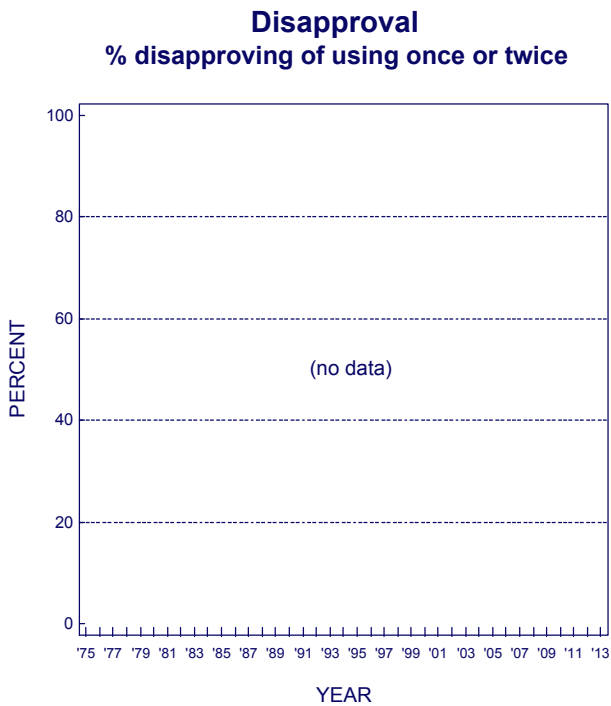
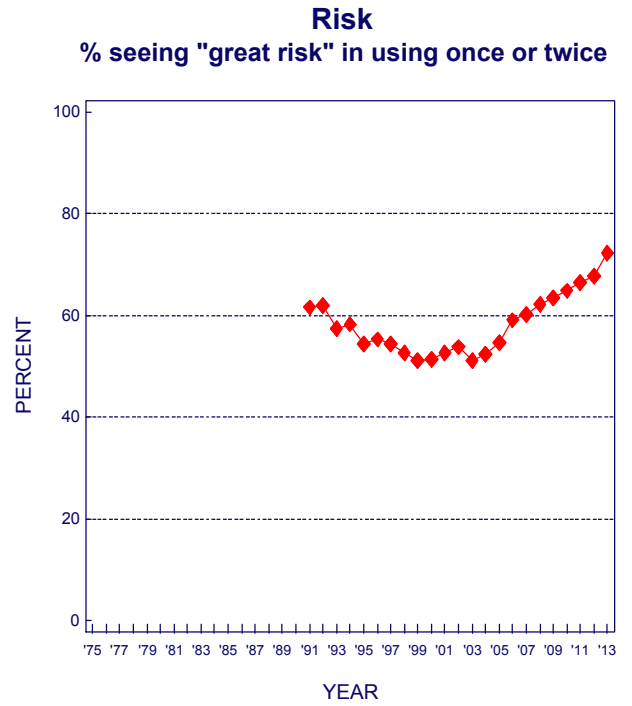
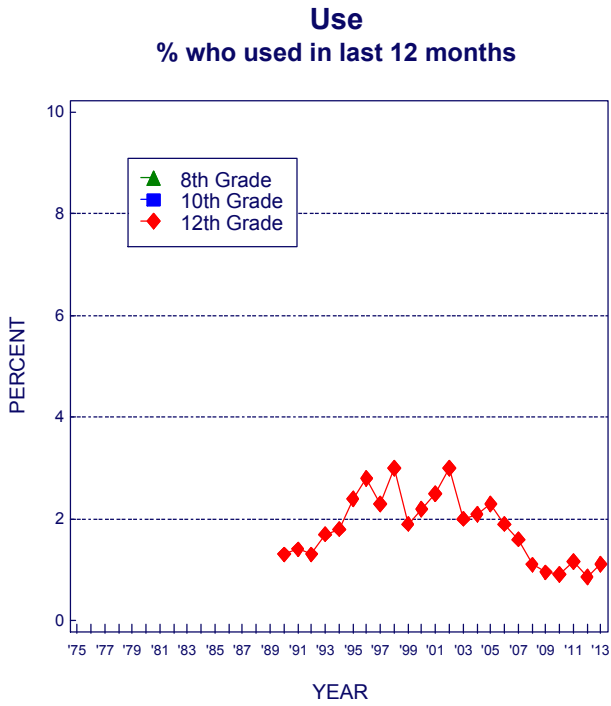
The newer questions for *methamphetamine* (not graphed here) show annual prevalence rates in 2013 of 1.0% for 8th and 10th graders, and 0.9% for 12th graders. All of these levels are down considerably from the first measurement taken in 1999, when they were 3.2%, 4.6%, and 4.7% (see Table 6). So, despite growing public concern about the methamphetamine problem in the United States, use actually has shown a fairly steady decline over the past 14 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, likely reflecting a cohort effect. See Volume II in this series.)

### 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 2003, very likely explaining much of the decline in use since then. Its perceived availability generally has been falling in all three grades since 2006, perhaps in part because there are many fewer users.

**Crystal Methamphetamine (Ice) : Trends in Annual Use, Risk, and Availability**  
 Grades 8, 10, 12



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



# 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 (e.g., snorting, smoking) practical alternatives. Thus, in 1995 we introduced questions that asked separately about using heroin with and without a needle 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 provided 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 1994. 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%), suggesting a cohort effect. Since those peak levels, use has declined, with annual prevalence in all three grades fluctuating between 0.7% and 0.9% from 2005 through 2010. Use declined some in the next two years; in the three grades combined, the 2011 to 2012 decline from 0.7% to 0.6% was significant but leveled in 2013.

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 both means. At 10th grade a somewhat higher proportion of all users took heroin without a needle, and at 12th grade the proportion was higher still. Much of the 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 since the recent peak levels has been due to decreasing use of heroin without a needle. In 2012 there were significant decreases in use of heroin without a needle for 8th and 12th graders, but no

further change in 2013. All grades were at 0.3% or 0.4% annual prevalence in 2012 and 2013.

Use with a needle has fluctuated less over time, though in 2010 twelfth graders showed a significant increase to 0.7%, about where it remained in 2011 (0.6%). In 2013 all three grades were at 0.4% or 0.5% using with a needle, and there has been little change since 2011.

## Perceived Use

Students have long seen heroin to be one of the most dangerous drugs, which helps to account for both the consistently high level of personal disapproval of use (see below) and the quite low prevalence of use. Nevertheless, perceived risk levels have changed some 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 (when perceived risk for cocaine also jumped dramatically), where it held for four years. In 1992, perceived risk dropped to a lower plateau again, presaging an increase in use a year or two later. Perceived risk rose in the latter half of the 1990s, and use leveled off and then declined. Perceived risk of use without a needle rose in 8th and 10th 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, but with some recent gradual increase in grades 10 and 12 as use declined.

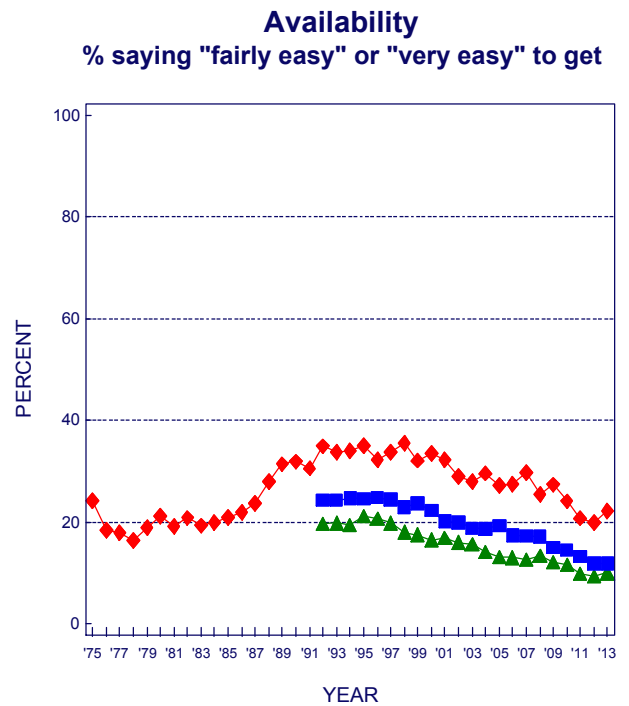
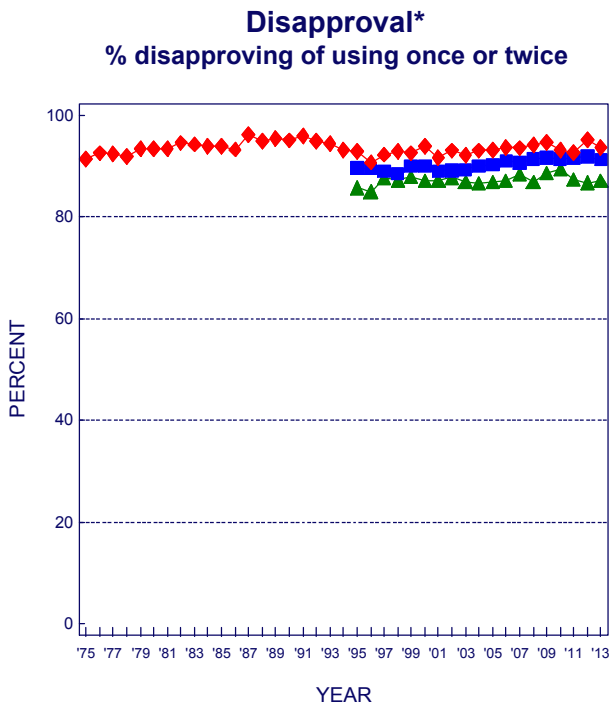
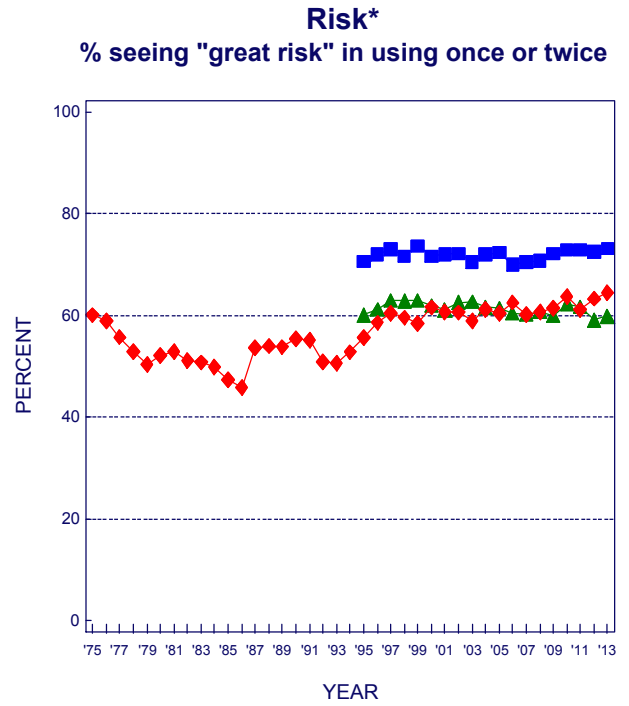
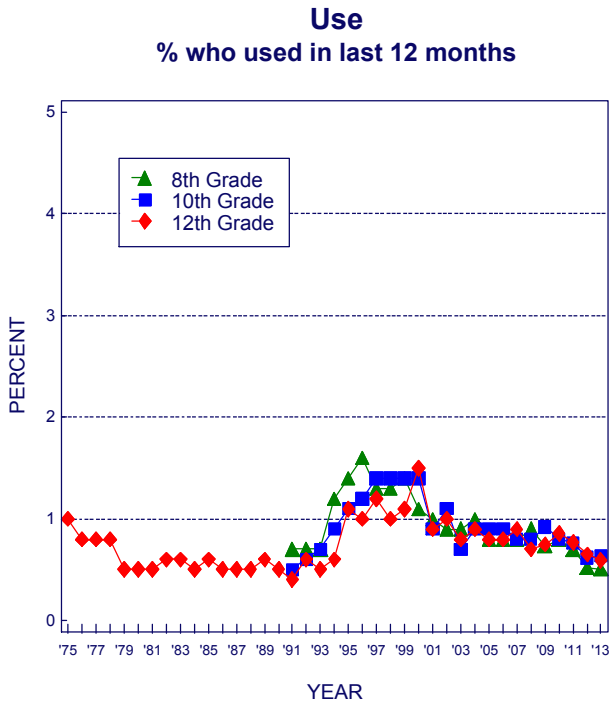
## Disapproval

There has been little fluctuation in the very high levels of disapproval of 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. From the mid- to late-1990s through 2012, heroin availability declined gradually but substantially in all three grades, then leveled in 2013.

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



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

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

## Other Narcotic Drugs, Including OxyContin and Vicodin

---

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, with OxyContin and Vicodin being two of the major ones.

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 long 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 have been the most prevalent.

### 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, dropping considerably. After 1992 use rose rather steeply as all forms of substance use were increasing, with annual prevalence nearly tripling from 3.3% in 1992 to 9.5% in 2004, before leveling through about 2009. Since then, use has been declining. (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 likely is exaggerated, but probably

not by much, because these drugs came onto the scene later, during the rise. They simply were not being fully reported until 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 disapproval of use of narcotics other than heroin, and only limited data on perceived risk* (since 2010). **OxyContin** use increased some in all grades from 2002 (when it was first measured) through roughly 2009, though the trend lines have been irregular. Since 2009 or 2010 the prevalence rate has dropped in the upper grades, though only 12th grade showed any further decline in 2013. Annual prevalence in 2013 was 2.0%, 3.4%, and 3.6% in grades 8, 10, and 12, respectively. Use of **Vicodin**, on the other hand, remained fairly steady at somewhat higher levels since 2002, until its use declined after 2009 in all three grades. In 2013 annual prevalence rates were 1.4%, 4.6%, and 5.3% in grades 8, 10, and 12; only among 12th graders was there a continuation in the decline.

### Availability

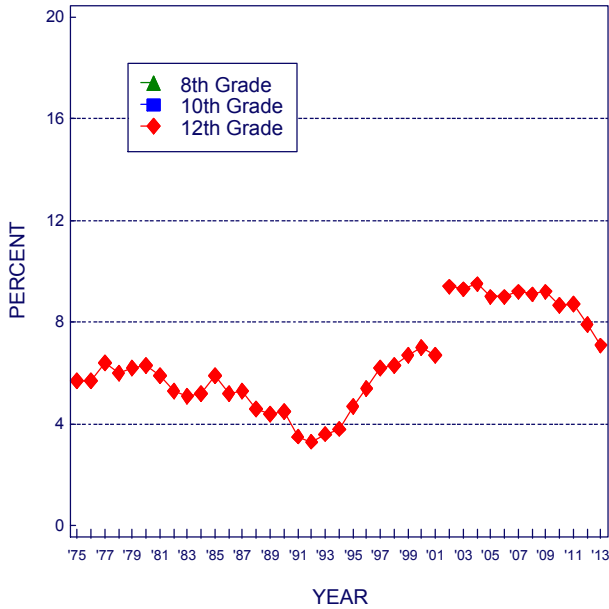
Questions were asked about the availability of narcotics other than heroin, taken as a class. Perceived availability increased gradually among 12th graders from 1978 through 1989, even as reported use was dropping. Perceived availability then rose further, from 1991 through 2001, as use rose quite sharply before leveling by about 2000 and then declining after 2006. In contrast, perceived availability has declined among 8th and 10th graders since the late 1990s. (A change in question wording in 2010 to include OxyContin and Vicodin as examples presumably accounts for the considerable jump in reported availability that year.) Availability has declined further in all three grades since 2010.

**Narcotics other than Heroin (including OxyContin and Vicodin) :**

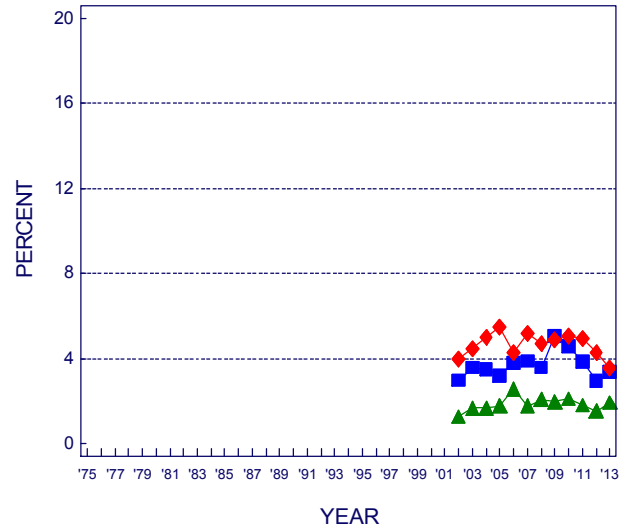
**Trends in Annual Use and Availability**

Grades 8, 10, 12

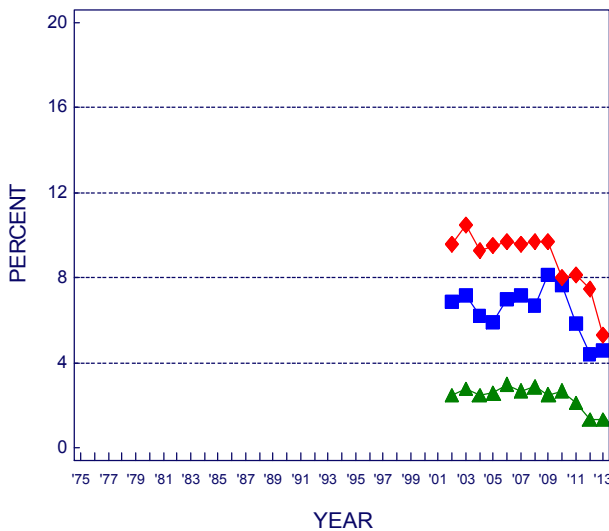
**Use of Narcotics other than Heroin**  
% who used any narcotics other than heroin  
in last 12 months\*



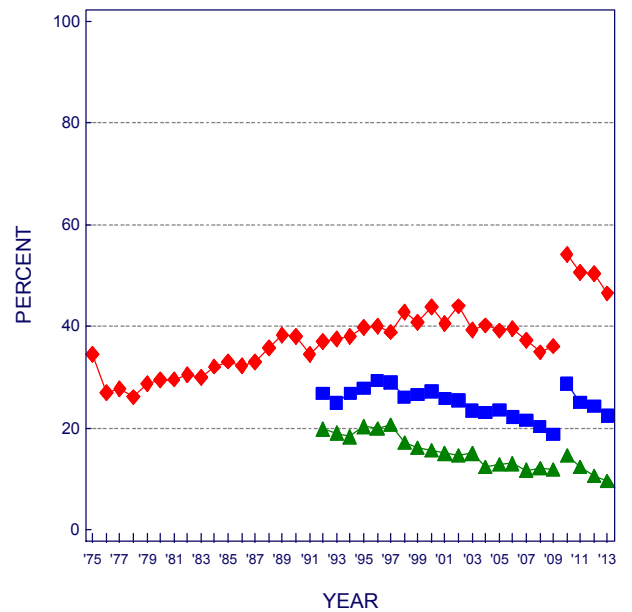
**OxyContin Use**  
% who used OxyContin in last 12 months



**Vicodin Use**  
% who used Vicodin in last 12 months



**Availability of Narcotics other than Heroin\*\***  
% saying "fairly easy" or "very easy" to get



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

\*Beginning in 2002, a revised set of questions on other narcotics use was introduced in which Talwin, laudanum, and paregoric were replaced as examples given with Vicodin, OxyContin, and Percocet.

\*\*In 2010 the list of examples was changed from methadone, opium to Vicodin, OxyContin, Percocet, etc.

## Tranquilizers

---

Tranquilizers are psychotherapeutic drugs that are legally sold only by prescription, like amphetamines. They are central nervous depressants and, for the most part, comprise benzodiazepines (minor tranquilizers), although some nonbenzodiazepines have been introduced. Respondents are instructed to exclude any medically prescribed use from their answers. At present, *Xanax* is the tranquilizer most commonly used by 12th graders (only 12th graders are asked to indicate which specific tranquilizers they used). (See Table E-3 in appendix E of *Volume I* in this monograph series for details.) Valium, Klonopin, and Soma are other tranquilizers, used at somewhat lower levels. 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 remained relatively stable after that among 8th graders, at considerably lower levels than the upper

two grades, though they did show a significant decline in 2011 followed by a modest further decline in 2012. From 2002 to 2005 there was some decline among 10th graders, followed by a leveling then a resumption of the decline in 2011, while among 12th graders there was a very gradual decline from 2002 through 2007, before leveling and then decreasing in 2010 and again in 2013. This staggered pattern of change suggests that a cohort effect has been at work. At present the prevalence of use of these prescription-type drugs is somewhat lower than their recent peak levels, with annual prevalence rates of 1.8%, 3.7%, and 4.6% in grades 8, 10, and 12, respectively, in 2013.

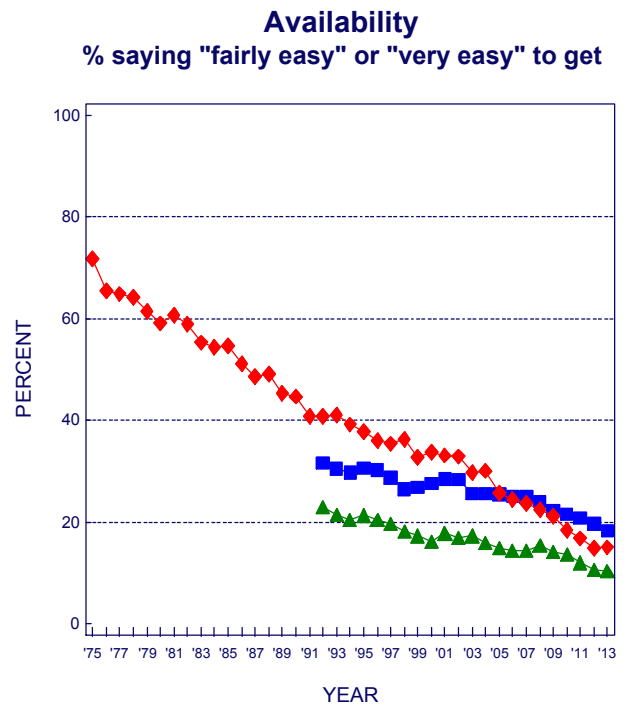
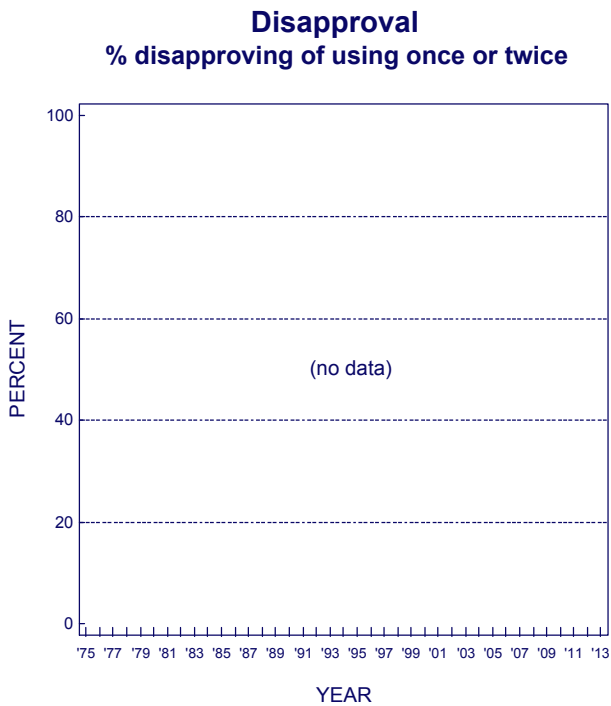
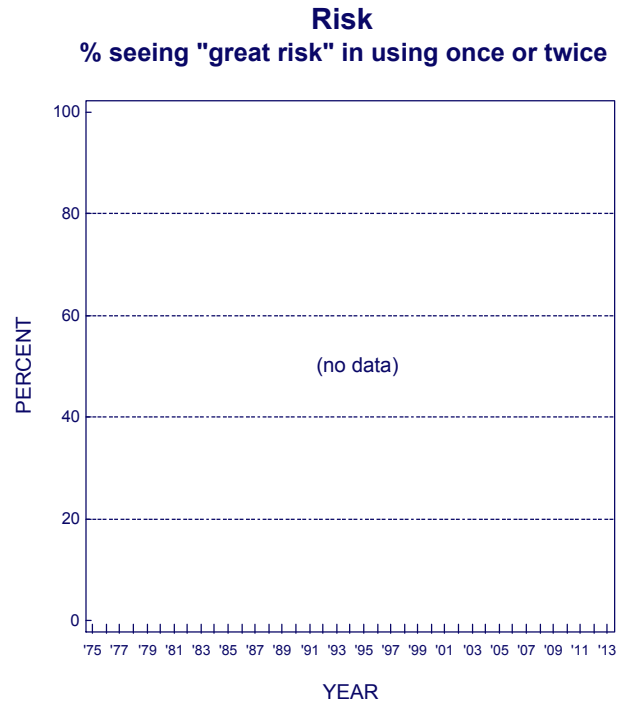
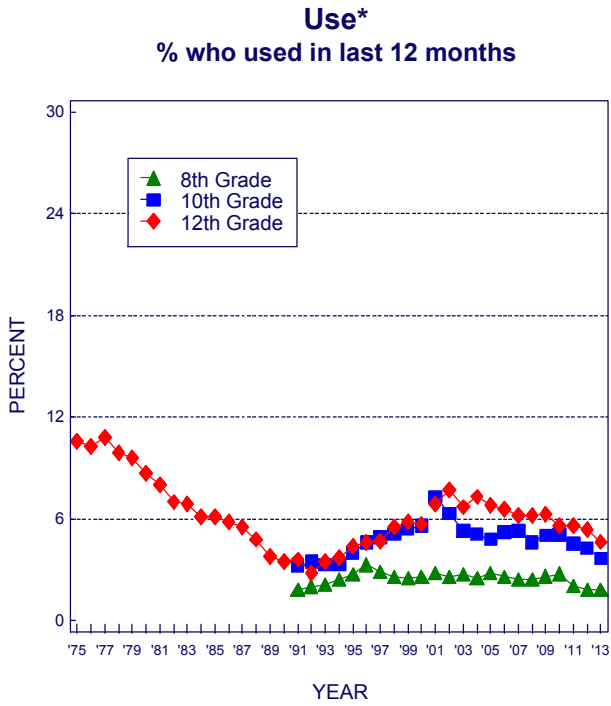
### Perceived Risk and Disapproval

Data have not been collected on perceived risk and 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. However, 12th graders' perceived availability has continued to fall since then, even as use rebounded in the 1990s; it is now down by nearly eight tenths over the life of the study—from 72% in 1975 to 15% by 2013 saying that tranquilizers would be fairly or very easy to get if they wanted some. Availability has fallen fairly continuously since 1991 in the lower grades as well—including in 2013—though not as sharply.

**Tranquilizers: Trends in Annual Use and Availability**  
Grades 8, 10, 12



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

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

## Sedatives (Barbiturates)

---

Like tranquilizers, sedatives are prescription-controlled psychotherapeutic drugs that 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 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 annual prevalence fell by three fourths, from 10.7% to 2.8%. As with many other drugs, a gradual, long-term resurgence in sedative use occurred after 1992, but unlike the case with most illegal drugs, sedative (barbiturate) use continued to rise steadily through 2005, well beyond the point at which the use of most illegal drugs began falling. (Recall that tranquilizer use also continued to rise into the early 2000s.) Use has declined some since 2005, and by 2013 the annual prevalence rate was down by about one third 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 2007, about where it remained through 2012, after which the question was dropped.

### 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 changes in 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 the use of this class of psychotherapeutic drugs (and likely others) stayed at relatively high levels in the first half of the decade of the 2000s. However, perceived risk began to rise a bit 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 some since then. As perceived risk rose, use declined through 2011.

### Disapproval

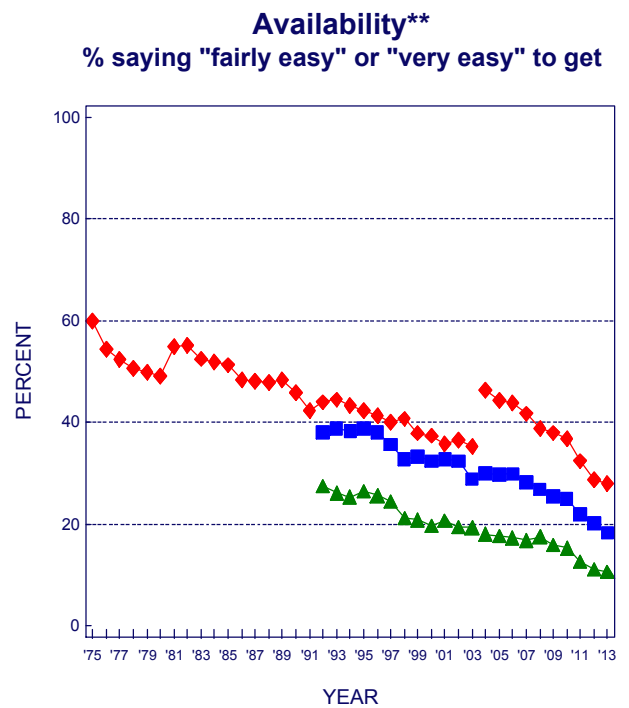
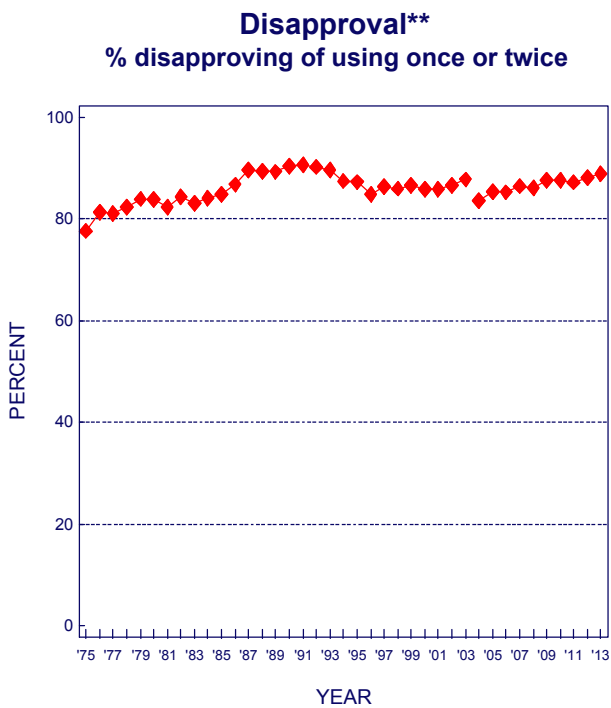
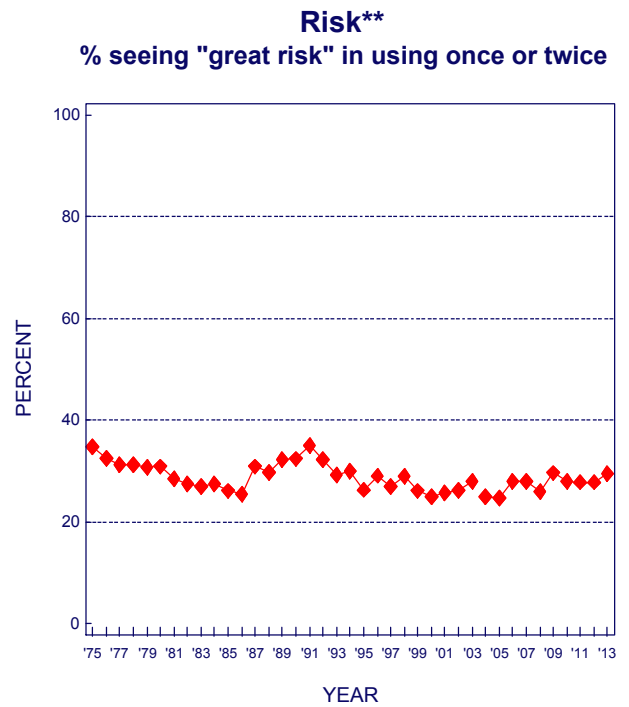
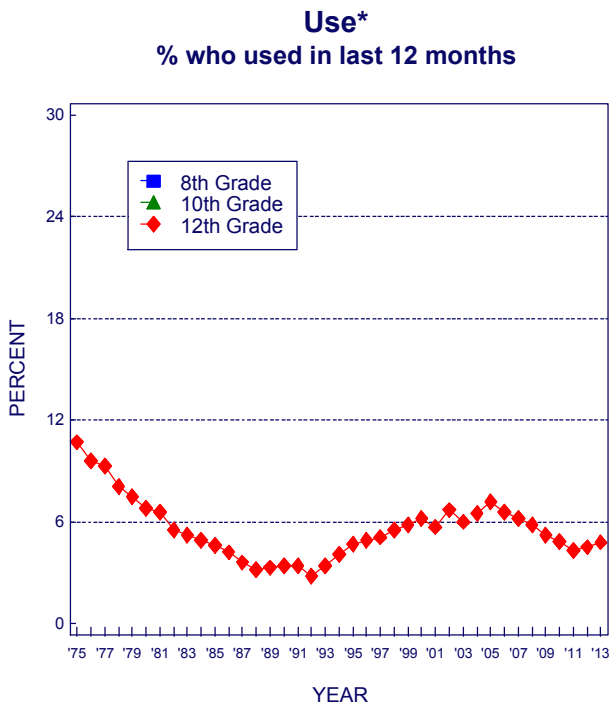
Like many illicit drugs other than marijuana, sedative (barbiturate) use has received the disapproval of most high school seniors since 1975, with some variation in disapproval rates that have moved consistently with usage patterns. The necessary change in question wording in 2004 appeared to lessen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

### Availability

As the fourth panel on the facing page shows, the perceived 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 necessary change in question text in 2004 appears to have had the effect of increasing reported availability among 12th graders but not among students in the lower grades.) Perceived availability for sedatives (barbiturates) continued its long term decline in 2013.



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



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

\*In 2004 the question text was changed. Barbiturates was changed to Sedatives, including barbiturates and "have you taken barbiturates..." was changed to "have you taken sedatives..." In the list of examples downers, downers, goofballs, yellows, reds, blues, rainbows were changed to downers, or downers, and include Phenobarbital, Tuinal, and Seconal.

\*\*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.



## Ecstasy (MDMA) and Other “Club Drugs”

---

“Club drugs,” so called because they have been popular at night clubs and raves, include LSD, MDMA (ecstasy), methamphetamine, GHB (gammahydroxybutyrate), ketamine (special K), and Rohypnol. (For discussion of LSD and methamphetamine, see prior pages in this *Overview*.)

**Rohypnol** and **GHB** are labeled date rape drugs because they can have amnesiac effects and be added to food or drink without a victim's knowledge. By 2011, both drugs had shown significant declines since their peak levels of annual use (Table 6). In 2011, annual prevalence for Rohypnol use was 0.8%, 0.6%, and 1.3%, and for GHB use, 0.6%, 0.5%, and 1.4% in grades 8, 10, and 12, respectively. Annual prevalence for another club drug, **ketamine**, had also shown significant declines, and was at 0.8%, 1.2%, and 1.7% in 2011. Questions about GHB and ketamine use were dropped from the surveys of 8th and 10th graders in 2012. In 2013, annual prevalence among 12th graders for Rohypnol, GHB, and ketamine was 0.9%, 1.0%, and 1.4%, respectively. Annual prevalence for 8th graders for Rohypnol was 0.4% and for 10th graders 0.6%. No questions about risk, disapproval, or availability are asked for these drugs.

### Trends in Ecstasy Use

Ecstasy (3,4-methylenedioxymethamphetamine or MDMA) is used more for its mildly hallucinogenic properties than for its stimulant properties. Questions on ecstasy use were added to 8th-, 10th-, and 12th-grade surveys in 1996.

In 1996, annual prevalence of ecstasy use was 4.6% in both 10th and 12th grades—considerably higher than among college students (2.8%) and young adults (1.7%), who have been asked about MDMA since 1989—but use declined over the next two years. Use then rose sharply bringing annual prevalence up to 3.5% for 8th graders, 6.2% for 10th graders and 9.2% for 12th graders by 2001. From 2001 to 2005, use declined substantially, down to 1.7%, 2.6%, and 3.0%, respectively. Following some irregular changes in recent years, in 2013 compared to 2005, use was down slightly in 8th grade to 1.1% and up slightly in 10th (3.6%) and 12th (4.0%) grades. “Molly”—reputed to be a purer form of ecstasy—received much attention in 2013; since that term was not used in the

questionnaires it is not clear whether students included it in their answers about ecstasy use in 2013.

### Perceived Risk of Ecstasy Use

In 2001, 12th graders' perceived risk of ecstasy use jumped by eight percentage points and in 2002 by another seven. Significant increases occurred in 2003 for all grades. This sharp rise likely explains the drop in use that we predicted. From 2004 to 2011 we saw a troubling drop in perceived risk (first among 8th and 10th, and then among 12th graders), corresponding to the increase in use in the upper two grades and then in all three grades. This suggests a generational forgetting of the dangers of ecstasy use resulting from generational replacement. In 2012 only 8th grade showed much further decline. The rebound in use after 2004 might be explained by the sizable drop in perceived risk, but the recent decline of perceived risk cannot explain the decline in use in 2012.

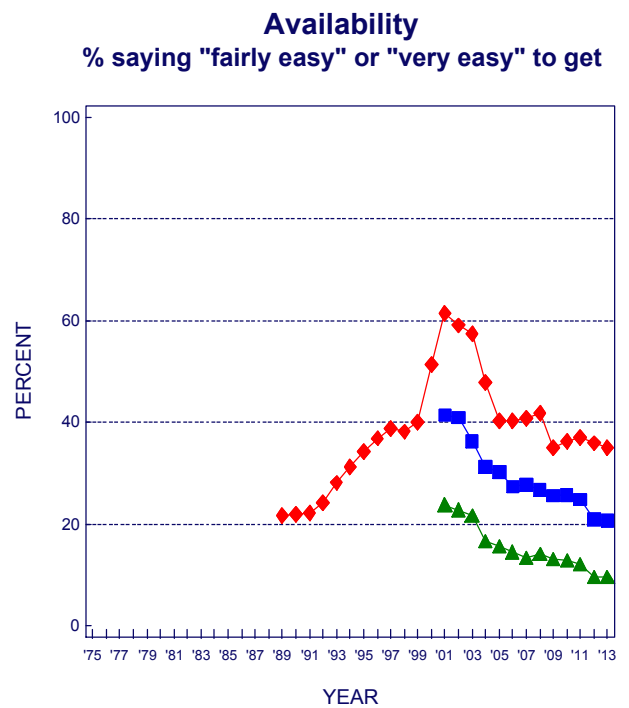
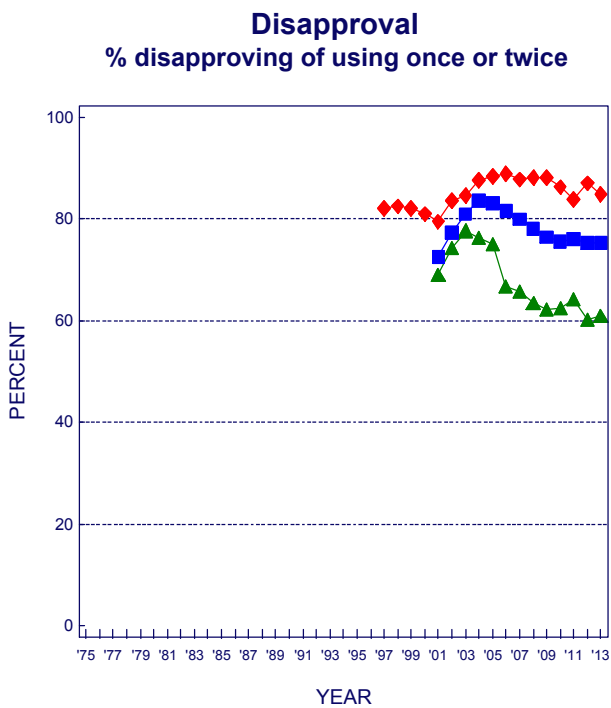
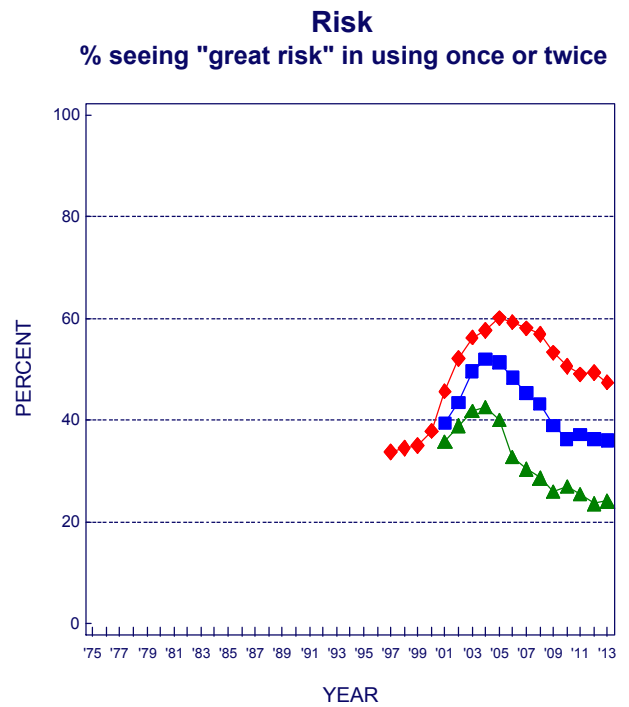
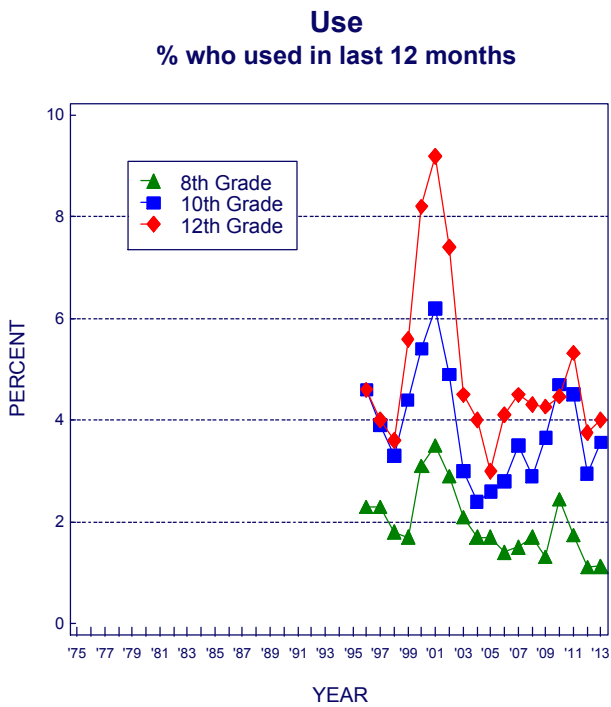
### Disapproval of Ecstasy Use

Disapproval of ecstasy use declined some after 1998 but increased significantly in all three grades in 2002, perhaps due to the rise in perceived risk. The rise in disapproval continued through 2003 for 8th, 2004 for 10th, and 2006 for 12th graders, suggesting some cohort effect. After those peaks, disapproval dropped sharply among 8th graders before leveling, dropped by less among 10th graders before leveling, and did not drop among 12th graders until 2010—again suggesting a cohort effect. We previously stated that the erosion in perceived risk and disapproval—which has been sharpest among 8th graders—left these age groups more vulnerable to a possible rebound in ecstasy use; some rebound appears to have occurred.

### 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 and continues to decline in the lower grades. Therefore, decreased availability may account for the drop in use in 2012.

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



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

# Alcohol

---

Alcohol has been widely used by American young people for a very long time. In 2013 the proportions of 8th, 10th, and 12th graders who reported drinking an alcoholic beverage in the 30-day period prior to the survey were 10%, 26%, and 39%, respectively. Various 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., having five or more drinks in a row at least once in the prior two weeks)—the pattern of alcohol consumption that is probably of greatest concern from a public health perspective. In 2013 lifetime, annual, and 30-day measures of alcohol use were at historic lows over the life of the study in all three grades. Binge drinking in 12th grade and daily use in 10th and 12th grades were the only exceptions, and they were very close to their historic lows (which occurred in 2011).

## Trends in Use

Among 12th graders, binge drinking peaked in 1979 along with overall illicit drug use. Binge drinking then declined substantially from 41% in 1983 to 28% in 1992, a drop of almost one third (also the low point of any illicit drug use). Although illicit drug use rose sharply in the 1990s, binge drinking rose by only a small fraction and was followed by some decline at all three grades. By 2013, proportional declines since the recent peaks reached in the 1990s were 62%, 43%, and 30% 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, at least until the past five years, during which time alcohol continued to decline while marijuana reversed course and rose. Moreover, these two behaviors have consistently been positively correlated at the individual level.

## 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. However, an increase from 36% to 49% occurred between 1982 and 1992. A decline to 43% followed by 1997 as use rose, before it stabilized. Since 2003,

perceived risk has risen some in all grades, at least through 2011. 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, contributed to the increase in perceived risk of binge drinking generally. Drunk driving by 12th graders declined during that period by an even larger proportion than binge drinking.<sup>10</sup> Also, we showed that increases in the minimum drinking age during the 1980s were followed by reductions in drinking and increases in perceived risk associated with drinking.<sup>11</sup>

## 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, though it has leveled some in recent years.

## Availability

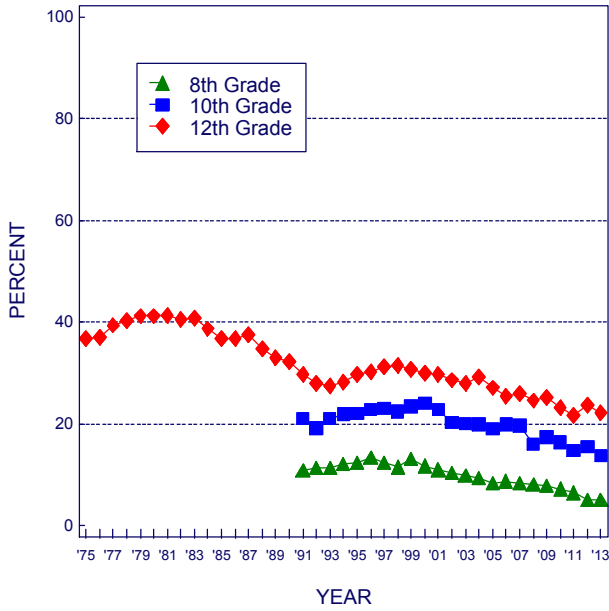
Perceived availability of alcohol, which until 1999 was asked only of 8th and 10th graders, was very high and mostly steady in the 1990s. Since 1996, however, there have been substantial declines in 8th and 10th grades. For 12th grade, availability has declined only modestly with 90% still saying that it would be fairly easy to get alcohol. Overall, it appears that states, communities, and parents have been successful in reducing access to alcohol among the younger teens.

<sup>10</sup>O'Malley, P.M. & Johnston, L.D. (2003). Unsafe driving by high school seniors: National trends from 1976 to 2001 in tickets and accidents after use of alcohol, marijuana, and other illegal drugs. *Journal of Studies on Alcohol*, 64, 305-312.

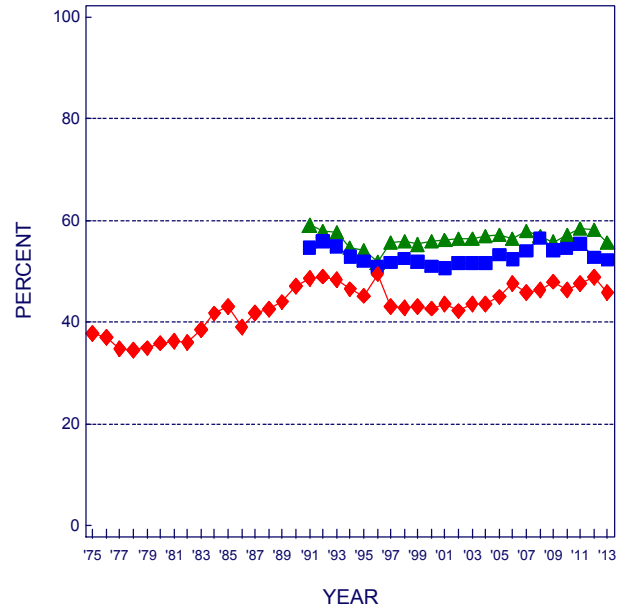
<sup>11</sup>O'Malley, P.M., & Wagenaar, A.C. (1991). Effects of minimum drinking age laws on alcohol use, related behaviors, and traffic crash involvement among American youth: 1976-1987. *Journal of Studies on Alcohol*, 52, 478-491.

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

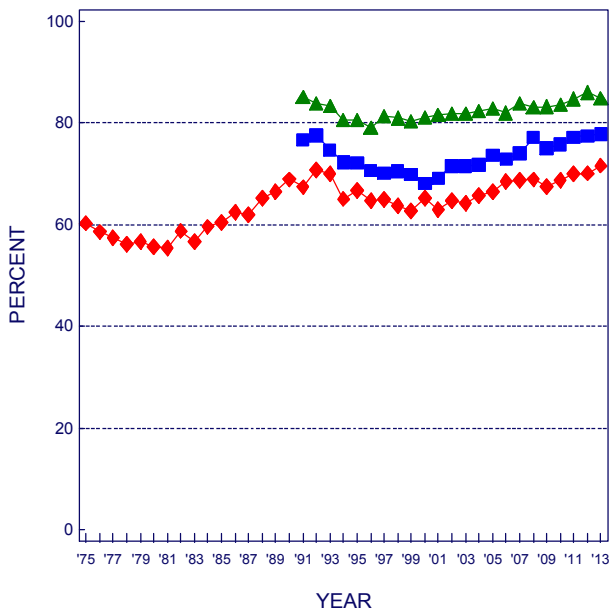
**Use**  
 % who had 5+ drinks in a row  
 at least once in past two weeks



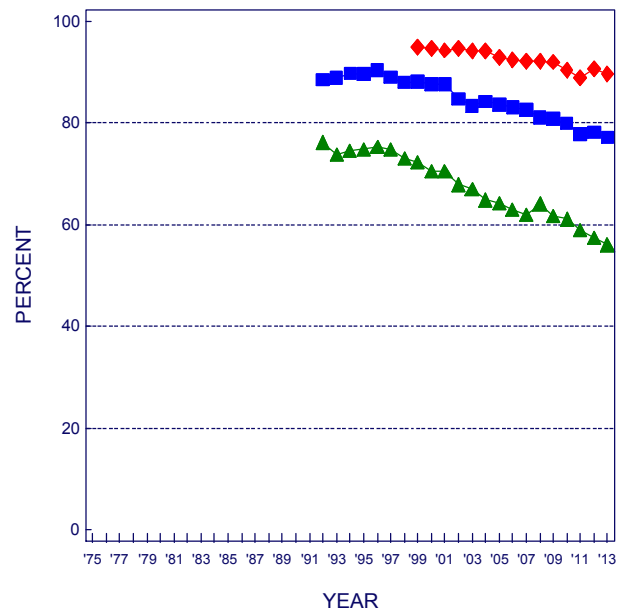
**Risk**  
 % seeing "great risk" in having 5+ drinks in a row  
 once or twice each weekend



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



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



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

# 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 (i.e., “cohort effects”).

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.) After about a one quarter drop in 12th-grade 30-day prevalence between 1976 and 1981, the rate 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 considerable 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. Between the 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. This important decline in adolescent smoking decelerated after about 2002. Still, by 2013, 30-day prevalence levels were down from peak levels by 79%, 70%, and 56% in grades 8, 10, and 12. An increase in 2009 in federal taxes on cigarettes (from \$0.39 to \$1.01 per pack) may have contributed to the recent decline in use. Smoking initiation by 8th graders declined by seven tenths, from a peak of 49% in 1996 to just 15% by 2013.

## Perceived Risk

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

period of decline in use in the late 1970s. 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. Since then, there has generally been an increase (though not entirely consistently) in perceived risk, at least through 2011. All three grades showed an increase in 2011, accompanied by a decline in use; the 2012 levels of perceived risk were the highest ever observed, but they leveled in 2013. Note the differences in the extent of perceived risk among grade levels. There is a clear age effect: by the time most youngsters fully appreciate the hazards of smoking, many already have initiated the behavior.

## Disapproval

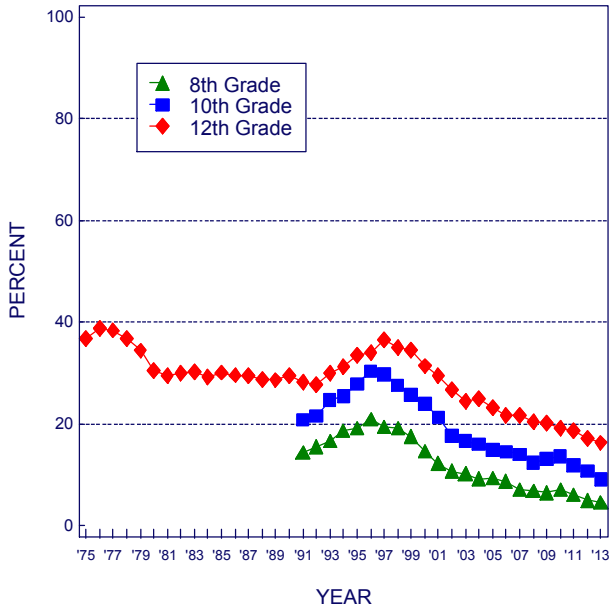
Disapproval rates for smoking have been fairly high throughout the study and, unlike perceived risk, are higher in the lower grade levels. Among 12th graders, there was a gradual increase in disapproval of smoking from 1976 to 1986, some erosion over the following five years, and then steeper erosion 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 four to five years ago (see Table 3 in the 2013 MTF press release on teen smoking, <http://www.monitoringthefuture.org/press.html>). So, most attitudes and beliefs about cigarette smoking are no longer moving in a direction that would discourage use, suggesting that external changes in the environment may be required to further reduce youth smoking.

## Availability

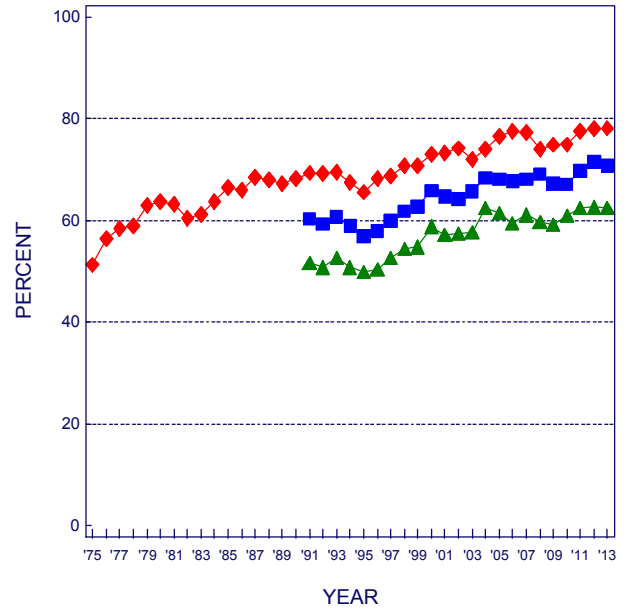
Since 1996, availability has declined considerably, especially among 8th graders. Some 50% of 8th graders and 71% of 10th graders now say that cigarettes would be very easy or fairly easy to get, reflecting declines of 35% and 22%, respectively.

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

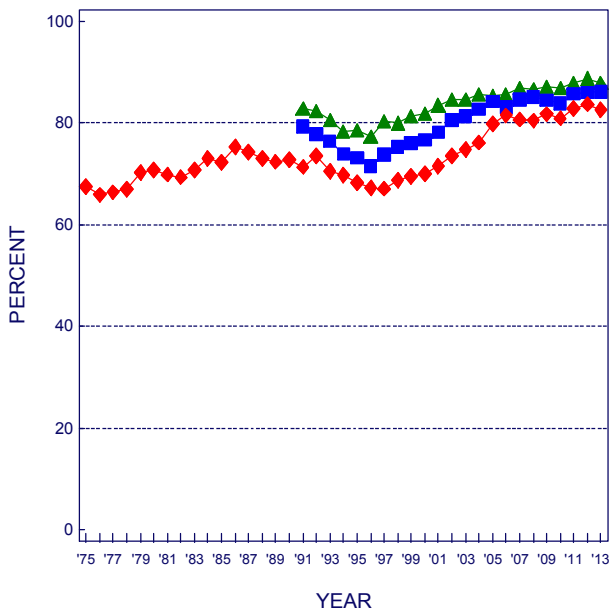
**Use**  
 % who used in last 30 days



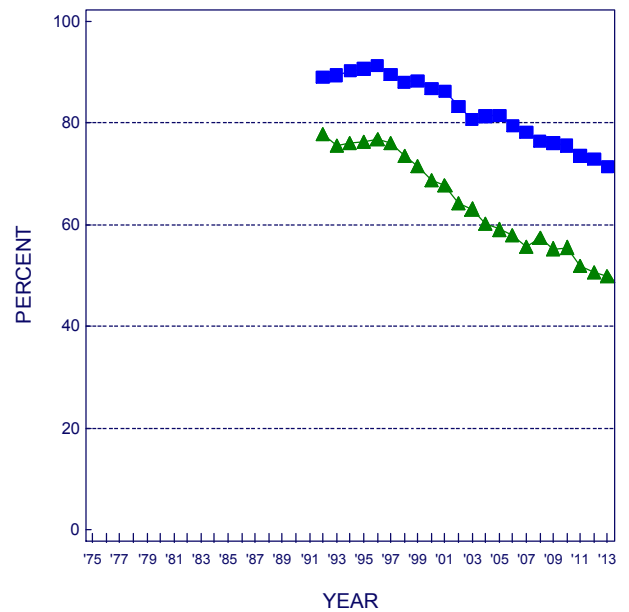
**Risk**  
 % seeing "great risk" in smoking a pack or more per day



**Disapproval**  
 % disapproving of smoking a pack or more per day



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



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



## Smokeless Tobacco

Traditionally, smokeless tobacco has come 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. These forms are sometimes called “spit” tobacco because users expectorate the tobacco juices and saliva (stimulated by the tobacco) that accumulate in the mouth. “*Snus*” (rhymes with goose) is a relatively new variation on smokeless tobacco, as are some other *dissolvable tobacco* products that literally dissolve in the mouth. Given that snus appeared to be gaining in popularity, separate items regarding the use in the past 12 months of snus and dissolvable tobacco were added to the 12th-grade surveys in 2011 and to the 8th- and 10th-grade surveys in 2012. In addition, in 2011 snus and dissolvable tobacco were added as examples to the long-standing question on smokeless tobacco.

### Trends in Use

The use of smokeless tobacco by teens had been decreasing gradually, and *30-day prevalence* is now between one third and two thirds of the recent peak levels in the mid-1990s, though there was a reversal of the declines from about 2007 through 2010. Among 8th graders, 30-day prevalence declined from a 1994 peak of 7.7% to 3.2% in 2007 and reached a low of 2.8% in 2013; among 10th graders, use declined from a 1994 peak of 10.5% to 4.9% by 2004 but rose to 6.4% in 2013; among 12th graders, use declined from a 1995 peak of 12.2% to 6.1% by 2006 but rose to 8.1% in 2013. Thirty-day prevalence of *daily use* of smokeless tobacco fell gradually, but appreciably, for some years. *Daily usage* rates in 2013 were 0.5%, 1.9%, and 3.0% in grades 8, 10, and 12, respectively—down substantially from peak levels recorded in the 1990s—but the declines in daily use have leveled among 10th and 12th graders.

Smokeless tobacco use among American young people is almost exclusively a male behavior. Among males the 30-day prevalence rates in 2013 were 3.8%, 11.1%, and 14.6% in grades 8, 10, and 12, versus 1.9%, 2.0%, and 1.4% for females. The respective current daily use rates for males were 0.9%, 3.5%,

and 5.7% compared to 0.1%, 0.3%, and 0.0% for females.

Annual prevalence in 2013 for *snus* was 2.0%, 5.2%, and 7.7% among 8th, 10th, and 12th graders, respectively. For dissolvable tobacco, the corresponding figures were 1.1%, 1.2%, and 1.9%. There was no change in use of snus or dissolvable tobacco between 2011 and 2012 among 12th graders (there were no 2011 measures for 8th and 10th graders); in 2013 the one significant change was a decline in use of snus among 10th graders.

### Perceived Risk

The most recent low point in the level of perceived risk for smokeless tobacco was 1995 in all three grades (though for 12th graders it was considerably lower in the mid-1980s). 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 2004, and it has declined some in the interval since then. The decline could be due to generational forgetting of the dangers of use, the increased marketing of snus and other smokeless products, and/or public statements about smokeless tobacco use being relatively less dangerous than cigarette smoking. In 2013 perceived risk declined in all three grades.

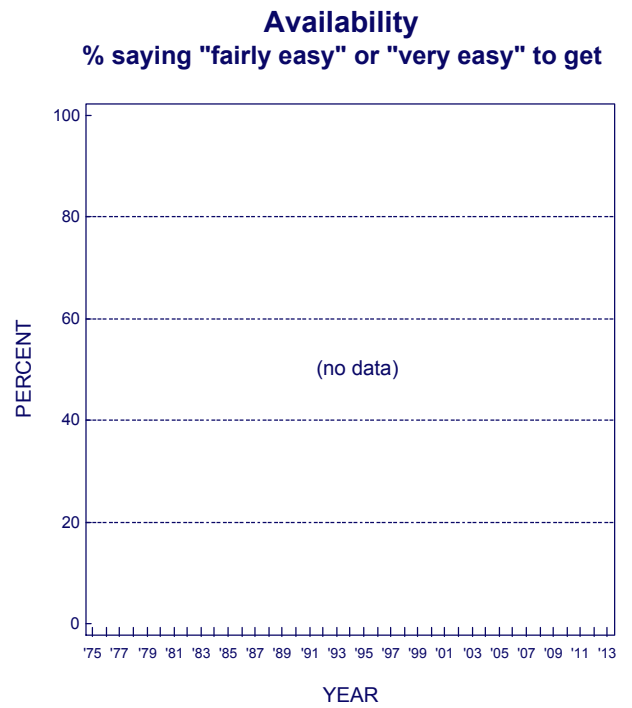
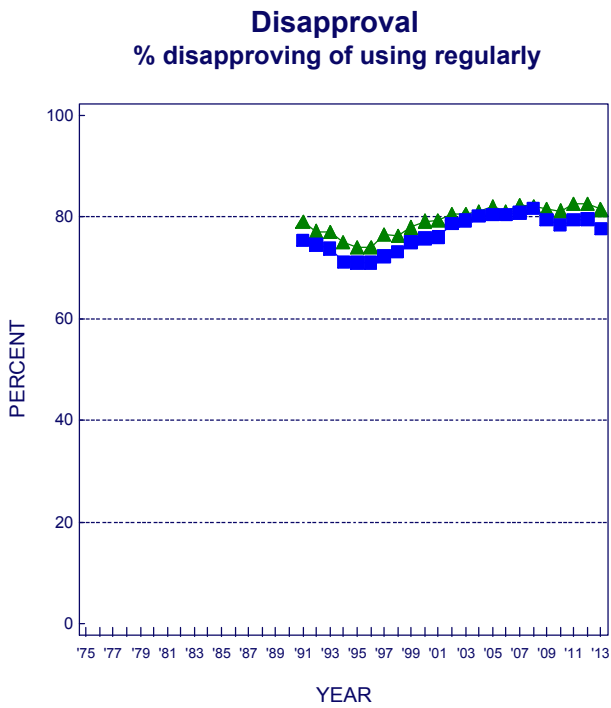
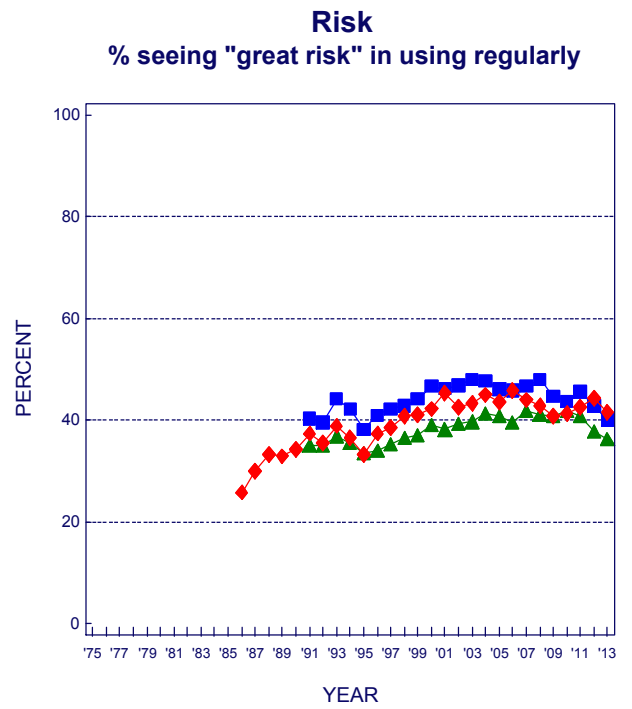
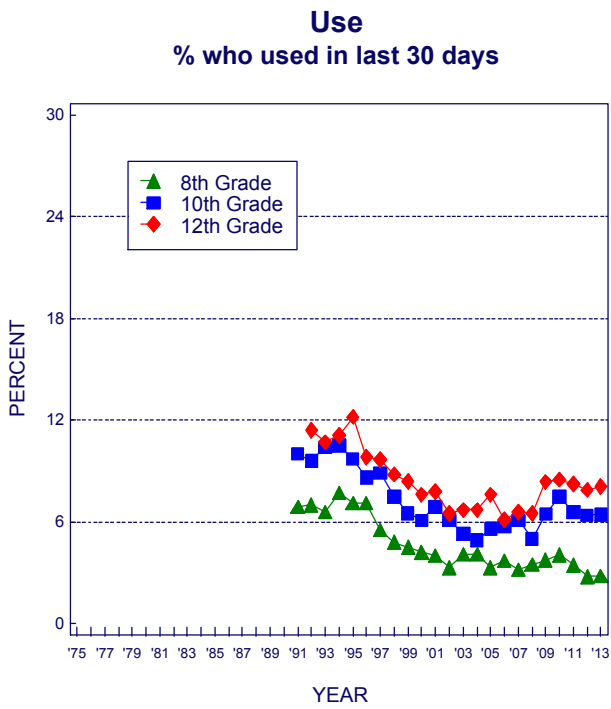
### Disapproval

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 remained in 2013 (82%), and from 71% to 82% in 2008 among 10th graders, with a significant decline since 2008 to 78% in 2013. It was 78% in 2013. Thus, both perceived risk and disapproval of smokeless tobacco use have “softened” in the past few years.

### Availability

There are no questions on perceived availability of smokeless tobacco.

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



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



## Small Cigars and Tobacco Using a Hookah

---

Twelfth graders were first asked about smoking small cigars and smoking tobacco using a hookah (water pipe) in 2010. (These questions were not asked of 8th and 10th graders.) Only the prevalence and frequency of use in the past 12 months are reported, because we use this prevalence period, which requires only a single question, to determine whether additional questions on the substance may be warranted in future surveys. We call these “tripwire” questions.

**Smoking Tobacco Using a Hookah.** The *past year* prevalence rate in 2013 was 21.4% for hookah smoking (up significantly from 17.1% in 2010 and 18.3% in 2012). Only about 14% of the 12th-grade students in 2013 indicated use on more than two occasions during the past 12 months, which suggests that a considerable amount of hookah use is light or experimental. Both genders use hookahs in about equal proportions: 22% of males and 21% of females in 2013.

**Small Cigars.** Small or little cigars can be the size and shape of a cigarette, but they are classified as cigars because they are wrapped in brown paper, which contains some tobacco leaf, rather than in white paper. The annual prevalence rate for small or little cigars

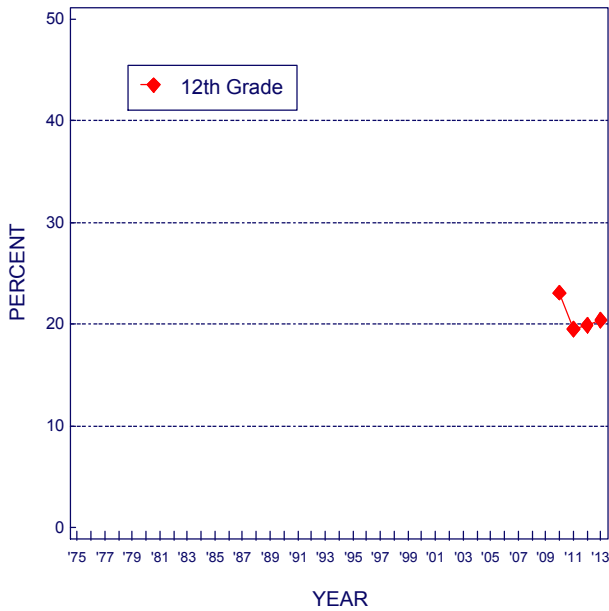
(our question uses the term “small cigars”) was similar to that for hookah smoking—20.4% in 2013 (down significantly from 23.1% in 2010). However, there is a larger gender difference for these; the 2013 annual prevalence for 12th grade males was 27% compared to 15% among females. The increases in the federal taxes on tobacco products, instituted in 2009, may well have played a role in leveling or decreasing the use of small cigars. The increase on a pack of small cigars was the same as for regular cigarettes (from \$0.39 to \$1.01 per pack). Some producers of small cigars subsequently slightly increased the weight of them in order to avoid the higher taxes placed on cigarettes and to remove them from FDA control under current law. Twelve percent of 12th graders indicated having used small cigars on more than two occasions during the year, and only 2% on more than 20 occasions.

Some small cigars are flavored, which is likely to make them more attractive to young people. A concern in the public health community is that these products will have the effect of reversing the hard-won gains in reducing cigarette smoking among youth, although in fact they carry the same dangers.

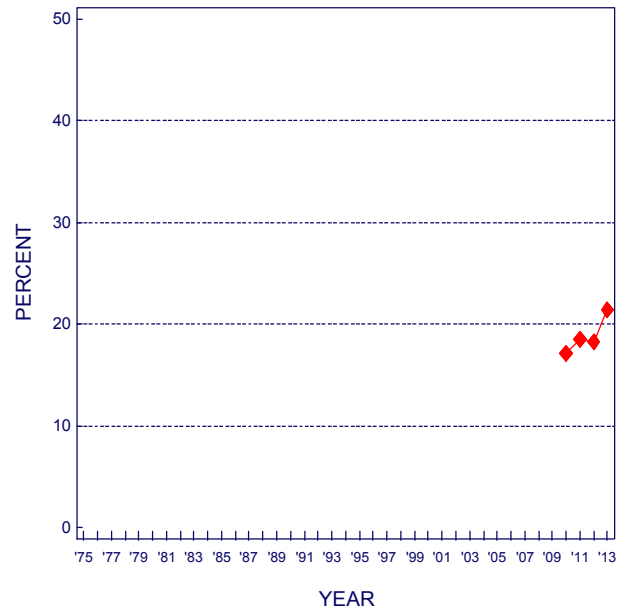
## Small Cigars and Tobacco using a Hookah : Trends in Annual Use

Grade 12

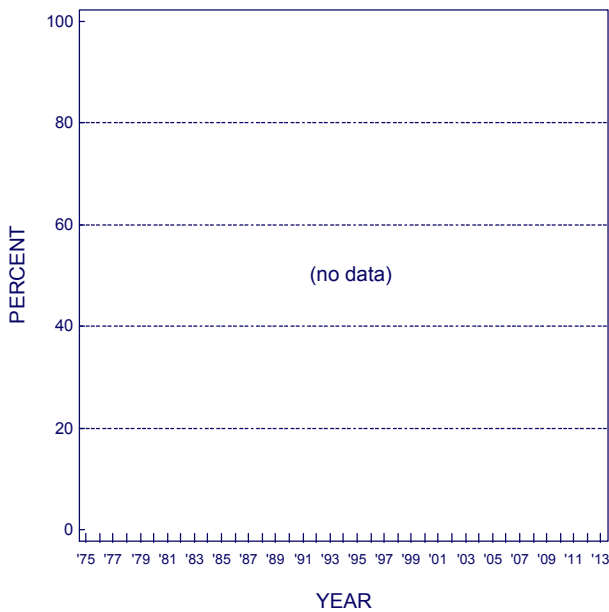
**Small Cigar Use**  
% who used in last 12 months



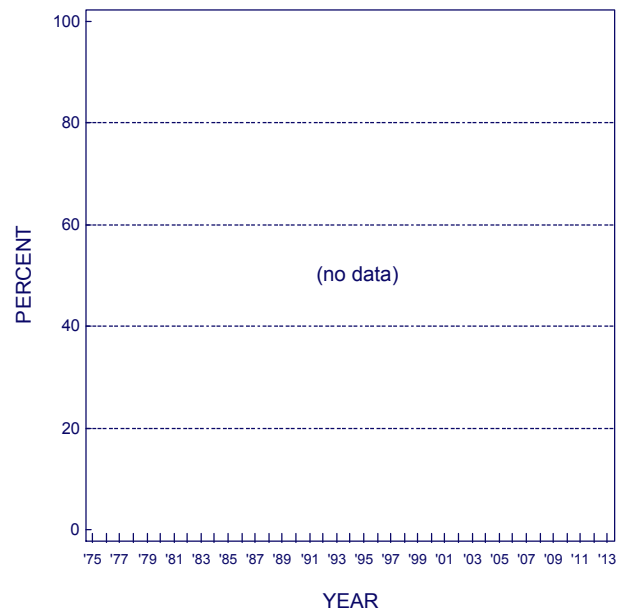
**Use of Tobacco with a Hookah**  
% who used in last 12 months



**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.

## 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 are controlled substances for which there is an illicit market, and they can have adverse consequences for the user. 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 2013, annual prevalence rates were 0.7%, 1.3%, and 2.2% for boys in grades 8, 10, and 12, compared with 0.4%, 0.5%, and 0.7% for girls.) Between 1991 and 1998, the overall annual prevalence rate was fairly stable among 8th and 10th graders, ranging between 0.9% and 1.2%. 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 half in a single year.) Among all 8th graders, steroid use declined by almost two thirds to 0.6% in 2013. Among 10th graders, use continued to increase, reaching 2.2% in 2002, but then declined by more than half to 0.8% by 2013. 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 a

cohort effect with the younger, heavier-using cohorts getting older). Twelfth graders use decreased significantly in 2005 to 1.5%, and in 2013 was again at 1.5%. Use is now down from recent peak levels by 64%, 61%, and 43% among 8th, 10th, and 12th graders, respectively. (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%). A change this sharp is quite unusual and highly significant, suggesting that some particular event or events in 1998—quite possibly publicity about use of performance-enhancing substances by famous athletes, in particular use of androstenedione by a famous home-run-hitting baseball player—made steroids seem less risky. It seems likely that perceived risk dropped substantially in the lower grades as well, and the sharp upturn in their use that year would be consistent with such a change. By 2006, perceived risk for 12th graders was up to 60%, with little change thereafter until 2013 when it showed a significant 4.4 percentage point decline, reaching 54%, the lowest point ever.

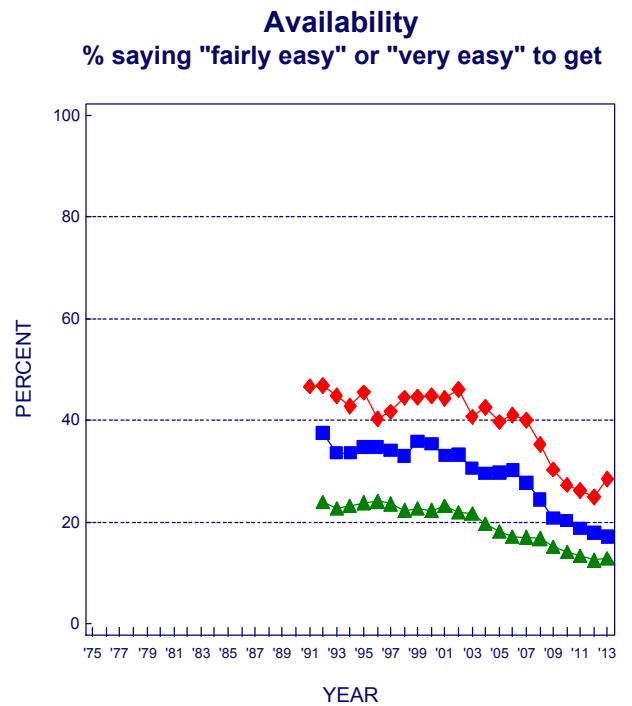
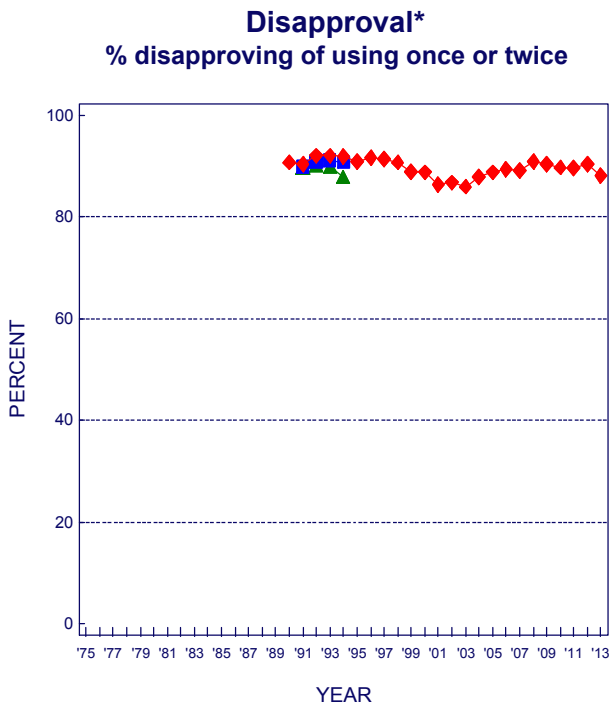
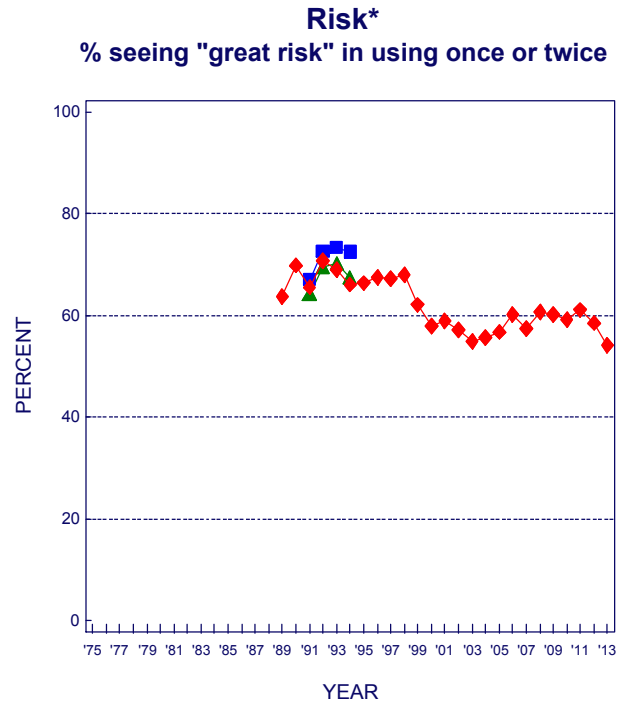
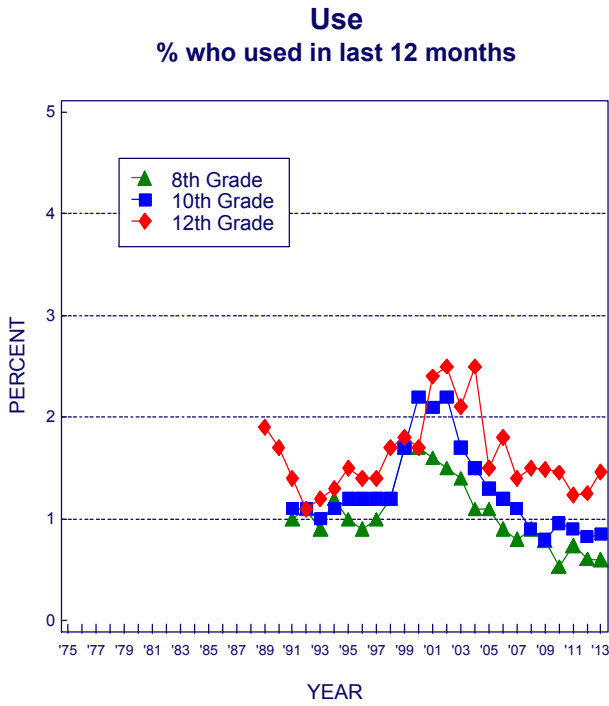
### Disapproval

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. From 2003 to 2008, disapproval rose some—as perceived risk rose and use declined—then leveled.

### Availability

Perceived availability of steroids was relatively high prior to 2001 or 2002; but it declined appreciably at all grades through 2012, before it halted among 8th graders and increased among 12th graders for the first time in a long time. Some steroids were previously sold over the counter, but now a number have been scheduled by the DEA. Androstenedione was classified as a Schedule III controlled substance in 2005.

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



Source. The Monitoring the Future study, the University of Michigan.  
 \*Question discontinued in 8th- and 10th-grade questionnaires in 1995.

## 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 drugs covered in this report. However, *Volume I* in this monograph series contains an extensive appendix (Appendix D) with tables giving the subgroup prevalence levels and trends for all of the classes of drugs discussed here. Chapters 4 and 5 in *Volume I* also present a more in-depth discussion and interpretation of those subgroup differences. Comparisons are made by gender, college plans, region of the country, community size, socioeconomic level (as measured by educational level of the parents), and race/ethnicity. In addition, an annual Monitoring the Future Occasional Paper (most recently number 79, containing data through 2012) provides in chart form the subgroup trends for all drugs; the Occasional Paper is available on the MTF website (<http://www.monitoringthefuture.org/pubs/occpapers/mf-occ79.pdf>). The reader is likely to find the graphic presentations in these occasional papers much easier to comprehend than the tabular material.

### 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. Gender differences in 30-day alcohol use differ by grade. Among 8th graders, the differences are very small, with females consistently slightly higher than males since 2002. Among 10th graders, males have generally, though not always, been higher than females; males have consistently been slightly higher than females since 2009. Among 12th graders, males have consistently been distinctly higher than females. Gender differences in binge drinking follow a similar pattern of little difference among 8th graders, males being somewhat higher than females in 10th grade, and a larger (though narrowing) gap in 12th grade with males being distinctly higher. Gender differences in 30-day cigarette smoking among 8th and 10th

graders have generally been minimal, but males are slightly higher than females in recent years. Among 12th graders, females generally had higher rates of smoking than males through 1990, but since then males have generally had the higher rates—the exception being that at 8th grade females have had higher rates in the past two years. The various gender differences in substance use appear to emerge for many drugs as students grow older. In 8th grade, females have higher rates of use for some drugs, such as inhalants and amphetamines. Usage rates for the various substances generally tend to move much in parallel across time for both genders, and 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, it was the college-bound who had a greater increase in cigarette smoking in the early to mid-1990s than did their non-college-bound peers; but they also showed a considerably larger decline since then, leaving them with dramatically lower smoking rates at present.

### 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, the Northeast and West tended to have the highest proportions of students using any illicit drug, and the South the lowest; however, 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 and schools 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. We believe that the removal of the Joe Camel ad campaign may have played a role in this. With regard to alcohol, in recent years there has been essentially no association between parental education and binge drinking among 12th graders, a small negative correlation among 10th graders, and a somewhat stronger negative correlation among 8th graders.

### Race/Ethnicity

Among the most dramatic and interesting subgroup differences are those found among the three largest

racial/ethnic groups—Whites, African Americans, and Hispanics. For a number of years African-American students had substantially lower rates of use of any illicit drug than did Whites, but the differences have narrowed in recent years in the lower grades as a result of increasing marijuana use among African-American students. (Marijuana use tends to drive the overall index.) Still, African Americans have lower levels of use for most licit and illicit drugs at all three grade levels—in particular for hallucinogens, ecstasy, and all forms of prescription drugs. Their use of alcohol, and cigarettes, is also lower. 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 generally have had rates of use that tended to place them between the other two groups in 12th grade—usually closer to the rates for Whites than for African Americans. In 2013 Hispanics have the highest reported rates of use in 12th grade for a number of substances—marijuana, inhalants, ecstasy, cocaine, crack, salvia, Vicodin, methamphetamine, crystal methamphetamine, over-the-counter cough/cold medicines, and tobacco using a hookah. In 8th grade they tend to come out highest of the three racial/ethnic groups on nearly all classes of drugs. 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: 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. Like African-American students, Hispanic students generally have lower rates than White students of misusing any of the prescription drugs.

Again, we refer the reader to Occasional Paper 79 for a much more complete picture of these complex subgroup differences and how they have changed over the years (<http://www.monitoringthefuture.org/pubs/occapers/mtf-occ79.pdf>).



## Lessons Learned

---

### 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. Supposed benefits take only rumor and a few testimonials, the spread of which have been hastened and expanded greatly by the media and the Internet. It usually takes much longer for the evidence of adverse consequences (e.g., adverse reactions, 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 illustrated this dynamic. Synthetic marijuana and so-called “bath salts” are two more recent examples where evidence of adverse outcomes is only beginning to catch up to the push that these drugs have received through the Internet and the media.

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.

Marijuana is one drug that is affected by some very specific policies, including medicalization and legalization of recreational use by adults. The effects on youth behaviors and attitudes of recent changes in a number of states will need to be carefully monitored in future years. Currently, marijuana does not hold the same appeal for youth as it did in the past, and today’s annual prevalence among 12th graders of 36% is considerably lower than rates exceeding 50% in the

1970s (documented by this project). However, if states that legalize recreational marijuana allow marijuana advertising and marketing, then prevalence could rebound and approach or even surpass past levels.

### “Generational Forgetting” Helps Keep the Drug 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 knowledge among youth 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 that have followed a similar pattern. LSD, inhalants, and ecstasy have all shown some effects of generational forgetting in recent years—that is, perceived risk has declined appreciably for those drugs—which puts future cohorts at greater risk of having a resurgence in use. In the case of LSD, perceived risk among 8th graders has declined noticeably, and more students are saying that they are not familiar with the drug. It would appear that a resurgence in availability (which declined very sharply after about 2001, most likely due to the FDA closing a major lab in 2000) could generate another increase in use.

As for newly emerging drugs, examples include nitrite inhalants and PCP in the 1970s; crack and crystal methamphetamine in the 1980s; Rohypnol, GHB, and ecstasy in the 1990s; dextromethorphan, and salvia in the 2000s, and “bath salts” and “synthetic marijuana” more recently. The frequent introduction of new drugs (or new forms or new modes of administration of older drugs, as illustrated by crack, crystal methamphetamine, and noninjected heroin) helps 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.



**TABLE 1**  
**Trends in Lifetime Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012–2013	Peak year–2013 change		Low year–2013 change	
																								change	Absolute change	Proportional change (%) <sup>a</sup>	Absolute change	Proportional change
Any Illicit Drug	30.4	29.8	32.1	35.7	38.9	42.2	<b>43.3</b>	42.3	41.9	41.0	40.9	39.5	37.5	36.4	35.7	34.0	32.7	<u>32.6</u>	33.2	34.4	34.7	34.1	35.8	+1.7 s	-7.5 sss	-17.2	+3.3 sss	+10.0
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‡	<b>23.2</b>	21.1	19.8	19.3	18.6	18.2	17.7	16.8	16.5	16.8	16.1	<u>15.5</u>	16.2	+0.7	-7.0 sss	-30.3	+0.7	+4.5
Any Illicit Drug including Inhalants	36.8	36.3	38.8	41.9	44.9	47.4	<b>48.2</b>	47.4	46.9	46.2	45.5	43.7	41.9	41.3	41.0	39.3	38.0	<u>37.9</u>	<u>37.9</u>	38.8	38.7	<u>37.9</u>	39.1	+1.2	-9.1 sss	-18.9	+1.2	+3.1
Marijuana/Hashish	22.7	21.1	23.4	27.8	31.6	35.6	<b>37.8</b>	36.5	36.4	35.3	35.3	34.0	32.4	31.4	30.8	28.9	<u>27.9</u>	<u>27.9</u>	29.0	30.4	31.0	30.7	32.0	+1.3	-5.8 sss	-15.4	+4.1 sss	+14.7
Inhalants	17.0	16.9	18.2	18.6	<b>19.4</b>	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	12.1	10.6	10.0	<u>8.9</u>	-1.1 ss	-10.5 sss	-54.2	—	—
Hallucinogens	6.1	6.3	7.0	7.7	8.9	10.0	<i>10.2</i>	9.5	9.0	8.5‡	<b>9.2</b>	7.6	6.9	6.3	5.9	5.7	5.8	5.6	5.3	5.8	5.7	<u>5.0</u>	<u>5.0</u>	0.0	-4.1 sss	-45.0	—	—
LSD	5.5	5.7	6.5	6.9	8.1	8.9	<b>9.1</b>	8.3	7.9	7.2	6.5	5.0	3.7	3.0	2.6	2.5	2.6	2.7	2.5	2.8	2.7	<u>2.5</u>	2.6	+0.1	-6.5 sss	-71.1	+0.1	+4.2
Hallucinogens other than LSD	2.4	2.5	2.7	3.6	3.9	4.8	4.9	4.8	4.4	4.5‡	<b>6.7</b>	6.0	5.8	5.6	5.4	5.2	5.1	4.8	4.7	5.0	4.9	4.3	<u>4.1</u>	-0.2	-2.5 sss	-38.1	—	—
Ecstasy (MDMA)	—	—	—	—	—	4.9	5.2	4.5	5.3	7.2	<b>8.0</b>	6.9	5.4	4.7	<u>4.0</u>	4.3	4.5	4.1	4.6	5.5	5.5	4.6	4.7	+0.1	-3.3 sss	-40.9	+0.8 ss	+19.2
Cocaine	4.6	4.0	4.1	4.5	5.1	6.0	6.6	7.0	<b>7.2</b>	6.5	5.9	5.7	5.3	5.5	5.5	5.3	5.2	4.8	4.2	3.8	3.4	3.3	<u>3.1</u>	-0.2	-4.1 sss	-56.6	—	—
Crack	2.0	1.9	2.0	2.5	2.8	3.2	3.4	<b>3.8</b>	<b>3.8</b>	3.5	3.2	3.2	2.9	2.8	2.6	2.5	2.2	2.0	1.9	1.6	<u>1.5</u>	<u>1.5</u>	0.0	-2.4 sss	-61.9	—	—	
Other cocaine	4.1	3.5	3.6	3.9	4.2	5.2	5.9	6.1	<b>6.3</b>	5.6	5.1	4.8	4.5	4.7	4.7	4.6	4.1	3.7	3.4	3.1	2.9	<u>2.7</u>	-0.2	-3.5 sss	-56.2	—	—	
Heroin	1.1	1.3	1.3	1.6	1.9	2.1	<b>2.2</b>	<b>2.2</b>	2.1	1.7	1.5	1.5	1.4	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.2	<u>1.0</u>	<u>1.0</u>	0.0	-1.2 sss	-54.7	—	—
With a needle	—	—	—	—	—	1.1	1.2	1.1	1.1	<b>1.3</b>	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.8	<u>0.6</u>	0.7	0.0	-0.6 sss	-48.9	0.0	+1.4
Without a needle	—	—	—	—	1.3	1.7	1.7	1.6	1.6	<b>1.8</b>	1.3	1.3	1.3	1.2	1.1	1.0	1.0	0.9	0.9	1.0	0.9	<u>0.7</u>	<u>0.7</u>	0.0	-1.1 sss	-60.6	—	—
Amphetamines <sup>b</sup>	12.9	12.5	13.8	14.3	15.2	<b>15.5</b>	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	8.9	8.6	8.3	<u>8.1</u>	-0.2	-7.4 sss	-47.6	—	—
Methamphetamine	—	—	—	—	—	—	—	—	<b>6.5</b>	6.2	5.8	5.3	5.0	4.5	3.9	3.4	2.5	2.5	2.2	2.2	1.8	1.6	<u>1.5</u>	-0.1	-5.0 sss	-77.2	—	—
Tranquilizers	5.5	5.3	5.4	5.5	5.8	6.5	6.6	6.9	7.0	6.9‡	<b>7.9</b>	<b>7.9</b>	7.3	7.1	6.8	7.0	6.7	6.3	6.5	6.6	6.0	5.8	<u>5.2</u>	-0.6 s	-2.6 sss	-33.6	—	—
Alcohol	<i>80.1</i>	<i>79.2‡</i>	68.4	68.4	68.2	68.4	<b>68.8</b>	67.4	66.4	66.6	65.5	62.7	61.7	60.5	58.6	57.0	56.3	55.1	54.6	53.6	51.5	50.0	<u>48.4</u>	-1.6 s	-20.3 sss	-29.5	—	—
Been drunk	<b>46.3</b>	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	34.2	32.5	32.8	<u>31.7</u>	-1.2	-14.6 sss	-31.6	—	—
Flavored alcoholic beverages	—	—	—	—	—	—	—	—	—	—	—	—	—	<b>54.7</b>	<b>54.7</b>	53.1	51.3	49.3	47.9	46.7	44.5	42.7	<u>41.1</u>	-1.7	-13.6 sss	-24.9	—	—
Cigarettes	53.5	53.0	54.0	54.6	55.8	<b>57.8</b>	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	30.9	28.7	27.0	<u>25.6</u>	-1.4 s	-32.2 sss	-55.7	—	—
Smokeless Tobacco	—	26.2	25.6	<b>26.3</b>	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	<u>12.3</u>	13.5	14.5	13.8	13.5	12.8	-0.7	-13.5 sss	-51.4	+0.5	+4.0
Steroids	1.9	1.8	1.8	2.1	2.1	1.8	2.1	2.3	2.8	3.0	<b>3.3</b>	<b>3.3</b>	3.0	2.5	2.1	2.0	1.8	1.6	1.5	1.5	1.5	<u>1.4</u>	1.5	+0.1	-1.8 sss	-55.3	+0.1	+4.1

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

Notes. '—' indicates data not available. '‡' indicates a change in the question text. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

Values in bold equal peak levels since 1991. Values in italics equal peak level before wording change. Underlined values equal lowest level since recent peak level.

Level of significance of difference between classes: s = .05, ss = .01, sss = .001.

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

<sup>a</sup>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%.

<sup>b</sup>In 2013, for the questions on the use of amphetamines, the text was changed on two of the questionnaire forms for 8th and 10th graders and four of the questionnaire forms for 12th graders. Data presented here for 2013 include only the unchanged forms.

**TABLE 2**  
**Trends in Annual Prevalence of Use of Various Drugs for Grades 8, 10, and 12 Combined**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012–2013 change	Peak year–2013 change Absolute change	Peak year–2013 change Proportional change (%) <sup>a</sup>	Low year–2013 change Absolute change	Low year–2013 change Proportional change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012–2013 change	Peak year–2013 change Absolute change	Peak year–2013 change Proportional change (%) <sup>a</sup>	Low year–2013 change Absolute change	Low year–2013 change Proportional change	
Any Illicit Drug	20.2	19.7	23.2	27.6	31.0	33.6	<b>34.1</b>	32.2	31.9	31.4	31.8	30.2	28.4	27.6	27.1	25.8	<u>24.8</u>	24.9	25.9	27.3	27.6	27.1	28.4	+1.3 s	-5.6 sss	-16.6	+3.6 sss	+14.4	
Any Illicit Drug other than Marijuana	12.0	12.0	13.6	14.6	16.4	17.0	16.8	15.8	15.6	15.3†	<b>16.3</b>	14.6	13.7	13.5	13.1	12.7	12.4	11.9	11.6	11.8	11.3	<u>10.8</u>	11.0	+0.2	-5.3 sss	-32.4	+0.2	+1.8	
Any Illicit Drug including Inhalants	23.5	23.2	26.7	31.1	34.1	36.6	<b>36.7</b>	35.0	34.6	34.1	34.3	32.3	30.8	30.1	30.1	28.7	<u>27.6</u>	<u>27.6</u>	28.5	29.7	29.8	29.0	30.2	+1.2	-6.5 sss	-17.7	+2.6 ss	+9.3	
Marijuana/Hashish	15.0	14.3	17.7	22.5	26.1	29.0	<b>30.1</b>	28.2	27.9	27.2	27.5	26.1	24.6	23.8	23.4	22.0	<u>21.4</u>	21.5	22.9	24.5	25.0	24.7	25.8	+1.1	-4.3 sss	-14.2	+4.4 sss	+20.7	
Synthetic marijuana	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	<b>8.0</b>	<u>6.4</u>	-1.6 sss	-1.6 sss	-20.6	—	—	
Inhalants	7.6	7.8	8.9	9.6	<b>10.2</b>	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	6.0	5.0	4.5	<u>3.8</u>	-0.7 ss	-6.4 sss	-63.0	—	—	
Hallucinogens	3.8	4.1	4.8	5.2	6.6	7.2	6.9	6.3	6.1	5.4†	<b>6.0</b>	4.5	4.1	4.0	3.9	3.6	3.8	3.8	3.5	3.8	3.7	3.2	<u>3.1</u>	-0.1	-2.9 sss	-48.4	—	—	
LSD	3.4	3.8	4.3	4.7	5.9	<b>6.3</b>	6.0	5.3	5.3	4.5	4.1	2.4	1.6	1.6	1.5	<u>1.4</u>	1.7	1.9	1.6	1.8	1.8	1.6	1.6	0.0	-4.7 sss	-75.0	+0.2	+12.5	
Hallucinogens other than LSD	1.3	1.4	1.7	2.2	2.7	3.2	3.2	3.1	2.9	2.8†	<b>4.0</b>	3.7	3.6	3.6	3.4	3.3	3.3	3.2	3.0	3.3	3.1	2.7	<u>2.5</u>	-0.3	-1.6 sss	-39.3	—	—	
Ecstasy (MDMA)	—	—	—	—	—	3.1	3.4	2.9	3.7	5.3	<b>6.0</b>	4.9	3.1	2.6	<u>2.4</u>	2.7	3.0	2.9	3.0	3.8	3.7	2.5	2.8	+0.3	-3.2 sss	-53.0	+0.5 s	+19.0	
Salvia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.5	<b>3.6</b>	2.7	<u>2.3</u>	-0.4 ss	-1.4 sss	-37.4	—	—	
Cocaine	2.2	2.1	2.3	2.8	3.3	4.0	4.3	<b>4.5</b>	<b>4.5</b>	3.9	3.5	3.7	3.3	3.5	3.5	3.5	3.4	2.9	2.5	2.2	2.0	1.9	<u>1.8</u>	-0.1	-2.7 sss	-60.0	—	—	
Crack	1.0	1.1	1.2	1.5	1.8	2.0	2.1	<b>2.4</b>	2.2	2.1	1.8	2.0	1.8	1.7	1.6	1.5	1.5	1.3	1.2	1.1	1.0	0.9	<u>0.8</u>	0.0	-1.6 sss	-65.5	—	—	
Other cocaine	2.0	1.8	2.0	2.3	2.8	3.4	3.7	3.7	<b>4.0</b>	3.3	3.0	3.1	2.8	3.1	3.0	3.1	2.9	2.6	2.1	1.9	1.7	1.7	<u>1.5</u>	-0.1	-2.5 sss	-61.5	—	—	
Heroin	0.5	0.6	0.6	0.9	1.2	<b>1.3</b>	<b>1.3</b>	1.2	<b>1.3</b>	<b>1.3</b>	0.9	1.0	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7	<u>0.6</u>	<u>0.6</u>	0.0	-0.7 sss	-56.2	—	—	
With a needle	—	—	—	—	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	<u>0.4</u>	<u>0.4</u>	0.0	-0.3 sss	-43.9	—	—	
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	0.6	0.5	<u>0.4</u>	<u>0.4</u>	0.0	-0.7 sss	-65.7	—	—	
OxyContin	—	—	—	—	—	—	—	—	—	—	—	2.7	3.2	3.3	3.4	3.5	3.5	3.4	<b>3.9</b>	3.8	3.4	<u>2.9</u>	<u>2.9</u>	+0.1	-1.0 ss	-24.5	—	—	
Vicodin	—	—	—	—	—	—	—	—	—	—	—	6.0	<b>6.6</b>	5.8	5.7	6.3	6.2	6.1	6.5	5.9	5.1	4.3	<u>3.7</u>	-0.6	-2.9 sss	-44.0	—	—	
Amphetamines <sup>c</sup>	7.5	7.3	8.4	9.1	10.0	<b>10.4</b>	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	6.2	5.9	<u>5.6</u>	5.7	0.0	-4.7 sss	-45.0	0.0	+0.9	
Ritalin	—	—	—	—	—	—	—	—	—	—	<b>4.2</b>	3.8	3.5	3.6	3.3	3.5	2.8	2.6	2.5	2.2	2.1	<u>1.7</u>	<u>1.7</u>	0.0	-2.5 sss	-59.4	—	—	
Adderall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.3	<b>4.5</b>	4.1	4.4	4.4	-0.1	-0.5 s	-10.3	+0.3	+7.6	
Methamphetamine	—	—	—	—	—	—	—	—	<b>4.1</b>	3.5	3.4	3.2	3.0	2.6	2.4	2.0	1.4	1.3	1.3	1.3	1.2	<u>1.0</u>	<u>1.0</u>	0.0	-3.1 sss	-76.5	—	—	
Bath salts (synthetic stimulants)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.9	0.9	0.0	—	—	—	—	—
Tranquilizers	2.8	2.8	2.9	3.1	3.7	4.1	4.1	4.4	4.4	4.5†	<b>5.5</b>	5.3	4.8	4.8	4.7	4.6	4.5	4.3	4.5	4.4	3.9	3.7	<u>3.3</u>	-0.4 s	-2.2 sss	-39.6	—	—	
OTC Cough/Cold Medicines	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.4	5.0	4.7	5.2	4.8	4.4	4.4	<u>4.0</u>	-0.4	-1.3 sss	-25.0	—	—
Rohypnol	—	—	—	—	—	1.1	1.1	1.1	0.8	0.7	0.9†	0.8	0.8	<b>0.9</b>	0.8	0.7	0.8	0.7	<u>0.6</u>	0.8	0.9	0.7	<u>0.6</u>	-0.1	-0.3 s	-33.3	—	—	
GHB <sup>b</sup>	—	—	—	—	—	—	—	—	—	1.4	1.2	1.2	1.2	1.1	<u>0.8</u>	0.9	0.7	0.9	0.9	<u>0.8</u>	—	—	—	—	—	—	—	—	—
Ketamine <sup>b</sup>	—	—	—	—	—	—	—	—	—	<b>2.0</b>	1.9	<b>2.0</b>	1.7	1.3	<u>1.0</u>	1.1	<u>1.0</u>	1.2	1.3	1.2	1.2	—	—	—	—	—	—	—	—
Alcohol	67.4	66.3†	59.7	60.5	60.4	60.9	<b>61.4</b>	59.7	59.0	59.3	58.2	55.3	54.4	54.0	51.9	50.7	50.2	48.7	48.4	47.4	45.3	44.3	<u>42.8</u>	-1.5 s	-18.5 sss	-30.2	—	—	
Been drunk	35.8	34.3	34.3	35.0	35.9	36.7	<b>36.9</b>	35.5	36.0	35.9	35.0	32.1	31.2	32.5	30.8	30.7	29.7	28.1	28.7	27.1	25.9	26.4	<u>25.4</u>	-0.9	-11.4 sss	-31.0	—	—	
Flavored alcoholic beverages	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Alcoholic beverages containing caffeine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19.7	18.6	<u>16.6</u>	-2.0	-3.1 sss	-15.8	—	—
Dissolvable tobacco products	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.4	1.4	0.0	—	—	—	—	—
Snus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.6	<u>4.8</u>	-0.8 s	-0.8 s	-14.2	—	—
Steroids	1.2	1.1	1.0	1.2	1.3	1.1	1.2	1.3	1.7	1.9	<b>2.0</b>	<b>2.0</b>	1.7	1.6	1.3	1.3	1.1	1.1	1.0	<u>0.9</u>	<u>0.9</u>	<u>0.9</u>	<u>0.9</u>	+0.1	-1.1 sss	-53.4	—	—	

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

Notes. '—' indicates data not available. '†' indicates a change in the question text. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

Values in bold equal peak levels since 1991. Values in italics equal peak level before wording change. Underlined values equal lowest level since recent peak level.

Level of significance of difference between classes: s = .05, ss = .01, sss = .001.

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

<sup>a</sup>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%.

<sup>b</sup>Question was discontinued among 8th and 10th graders in 2012.

<sup>c</sup>In 2013, for the questions on the use of amphetamines, the text was changed on two of the questionnaire forms for 8th and 10th graders and four of the questionnaire forms for 12th graders. Data presented here for 2013 include only the unchanged forms.

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

(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012–2013 change	Peak year–2013 change	Proportional change (%) <sup>a</sup>	Low year–2013 change	Proportional change
																								Absolute change	Proportional change (%) <sup>a</sup>	Absolute change	Proportional change	
Any Illicit Drug	10.9	10.5	13.3	16.8	18.6	<b>20.6</b>	20.5	19.5	19.5	19.2	19.4	18.2	17.3	16.2	15.8	14.9	14.8	<u>14.6</u>	15.8	16.7	17.0	16.8	17.4	+0.7	-3.2 sss	-15.6	+2.8 sss	+18.9
Any Illicit Drug other than Marijuana	5.4	5.5	6.5	7.1	<i>8.4</i>	<i>8.4</i>	<i>8.4</i>	8.2	7.9	8.0‡	<b>8.2</b>	7.7	7.1	7.0	6.7	6.4	6.4	5.9	5.7	5.7	5.7	<u>5.2</u>	5.4	+0.3	-2.7 sss	-33.5	+0.3	+4.9
Any Illicit Drug including Inhalants	13.0	12.5	15.4	18.9	20.7	<b>22.4</b>	22.2	21.1	21.1	21.0	20.8	19.5	18.6	17.5	17.5	16.5	16.5	<u>16.1</u>	17.3	18.0	18.3	17.6	18.5	+0.8	-3.9 sss	-17.6	+2.3 sss	+14.3
Marijuana/Hashish	8.3	7.7	10.2	13.9	15.6	17.7	<b>17.9</b>	16.9	16.9	16.3	16.6	15.3	14.8	13.6	13.4	12.5	<u>12.4</u>	12.5	13.8	14.8	15.2	15.1	15.6	+0.4	-2.4 sss	-13.1	+3.2 sss	+25.8
Inhalants	3.2	3.3	3.8	4.0	<b>4.3</b>	3.9	3.7	3.4	3.3	3.2	<b>2.8</b>	2.7	2.7	2.9	2.9	2.7	2.6	2.6	2.5	2.4	2.1	1.7	<u>1.5</u>	-0.1	-2.8 sss	-64.1	—	—
Hallucinogens	1.5	1.6	1.9	2.2	3.1	2.7	3.0	2.8	2.5	2.0‡	<b>2.3</b>	1.7	1.5	1.5	1.3	1.4	1.4	1.3	1.4	1.3	1.3	<u>1.1</u>	<u>1.1</u>	0.0	-1.2 sss	-52.0	—	—
LSD	1.3	1.5	1.6	1.9	<b>2.8</b>	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	<u>0.5</u>	0.7	0.7	<u>0.5</u>	0.6	+0.1	-2.2 sss	-78.1	+0.1	+10.1
Hallucinogens other than LSD	0.5	0.5	0.7	1.0	1.0	1.2	1.2	1.2	1.1	1.1‡	<b>1.4</b>	<b>1.4</b>	1.2	1.3	1.2	1.1	1.1	1.1	1.0	1.2	1.0	0.9	<u>0.8</u>	-0.1	-0.6 sss	-45.2	—	—
Ecstasy (MDMA)	—	—	—	—	—	1.5	1.3	1.2	1.6	<b>2.4</b>	<b>2.4</b>	1.8	1.0	0.9	0.9	1.0	1.1	1.2	1.2	1.5	1.4	<u>0.8</u>	1.0	+0.2 ss	-1.3 sss	-55.9	+0.2 ss	+27.1
Cocaine	0.8	0.9	0.9	1.2	1.5	1.7	1.8	<b>1.9</b>	<b>1.9</b>	1.7	1.5	1.6	1.4	1.6	1.6	1.6	1.4	1.3	1.0	0.9	<u>0.8</u>	<u>0.8</u>	<u>0.8</u>	0.0	-1.1 sss	-58.7	—	—
Crack	0.4	0.5	0.5	0.7	0.8	0.9	0.8	<b>1.0</b>	0.9	0.9	0.9	<b>1.0</b>	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5	<u>0.4</u>	<u>0.4</u>	0.0	-0.5 sss	-60.2	—	—
Other cocaine	0.7	0.7	0.8	1.1	1.2	1.3	1.5	1.6	<b>1.7</b>	1.4	1.3	1.3	1.2	1.4	1.3	1.4	1.1	1.1	0.8	0.8	0.7	0.7	<u>0.6</u>	0.0	-1.0 sss	-62.6	—	—
Heroin	0.2	0.3	0.3	0.4	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	<u>0.3</u>	<u>0.3</u>	0.0	-0.3 sss	-47.5	—	—
With a needle	—	—	—	—	0.3	<b>0.4</b>	0.3	<b>0.4</b>	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	<u>0.2</u>	0.3	0.3	<u>0.2</u>	<u>0.2</u>	0.0	-0.1 ss	-40.7	—	—
Without a needle	—	—	—	—	0.4	0.4	<b>0.5</b>	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	<u>0.2</u>	<u>0.2</u>	0.3	0.3	<u>0.2</u>	<u>0.2</u>	0.0	-0.3 sss	-57.9	—	—
Amphetamines <sup>b</sup>	3.0	3.3	3.9	4.0	4.5	<b>4.8</b>	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	2.7	2.8	<u>2.5</u>	2.7	+0.2	-2.1 sss	-45.3	+0.2	—
Methamphetamine	—	—	—	—	—	—	—	—	<b>1.5</b>	<b>1.5</b>	1.4	<b>1.5</b>	1.4	1.1	0.9	0.7	0.5	0.7	0.5	0.6	0.5	0.5	<u>0.4</u>	-0.2	-1.1 sss	-74.5	—	—
Tranquilizers	1.1	1.1	1.1	1.3	1.6	1.7	1.7	1.9	1.9	2.1‡	2.3	<b>2.4</b>	2.2	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.7	<u>1.5</u>	<u>1.5</u>	0.0	-0.9 sss	-38.1	—	—
Alcohol	39.8	38.4‡	36.3	37.6	37.8	<b>38.8</b>	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	26.8	25.5	25.9	<u>24.3</u>	-1.6 ss	-14.4 sss	-37.3	—	—
Been drunk	19.2	17.8	18.2	19.3	20.3	20.4	<b>21.2</b>	20.4	20.6	20.3	19.7	17.4	17.7	18.1	17.0	17.4	16.5	14.9	15.2	14.6	<u>13.5</u>	14.7	<u>13.5</u>	-1.2 s	-7.7 sss	-36.3	—	—
Flavored alcoholic beverages	—	—	—	—	—	—	—	—	—	—	—	—	—	<b>23.0</b>	21.6	21.7	20.4	18.6	17.9	17.0	15.2	14.9	<u>14.0</u>	-0.9	-9.1 sss	-39.4	—	—
Cigarettes	20.7	21.2	23.4	24.7	26.6	<b>28.3</b>	<b>28.3</b>	27.0	25.2	22.6	20.2	17.7	16.6	16.1	15.3	14.4	13.6	12.6	12.7	12.8	11.7	10.6	<u>9.6</u>	-1.0 s	-18.7 sss	-66.0	—	—
Smokeless Tobacco	—	9.2	9.1	<b>9.7</b>	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	<u>4.9</u>	6.0	6.5	5.9	5.6	5.7	+0.1	-4.0 sss	-41.4	+0.8	+16.7
Steroids	0.6	0.6	0.6	0.7	0.6	0.5	0.7	0.7	0.9	0.9	0.9	<b>1.0</b>	0.9	0.9	0.7	0.7	0.6	0.6	0.6	0.6	<u>0.5</u>	<u>0.5</u>	0.6	0.0	-0.5 sss	-45.5	0.0	+6.0

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

Notes. '—' indicates data not available. '‡' indicates a change in the question text. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

Values in bold equal peak levels since 1991. Values in italics equal peak level before wording change. Underlined values equal lowest level since recent peak level.

Level of significance of difference between classes: s = .05, ss = .01, sss = .001.

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

<sup>a</sup>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%.

<sup>b</sup>In 2013, for the questions on the use of amphetamines, the text was changed on two of the questionnaire forms for 8th and 10th graders and four of the questionnaire forms for 12th graders. Data presented here for 2013 include only the unchanged forms.

**TABLE 4**  
**Trends in Daily Prevalence of Use of Selected Drugs for Grades 8, 10, and 12 Combined**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012–2013	Peak year–2013 change		Low year–2013 change	
																									change	Absolute change	Proportional change (%) <sup>a</sup>	Absolute change
Marijuana	0.9	0.9	1.2	2.1	2.7	3.2	3.4	3.4	3.5	3.5	<b>3.7</b>	3.5	3.4	3.0	2.9	2.8	<u>2.7</u>	2.8	2.8	3.4	3.6	3.6	3.7	+0.2	+0.1	1.8	+1.0 sss	+37.5
Alcohol	1.7	1.6‡	2.0	1.8	1.9	2.0	2.1	<b>2.2</b>	2.0	1.7	2.0	1.9	1.7	1.5	1.5	1.6	1.4	1.3	1.4	<u>1.0</u>	1.2	1.1	-0.2	-1.1 sss	-51.7	0.0	+3.3	
5+ drinks in a row in last 2 weeks	20.0	19.0	19.5	20.3	21.1	<b>21.9</b>	<b>21.9</b>	21.5	21.7	21.2	20.4	18.9	18.6	18.8	17.5	17.4	17.2	15.5	16.1	14.9	13.6	14.3	<u>13.2</u>	-1.1 s	-8.7 sss	-39.8	—	—
Been drunk	0.4	0.4	0.5	0.6	0.7	0.7	<b>0.9</b>	0.8	<b>0.9</b>	0.8	0.7	0.6	0.7	0.7	0.6	0.7	0.6	0.6	<u>0.5</u>	0.6	<u>0.5</u>	0.6	<u>0.5</u>	-0.1	-0.4 sss	-41.4	—	—
Cigarettes	12.4	11.9	13.5	14.0	15.5	16.8	<b>16.9</b>	15.4	15.0	13.4	11.6	10.2	9.3	9.0	8.0	7.6	7.1	6.4	6.4	6.4	5.7	5.2	<u>4.7</u>	-0.5	-12.2 sss	-72.0	—	—
1/2 pack+/day	6.5	6.1	6.9	7.2	7.9	<b>8.7</b>	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	2.5	2.1	1.9	<u>1.8</u>	-0.1	-7.0 sss	-79.5	—	—
Smokeless tobacco	—	<b>3.0</b>	2.7	2.9	2.5	2.3	2.5	2.1	1.7	1.9	2.0	<u>1.4</u>	1.6	1.7	1.6	1.5	1.6	1.6	1.8	2.1	1.8	1.9	1.7	-0.1	-1.2 ss	-41.9	+0.3	+18.7

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

Notes. '—' indicates data not available. '‡' indicates a change in the question text. When a question change occurs, peak levels after that change are used to calculate the peak year to current year difference.

Values in bold equal peak levels since 1991. Values in italics equal peak level before wording change. Underlined values equal lowest level since recent peak level.

Level of significance of difference between classes: s = .05, ss = .01, sss = .001.

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

<sup>a</sup>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%.

**TABLE 5**  
**Trends in Lifetime Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change
<b>Any Illicit Drug <sup>a</sup></b>																								
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	21.4	20.1	18.5	20.3	+1.8
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	37.0	37.7	36.8	38.8	+2.0
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	48.2	49.9	49.1	50.4	+1.3
<b>Any Illicit Drug other than Marijuana <sup>ab</sup></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	10.6	9.8	8.7	9.3	+0.6
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	16.8	15.6	14.9	15.7	+0.8
12th Grade	26.9	25.1	26.7	27.6	28.1	28.5	30.0	29.4	29.4	29.0†	30.7	29.5	27.7	28.7	27.4	26.9	25.5	24.9	24.0	24.7	24.9	24.1	24.7	+0.7
<b>Any Illicit Drug including Inhalants <sup>ac</sup></b>																								
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	28.6	26.4	25.1	25.7	+0.6
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	40.6	40.8	40.0	41.3	+1.4
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	49.9	51.8	50.3	52.0	+1.7
<b>Marijuana/Hashish</b>																								
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	17.3	16.4	15.2	16.5	+1.3
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	33.4	34.5	33.8	35.8	+2.1
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	43.8	45.5	45.2	45.5	+0.3
<b>Inhalants <sup>cd</sup></b>																								
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	14.5	13.1	11.8	10.8	-1.0
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	12.0	10.1	9.9	8.7	-1.2
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	9.0	8.1	7.9	6.9	-1.0
<b>Nitrites <sup>e</sup></b>																								
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	—	—	—	—	
<b>Hallucinogens <sup>bf</sup></b>																								
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	3.4	3.3	2.8	2.5	-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	6.1	6.0	5.2	5.4	+0.2
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	8.6	8.3	7.5	7.6	+0.1
<b>LSD</b>																								
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	1.8	1.7	1.3	1.4	+0.1
10th Grade	5.6	5.8	6.2	7.2	8.4	9.4	9.5	8.5	8.5	7.6	6.3	5.0	3.5	2.8	2.5	2.7	3.0	2.6	3.0	3.0	2.8	2.6	2.7	+0.1
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	4.0	4.0	3.8	3.9	+0.1
<b>Hallucinogens other than LSD <sup>b</sup></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	2.7	2.8	2.3	1.9	-0.4
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	5.3	5.2	4.5	4.4	0.0
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	7.7	7.3	6.6	6.4	-0.2

(Table continued on next page.)

**TABLE 5 (cont.)**  
**Trends in Lifetime Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change
<b>PCP<sup>e</sup></b>																								
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	1.8	2.3	1.6	1.3	-0.3
<b>Ecstasy (MDMA)<sup>g</sup></b>																								
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	3.3	2.6	2.0	1.8	-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	6.4	6.6	5.0	5.7	+0.7
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	7.3	8.0	7.2	7.1	-0.1
<b>Cocaine</b>																								
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	2.6	2.2	1.9	1.7	-0.2
10th Grade	4.1	3.3	3.6	4.3	5.0	6.5	7.1	7.2	7.7	6.9	5.7	6.1	5.1	5.4	5.2	4.8	5.3	4.5	4.6	3.7	3.3	3.3	3.3	0.0
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	5.5	5.2	4.9	4.5	-0.4
<b>Crack</b>																								
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	1.5	1.5	1.0	1.2	+0.1
10th Grade	1.7	1.5	1.8	2.1	2.8	3.3	3.6	3.9	4.0	3.7	3.1	3.6	2.7	2.6	2.5	2.2	2.3	2.0	2.1	1.8	1.6	1.4	1.5	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	2.4	1.9	2.1	1.8	-0.3
<b>Other Cocaine<sup>h</sup></b>																								
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	2.1	1.8	1.6	1.4	-0.2
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	3.4	3.0	3.0	2.9	-0.1
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	5.1	4.9	4.4	4.2	-0.2
<b>Heroin<sup>i</sup></b>																								
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	1.3	1.2	0.8	1.0	+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	1.3	1.2	1.1	1.0	0.0
12th Grade	0.9	1.2	1.1	1.2	1.6	1.8	2.1	2.0	2.0	2.4	1.8	1.7	1.5	1.5	1.5	1.4	1.5	1.3	1.2	1.6	1.4	1.1	1.0	-0.1
<b>With a Needle<sup>j</sup></b>																								
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	0.9	0.8	0.6	0.6	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	0.8	0.8	0.7	0.7	0.0
12th Grade	—	—	—	—	0.7	0.8	0.9	0.8	0.9	0.8	0.7	0.8	0.7	0.7	0.9	0.8	0.7	0.7	0.6	1.1	0.9	0.7	0.7	0.0
<b>Without a Needle<sup>i</sup></b>																								
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	0.7	0.7	0.5	0.5	+0.1
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	0.9	0.8	0.8	0.7	-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	1.4	1.3	0.8	0.9	+0.1
<b>Narcotics other than Heroin<sup>k,l</sup></b>																								
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	13.0	13.0	12.2	11.1	-1.1

(Table continued on next page.)

**TABLE 5 (cont.)**  
**Trends in Lifetime Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change
<b>Amphetamines <sup>k,m</sup></b>																								
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	5.7	5.2	4.5	4.2	-0.3
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	10.6	9.0	8.9	8.1	-0.8
12th Grade	15.4	13.9	15.1	15.7	15.3	15.3	16.5	16.4	16.3	15.6	16.2	16.8	14.4	15.0	13.1	12.4	11.4	10.5	9.9	11.1	12.2	12.0	12.4	+0.3
<b>Methamphetamine <sup>n,o</sup></b>																								
8th Grade	—	—	—	—	—	—	—	—	4.5	4.2	4.4	3.5	3.9	2.5	3.1	2.7	1.8	2.3	1.6	1.8	1.3	1.3	1.4	0.0
10th Grade	—	—	—	—	—	—	—	—	7.3	6.9	6.4	6.1	5.2	5.3	4.1	3.2	2.8	2.4	2.8	2.5	2.1	1.8	1.6	-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	2.3	2.1	1.7	1.5	-0.2
<b>Crystal Methamphetamine (Ice) <sup>o</sup></b>																								
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	1.8	2.1	1.7	2.0	+0.3
<b>Sedatives (Barbiturates) <sup>k,p</sup></b>																								
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	7.5	7.0	6.9	7.5	+0.6
<b>Methaqualone <sup>a,k</sup></b>																								
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	0.4	0.6	0.8	—	—
<b>Tranquilizers <sup>b,k</sup></b>																								
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	4.4	3.4	3.0	2.9	-0.1
10th Grade	5.8	5.9	5.7	5.4	6.0	7.1	7.3	7.8	7.9	8.0†	9.2	8.8	7.8	7.3	7.1	7.2	7.4	6.8	7.0	7.3	6.8	6.3	5.5	-0.8
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	8.5	8.7	8.5	7.7	-0.8
<b>Any Prescription Drug <sup>q</sup></b>																								
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.0	23.9	22.2	21.5	20.9	21.6	21.7	21.2	21.5	+0.3
<b>Rohypnol <sup>r</sup></b>																								
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	0.9	2.0	1.0	0.7	-0.3
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	1.4	1.2	0.8	1.1	+0.4
12th Grade	—	—	—	—	—	1.2	1.8	3.0	2.0	1.5	1.7	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Alcohol <sup>s</sup></b>																								
<b>Any Use</b>																								
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	35.8	33.1	29.5	27.8	-1.7
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	58.2	56.0	54.0	52.1	-1.8
12th Grade	88.0	87.5†	80.0	80.4	80.7	79.2	81.7	81.4	80.0	80.3	79.7	78.4	76.6	76.8	75.1	72.7	72.2	71.9	72.3	71.0	70.0	69.4	68.2	-1.2
<b>Been Drunk <sup>o</sup></b>																								
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	16.3	14.8	12.8	12.2	-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	36.9	35.9	34.6	33.5	-1.1
12th Grade	65.4	63.4	62.5	62.9	63.2	61.8	64.2	62.4	62.3	62.3	63.9	61.6	58.1	60.3	57.5	56.4	55.1	54.7	56.5	54.1	51.0	54.2	52.3	-1.9

(Table continued on next page.)

**TABLE 5 (cont.)**  
**Trends in Lifetime Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change
<b>Flavored Alcoholic Beverages <sup>a,n</sup></b>																								
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	37.9	35.5	35.5	34.0	32.8	29.4	30.0	27.0	23.5	21.9	-1.6
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	58.6	58.8	58.1	55.7	53.5	51.4	51.3	48.4	46.7	44.9	-1.8
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	71.0	73.6	69.9	68.4	65.5	67.4	62.6	62.4	60.5	58.9	-1.7
<b>Cigarettes</b>																								
<b>Any Use</b>																								
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	20.0	18.4	15.5	14.8	-0.8
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	33.0	30.4	27.7	25.7	-2.1
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	42.2	40.0	39.5	38.1	-1.4
<b>Smokeless Tobacco <sup>l</sup></b>																								
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	9.9	9.7	8.1	7.9	-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	16.8	15.6	15.4	14.0	-1.5
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	17.6	16.9	17.4	17.2	-0.2
<b>Steroids <sup>k,u</sup></b>																								
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	1.1	1.2	1.2	1.1	-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	1.6	1.4	1.3	1.3	0.0
12th Grade	2.1	2.1	2.0	2.4	2.3	1.9	2.4	2.7	2.9	2.5	3.7	4.0	3.5	3.4	2.6	2.7	2.2	2.2	2.2	2.0	1.8	1.8	2.1	+0.3

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

Note: See footnotes following Table 4.



**TABLE 6**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change	
<b>Any Illicit Drug <sup>a</sup></b>																									
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	16.0	14.7	13.4	14.9	+1.5 s	
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	30.2	31.1	30.1	31.8	+1.6	
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	38.3	40.0	39.7	40.3	+0.6	
<b>Any Illicit Drug other than Marijuana <sup>a,b</sup></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	7.1	6.4	5.5	5.8	+0.3	
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	12.1	11.2	10.8	10.9	0.0	
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	17.3	17.6	17.0	17.3	+0.3	
<b>Any Illicit Drug including Inhalants <sup>a,c</sup></b>																									
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	20.3	18.2	17.0	17.5	+0.5	
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	31.8	32.5	31.5	33.0	+1.5	
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	39.2	41.5	40.2	41.8	+1.7	
<b>Marijuana/Hashish</b>																									
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	13.7	12.5	11.4	12.7	+1.2	
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	27.5	28.8	28.0	29.8	+1.8	
12th Grade	23.9	21.9	26.0	30.7	34.7	35.8	38.5	37.5	37.8	36.5	37.0	36.2	34.9	34.3	33.6	31.5	31.7	32.4	32.8	34.8	36.4	36.4	36.4	0.0	
<b>Synthetic Marijuana <sup>n,o</sup></b>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.4	4.0	-0.4
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.8	7.4	-1.3
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.4	11.3	7.9	-3.4 sss
<b>Inhalants <sup>c,d</sup></b>																									
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	8.1	7.0	6.2	5.2	-1.1 s	
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	5.7	4.5	4.1	3.5	-0.6	
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	3.6	3.2	2.9	2.5	-0.4	
<b>Nitrites <sup>e</sup></b>																									
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	—	—	—	—	—	—
<b>Hallucinogens <sup>b,f</sup></b>																									
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	2.2	2.2	1.6	1.6	0.0	
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	4.2	4.1	3.5	3.4	-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	5.5	5.2	4.8	4.5	-0.3	
<b>LSD</b>																									
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	1.2	1.1	0.8	1.0	+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	1.9	1.8	1.7	1.7	-0.1	
12th Grade	5.2	5.6	6.8	6.9	8.4	8.8	8.4	7.6	8.1	6.6	6.6	3.5	1.9	2.2	1.8	1.7	2.1	2.7	1.9	2.6	2.7	2.4	2.2	-0.2	

(Table continued on next page.)

**TABLE 6 (cont.)**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change	
Hallucinogens other than LSD <sup>b</sup>																									
8th Grade	0.7	1.1	1.0	1.3	1.7	2.0	1.8	1.6	1.5	1.4‡	2.4	2.1	2.1	1.9	2.0	1.8	1.6	1.6	1.5	1.8	1.8	1.3	1.2	-0.1	
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	3.5	3.5	3.0	2.7	-0.3	
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	4.8	4.3	4.0	3.7	-0.4	
PCP <sup>o</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12th Grade	1.4	1.4	1.4	1.6	1.8	2.6	2.3	2.1	1.8	2.3	1.8	1.1	1.3	0.7	1.3	0.7	0.9	1.1	1.0	1.0	1.3	0.9	0.7	-0.2	
Ecstasy (MDMA) <sup>g</sup>																									
8th Grade	—	—	—	—	—	2.3	2.3	1.8	1.7	3.1	3.5	2.9	2.1	1.7	1.7	1.4	1.5	1.7	1.3	2.4	1.7	1.1	1.1	0.0	
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	4.7	4.5	3.0	3.6	+0.6	
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	4.5	5.3	3.8	4.0	+0.2	
Salvia <sup>h,o</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.7	1.6	1.4	1.2	-0.2	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.7	3.9	2.5	2.3	-0.2	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.7	5.5	5.9	4.4	3.4	-1.0 s
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	1.6	1.4	1.2	1.0	-0.2	
10th Grade	2.2	1.9	2.1	2.8	3.5	4.2	4.7	4.7	4.9	4.4	3.6	4.0	3.3	3.7	3.5	3.2	3.4	3.0	2.7	2.2	1.9	2.0	1.9	-0.1	
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	2.9	2.9	2.7	2.6	-0.1	
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	1.0	0.9	0.6	0.6	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	1.0	0.9	0.8	0.8	+0.1	
12th Grade	1.5	1.5	1.5	1.9	2.1	2.1	2.4	2.5	2.7	2.2	2.1	2.3	2.2	2.3	1.9	2.1	1.9	1.6	1.3	1.4	1.0	1.2	1.1	-0.2	
Other Cocaine <sup>h</sup>																									
8th Grade	1.0	1.2	1.3	1.7	2.1	2.5	2.2	2.4	2.3	1.9	1.9	1.8	1.6	1.6	1.7	1.6	1.5	1.4	1.3	1.3	1.1	1.0	0.8	-0.2	
10th Grade	2.1	1.7	1.8	2.4	3.0	3.5	4.1	4.0	4.4	3.8	3.0	3.4	2.8	3.3	3.0	2.9	3.1	2.6	2.3	1.9	1.7	1.8	1.6	-0.2	
12th Grade	3.2	2.6	2.9	3.0	3.4	4.2	5.0	4.9	5.8	4.5	4.4	4.4	4.2	4.7	4.5	5.2	4.5	4.0	3.0	2.6	2.6	2.4	2.4	0.0	
Heroin <sup>i</sup>																									
8th Grade	0.7	0.7	0.7	1.2	1.4	1.6	1.3	1.3	1.4	1.1	1.0	0.9	0.9	1.0	0.8	0.8	0.8	0.9	0.7	0.8	0.7	0.5	0.5	0.0	
10th Grade	0.5	0.6	0.7	0.9	1.1	1.2	1.4	1.4	1.4	1.4	0.9	1.1	0.7	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.6	0.6	0.0	
12th Grade	0.4	0.6	0.5	0.6	1.1	1.0	1.2	1.0	1.1	1.5	0.9	1.0	0.8	0.9	0.8	0.8	0.9	0.7	0.7	0.9	0.8	0.6	0.6	-0.1	
With a Needle <sup>i</sup>																									
8th Grade	—	—	—	—	0.9	1.0	0.8	0.8	0.9	0.6	0.7	0.6	0.6	0.7	0.6	0.5	0.6	0.5	0.5	0.6	0.5	0.4	0.3	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	0.5	0.5	0.4	0.5	+0.1	
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	0.7	0.6	0.4	0.4	0.0	
Without a Needle <sup>i</sup>																									
8th Grade	—	—	—	—	0.8	1.0	0.8	0.8	0.9	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.4	0.5	0.4	0.3	0.3	+0.1	
10th Grade	—	—	—	—	0.8	0.9	1.1	1.0	1.1	1.1	0.7	0.8	0.5	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	-0.1	
12th Grade	—	—	—	—	1.0	1.0	1.2	0.8	1.0	1.6	0.8	0.8	0.8	0.7	0.8	0.6	1.0	0.5	0.6	0.8	0.7	0.4	0.4	+0.1	

(Table continued on next page.)

**TABLE 6 (cont.)**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change		
<b>Narcotics other than Heroin<sup>k,l</sup></b>																										
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	8.7	8.7	7.9	7.1	-0.8		
<b>OxyContin<sup>k,n,v</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	1.3	1.7	1.7	1.8	2.6	1.8	2.1	2.0	2.1	1.8	1.6	2.0	+0.4		
10th Grade	—	—	—	—	—	—	—	—	—	—	—	3.0	3.6	3.5	3.2	3.8	3.9	3.6	5.1	4.6	3.9	3.0	3.4	+0.4		
12th Grade	—	—	—	—	—	—	—	—	—	—	—	4.0	4.5	5.0	5.5	4.3	5.2	4.7	4.9	5.1	4.9	4.3	3.6	-0.7		
<b>Vicodin<sup>k,n,v</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	2.5	2.8	2.5	2.6	3.0	2.7	2.9	2.5	2.7	2.1	1.3	1.4	0.0		
10th Grade	—	—	—	—	—	—	—	—	—	—	—	6.9	7.2	6.2	5.9	7.0	7.2	6.7	8.1	7.7	5.9	4.4	4.6	+0.2		
12th Grade	—	—	—	—	—	—	—	—	—	—	—	9.6	10.5	9.3	9.5	9.7	9.6	9.7	9.7	8.0	8.1	7.5	5.3	-2.2 ss		
<b>Amphetamines<sup>k,m</sup></b>																										
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	3.9	3.5	2.9	2.6	-0.3		
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	7.6	6.6	6.5	5.9	-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	7.4	8.2	7.9	8.7	+0.8		
<b>Ritalin<sup>k,n,o</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	2.9	2.8	2.6	2.5	2.4	2.6	2.1	1.6	1.8	1.5	1.3	0.7	1.1	+0.4	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	4.8	4.8	4.1	3.4	3.4	3.6	2.8	2.9	3.6	2.7	2.6	1.9	1.8	-0.1	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	5.1	4.0	4.0	5.1	4.4	4.4	3.8	3.4	2.1	2.7	2.6	2.6	2.3	-0.3	
<b>Adderall<sup>k,n,o</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.0	2.3	1.7	1.7	1.8	+0.1	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.7	5.3	4.6	4.5	4.4	-0.1	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.4	6.5	6.5	7.6	7.4	-0.3	
<b>Provigil<sup>k,o</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.8	1.3	1.5	—	—	—
<b>Methamphetamine<sup>n,o</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	3.2	2.5	2.8	2.2	2.5	1.5	1.8	1.8	1.1	1.2	1.0	1.2	0.8	1.0	1.0	0.0	
10th Grade	—	—	—	—	—	—	—	—	—	4.6	4.0	3.7	3.9	3.3	3.0	2.9	1.8	1.6	1.5	1.6	1.6	1.4	1.0	1.0	0.0	
12th Grade	—	—	—	—	—	—	—	—	—	4.7	4.3	3.9	3.6	3.2	3.4	2.5	2.5	1.7	1.2	1.2	1.0	1.4	1.1	0.9	-0.2	
<b>Crystal Methamphetamine (Ice)<sup>o</sup></b>																										
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	0.9	1.2	0.8	1.1	+0.3		
<b>Bath salts (synthetic stimulants)<sup>n,o</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	1.0	+0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6	0.9	+0.3
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3	0.9	-0.4

(Table continued on next page.)

**TABLE 6 (cont.)**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012- 2013 change
<b>Sedatives (Barbiturates) <sup>k,p</sup></b>																								
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	4.8	4.3	4.5	4.8	+0.3
<b>Methaqualone <sup>e,k</sup></b>																								
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	0.3	0.3	0.4	—	—
<b>Tranquilizers <sup>b,k</sup></b>																								
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	2.8	2.0	1.8	1.8	0.0
10th Grade	3.2	3.5	3.3	3.3	4.0	4.6	4.9	5.1	5.4	5.6‡	7.3	6.3	5.3	5.1	4.8	5.2	5.3	4.6	5.0	5.1	4.5	4.3	3.7	-0.6
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	5.6	5.6	5.3	4.6	-0.7
<b>Any Prescription Drug <sup>q</sup></b>																								
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.1	16.8	15.8	15.4	14.4	15.0	15.2	14.8	15.0	+0.2
<b>OTC Cough/Cold Medicines <sup>n,o</sup></b>																								
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.2	4.0	3.6	3.8	3.2	2.7	3.0	2.9	-0.1
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	5.4	5.3	6.0	5.1	5.5	4.7	4.3	-0.5
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.9	5.8	5.5	5.9	6.6	5.3	5.6	5.0	-0.5
<b>Rohypnol <sup>f</sup></b>																								
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	0.5	0.8	0.4	0.4	0.0
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	0.6	0.6	0.5	0.6	+0.1
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	1.5	1.3	1.5	0.9	-0.6
<b>GHB <sup>n,w</sup></b>																								
8th Grade	—	—	—	—	—	—	—	—	—	1.2	1.1	0.8	0.9	0.7	0.5	0.8	0.7	1.1	0.7	0.6	0.6	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	1.1	1.0	1.4	1.4	0.8	0.8	0.7	0.6	0.5	1.0	0.6	0.5	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	1.9	1.6	1.5	1.4	2.0	1.1	1.1	0.9	1.2	1.1	1.4	1.4	1.4	1.0	-0.4
<b>Ketamine <sup>n,x</sup></b>																								
8th Grade	—	—	—	—	—	—	—	—	—	1.6	1.3	1.3	1.1	0.9	0.6	0.9	1.0	1.2	1.0	1.0	0.8	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	2.1	2.1	2.2	1.9	1.3	1.0	1.0	0.8	1.0	1.3	1.1	1.2	—	—	—
12th Grade	—	—	—	—	—	—	—	—	—	2.5	2.5	2.6	2.1	1.9	1.6	1.4	1.3	1.5	1.7	1.6	1.7	1.5	1.4	-0.1
<b>Alcohol <sup>s</sup></b>																								
<b>Any Use</b>																								
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	29.3	26.9	23.6	22.1	-1.5
10th Grade	72.3	70.2‡	63.4	63.9	63.5	65.0	65.2	62.7	63.7	65.3	63.5	60.0	59.3	58.2	56.7	55.8	56.3	52.5	52.8	52.1	49.8	48.5	47.1	-1.4
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	65.2	63.5	63.5	62.0	-1.5
<b>Been Drunk <sup>o</sup></b>																								
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	11.5	10.5	8.6	8.4	-0.1
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	29.9	28.8	28.2	27.1	-1.2
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	44.0	42.2	45.0	43.5	-1.6

(Table continued on next page.)

**TABLE 6 (cont.)**  
**Trends in Annual Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013	change
Flavored Alcoholic Beverages <sup>e,n,y</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	30.4	27.9	26.8	26.0	25.0	22.2	21.9	19.2	17.0	15.7	-1.3	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	49.7	48.5	48.8	45.9	43.4	41.5	41.0	38.3	37.8	35.6	-2.2	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	55.2	55.8	58.4	54.7	53.6	51.8	53.4	47.9	47.0	44.4	44.2	-0.2	
Alcoholic Beverages containing Caffeine <sup>n,o,z</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.8	10.9	10.2	-0.7	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22.5	19.7	16.9	-2.8	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26.4	26.4	23.5	-2.8	
Bidis <sup>n,o</sup>																									
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	1.4	—	—	—	—	
Kreteks <sup>n,o</sup>																									
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	4.6	2.9	3.0	1.6	-1.4	
Tobacco using a Hookah <sup>e</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.1	18.5	18.3	21.4	
Small cigars <sup>e,n</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.1	19.5	19.9	20.4	
Dissolvable Tobacco Products <sup>e,n</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.0	1.1	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6	1.2	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5	1.6		
Snus <sup>e,n</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.4	2.0	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.9	5.2	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.9	7.9		
Steroids <sup>k,u</sup>																									
8th Grade	1.0	1.1	0.9	1.2	1.0	0.9	1.0	1.2	1.7	1.7	1.6	1.5	1.4	1.1	1.1	0.9	0.8	0.9	0.8	0.5	0.7	0.6	0.6	0.0	
10th Grade	1.1	1.1	1.0	1.1	1.2	1.2	1.2	1.2	1.7	2.2	2.1	2.2	1.7	1.5	1.3	1.2	1.1	0.9	0.8	1.0	0.9	0.8	0.8	0.0	
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	1.5	1.2	1.3	1.5	+0.2	

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

Note: See footnotes following Table 4.

**TABLE 7**  
**Trends in 30-Day Prevalence of Use of Various Drugs**  
**in Grades 8, 10, and 12**

	Percentage who used in last 30 days																								2012–
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	change	
<b>Any Illicit Drug <sup>a</sup></b>																									
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	9.5	8.5	7.7	8.5	+0.9	
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	18.5	19.2	18.6	19.4	+0.8	
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	23.8	25.2	25.2	25.5	+0.3	
<b>Any Illicit Drug other than Marijuana <sup>a,b</sup></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	3.5	3.4	2.6	3.3	+0.6 s	
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	5.8	5.4	5.0	5.1	+0.1	
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	8.6	8.9	8.4	8.4	-0.1	
<b>Any Illicit Drug including Inhalants <sup>a,c</sup></b>																									
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	11.7	10.5	9.5	9.9	+0.3	
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	19.4	20.1	19.3	20.1	+0.8	
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	24.5	26.2	25.2	26.6	+1.4	
<b>Marijuana/Hashish</b>																									
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	8.0	7.2	6.5	7.0	+0.5	
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	16.7	17.6	17.0	18.0	+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	21.4	22.6	22.9	22.7	-0.2	
<b>Inhalants <sup>c,d</sup></b>																									
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	3.6	3.2	2.7	2.3	-0.4	
10th Grade	2.7	2.7	3.3	3.6	3.5	3.3	3.0	2.9	2.6	2.6	2.4	2.4	2.2	2.4	2.2	2.3	2.5	2.1	2.2	2.0	1.7	1.4	1.3	-0.1	
12th Grade	2.4	2.3	2.5	2.7	3.2	2.5	2.5	2.3	2.0	2.2	1.7	1.5	1.5	1.5	2.0	1.5	1.2	1.4	1.2	1.4	1.0	0.9	1.0	+0.1	
<b>Nitrites <sup>e</sup></b>																									
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	—	—	—	—	—	
<b>Hallucinogens <sup>b,f</sup></b>																									
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	1.0	1.0	0.6	0.8	+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	1.6	1.4	1.2	1.1	-0.1	
12th Grade	2.2	2.1	2.7	3.1	4.4	3.5	3.9	3.8	3.5	2.6‡	3.3	2.3	1.8	1.9	1.9	1.5	1.7	2.2	1.6	1.9	1.6	1.6	1.4	-0.2	
<b>LSD</b>																									
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	0.6	0.5	0.3	0.5	+0.1	
10th Grade	1.5	1.6	1.6	2.0	3.0	2.4	2.8	2.7	2.3	1.6	1.5	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.5	0.7	0.7	0.5	0.6	0.0	
12th Grade	1.9	2.0	2.4	2.6	4.0	2.5	3.1	3.2	2.7	1.6	2.3	0.7	0.6	0.7	0.7	0.6	0.6	1.1	0.5	0.8	0.8	0.8	0.8	0.0	
<b>Hallucinogens other than LSD <sup>b</sup></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	0.8	0.7	0.5	0.5	0.0	
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	1.2	1.1	0.9	0.8	-0.1	
12th Grade	0.7	0.5	0.8	1.2	1.3	1.6	1.7	1.6	1.6	1.7‡	1.9	2.0	1.5	1.7	1.6	1.3	1.4	1.6	1.4	1.5	1.2	1.3	1.0	-0.3	

(Table continued on next page.)

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

	Percentage who used in last 30 days																							2012–	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	change	
PCP <sup>e</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	0.5	0.6	1.0	0.7	0.6	1.3	0.7	1.0	0.8	0.9	0.5	0.4	0.6	0.4	0.7	0.4	0.5	0.6	0.5	0.8	0.8	0.5	0.4	-0.2	
Ecstasy (MDMA) <sup>g</sup>																									
8th Grade	—	—	—	—	—	1.0	1.0	0.9	0.8	1.4	1.8	1.4	0.7	0.8	0.6	0.7	0.6	0.8	0.6	1.1	0.6	0.5	0.5	0.0	
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	1.9	1.6	1.0	1.2	+0.2	
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	1.4	2.3	0.9	1.5	+0.5	
Cocaine																									
8th Grade	0.5	0.7	0.7	1.0	1.2	1.3	1.1	1.4	1.3	1.2	1.1	0.9	0.9	1.0	1.0	0.9	0.8	0.8	0.6	0.8	0.5	0.5	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	0.9	0.7	0.8	0.8	0.0	
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	1.3	1.1	1.1	1.1	0.0	
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	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.5	0.3	0.3	+0.1		
10th Grade	0.3	0.4	0.5	0.6	0.9	0.8	0.9	1.1	0.8	0.9	0.7	1.0	0.7	0.8	0.7	0.7	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.0	
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	0.7	0.5	0.6	0.6	0.0	
Other Cocaine <sup>h</sup>																									
8th Grade	0.5	0.5	0.6	0.9	1.0	1.0	0.8	1.0	1.1	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.5	0.6	0.3	0.3	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	0.7	0.6	0.7	0.7	0.0	
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	1.1	1.0	1.0	0.9	-0.1	
Heroin <sup>i</sup>																									
8th Grade	0.3	0.4	0.4	0.6	0.6	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.4	0.5	0.5	0.3	0.4	0.4	0.4	0.4	0.4	0.2	0.3	0.0	
10th Grade	0.2	0.2	0.3	0.4	0.6	0.5	0.6	0.7	0.7	0.5	0.3	0.5	0.3	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	-0.1	
12th Grade	0.2	0.3	0.2	0.3	0.6	0.5	0.5	0.5	0.5	0.7	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.0	
With a Needle <sup>j</sup>																									
8th Grade	—	—	—	—	0.4	0.5	0.4	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	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	0.2	0.2	0.2	0.2	0.0	
12th Grade	—	—	—	—	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.1	0.4	0.4	0.3	0.2	0.0	
Without a Needle <sup>j</sup>																									
8th Grade	—	—	—	—	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	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	0.3	0.2	0.2	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	0.4	0.4	0.2	0.2	+0.1	
Narcotics other than Heroin <sup>k,l</sup>																									
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12th Grade	1.1	1.2	1.3	1.5	1.8	2.0	2.3	2.4	2.6	2.9	3.0†	4.0	4.1	4.3	3.9	3.8	3.8	3.8	4.1	3.6	3.6	3.0	2.8	-0.3	
Amphetamines <sup>k,m</sup>																									
8th Grade	2.6	3.3	3.6	3.6	4.2	4.6	3.8	3.3	3.4	3.4	3.2	2.8	2.7	2.3	2.3	2.1	2.0	2.2	1.9	1.8	1.8	1.3	1.4	+0.1	
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	3.3	3.1	2.8	2.8	0.0	
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	3.3	3.7	3.3	4.1	+0.8	

(Table continued on next page.)

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

	Percentage who used in last 30 days																							2012–		
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013	change	
<b>Methamphetamine<sup>n,o</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	1.1	0.8	1.3	1.1	1.2	0.6	0.7	0.6	0.6	0.7	0.5	0.7	0.4	0.5	0.4	0.4	-0.1	
10th Grade	—	—	—	—	—	—	—	—	1.8	2.0	1.5	1.8	1.4	1.3	1.1	0.7	0.4	0.7	0.6	0.7	0.5	0.6	0.4	0.4	-0.2	
12th Grade	—	—	—	—	—	—	—	—	1.7	1.9	1.5	1.7	1.7	1.4	0.9	0.9	0.6	0.6	0.5	0.5	0.6	0.5	0.4	0.4	-0.1	
<b>Crystal Methamphetamine (Ice)<sup>o</sup></b>																										
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	0.6	0.6	0.4	0.8	0.8	+0.4	
<b>Sedatives (Barbiturates)<sup>k,p</sup></b>																										
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	2.2	1.8	2.0	2.2	2.2	+0.2	
<b>Methaqualone<sup>e,k</sup></b>																										
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	0.2	0.2	0.3	—	—		
<b>Tranquilizers<sup>b,k</sup></b>																										
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	1.2	1.0	0.8	0.9	0.9	+0.2	
10th Grade	1.2	1.5	1.1	1.5	1.7	1.7	2.2	2.2	2.2	2.5†	2.9	2.9	2.4	2.3	2.3	2.4	2.6	1.9	2.0	2.2	1.9	1.7	1.6	1.6	-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	2.5	2.3	2.1	2.0	2.0	-0.1	
<b>Any Prescription Drug<sup>q</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.6	8.1	7.8	7.2	7.3	6.9	7.2	7.0	7.0	7.0	+0.1	
<b>Rohypnol<sup>f</sup></b>																										
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	0.2	0.6	0.1	0.1	0.1	0.0	
10th Grade	—	—	—	—	—	0.5	0.5	0.4	0.5	0.4	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.1	0.1	-0.1	
12th Grade	—	—	—	—	—	0.5	0.3	0.3	0.3	0.4	0.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Alcohol<sup>s</sup></b>																										
<b>Any Use</b>																										
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	13.8	12.7	11.0	10.2	10.2	-0.8	
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	28.9	27.2	27.6	25.7	25.7	-1.9	
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	41.2	40.0	41.5	39.2	39.2	-2.3 s	
<b>Been Drunk<sup>o</sup></b>																										
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	5.0	4.4	3.6	3.5	3.5	-0.1	
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	14.7	13.7	14.5	12.8	12.8	-1.6 s	
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	26.8	25.0	28.1	26.0	26.0	-2.1	
<b>Flavored Alcoholic Beverages<sup>e,n</sup></b>																										
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.6	12.9	13.1	12.2	10.2	9.5	9.4	8.6	7.6	6.3	-1.3 s	
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.1	23.1	24.7	21.8	20.2	19.0	19.4	15.8	16.3	15.5	-0.7	
12th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.1	30.5	29.3	29.1	27.4	27.4	24.1	23.1	21.8	21.0	-0.7	

(Table continued on next page.)



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

	Percentage who used in last 30 days																								2012– 2013 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
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	7.1	6.1	4.9	4.5	-0.5	
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	13.6	11.8	10.8	9.1	-1.7 s	
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	19.2	18.7	17.1	16.3	-0.9	
Smokeless Tobacco <sup>t</sup>																									
8th Grade	6.9	7.0	6.6	7.7	7.1	7.1	5.5	4.8	4.5	4.2	4.0	3.3	4.1	4.1	3.3	3.7	3.2	3.5	3.7	4.1	3.5	2.8	2.8	+0.1	
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	7.5	6.6	6.4	6.4	0.0	
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	8.5	8.3	7.9	8.1	+0.2	
Steroids <sup>k,w</sup>																									
8th Grade	0.4	0.5	0.5	0.5	0.6	0.4	0.5	0.5	0.7	0.8	0.7	0.8	0.7	0.5	0.5	0.5	0.4	0.5	0.4	0.3	0.4	0.3	0.3	0.0	
10th Grade	0.6	0.6	0.5	0.6	0.6	0.5	0.7	0.6	0.9	1.0	0.9	1.0	0.8	0.8	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.0	
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	1.1	0.7	0.9	1.0	+0.1	

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

See footnotes following Table 4.

**TABLE 8**  
**Trends in 30-Day Prevalence of Daily Use of Various Drugs**  
**in Grades 8, 10, and 12**  
(Entries are percentages.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012– 2013 change
<b>Marijuana/Hashish</b>																								
Daily <sup>aa</sup>																								
8th Grade	0.2	0.2	0.4	0.7	0.8	1.5	1.1	1.1	1.4	1.3	1.3	1.2	1.0	0.8	1.0	1.0	0.8	0.9	1.0	1.2	1.3	1.1	1.1	0.0
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	3.3	3.6	3.5	4.0	+0.5
12th Grade	2.0	1.9	2.4	3.6	4.6	4.9	5.8	5.6	6.0	6.0	5.8	6.0	6.0	5.6	5.0	5.0	5.1	5.4	5.2	6.1	6.6	6.5	6.5	0.0
<b>Alcohol<sup>s,aa</sup></b>																								
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	0.5	0.4	0.3	0.3	-0.1
10th Grade	1.3	1.2‡	1.8	1.7	1.7	1.6	1.7	1.9	1.9	1.8	1.9	1.8	1.5	1.3	1.3	1.4	1.4	1.0	1.1	1.1	0.8	1.0	0.9	-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	2.7	2.1	2.5	2.2	-0.4
<b>Been Drunk</b>																								
Daily <sup>o,aa</sup>																								
8th Grade	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	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	0.3	0.2	0.4	0.3	-0.1
12th Grade	0.9	0.8	0.9	1.2	1.3	1.6	2.0	1.5	1.9	1.7	1.4	1.2	1.6	1.8	1.5	1.6	1.3	1.4	1.1	1.6	1.3	1.5	1.3	-0.1
<b>5+ Drinks in a Row</b>																								
in Last 2 Weeks																								
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	7.2	6.4	5.1	5.1	0.0
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	16.3	14.7	15.6	13.7	-1.9
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	23.2	21.6	23.7	22.1	-1.6
<b>Cigarettes</b>																								
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	2.9	2.4	1.9	1.8	-0.1
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	6.6	5.5	5.0	4.4	-0.5
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	10.7	10.3	9.3	8.5	-0.8
<b>1/2 Pack+/Day</b>																								
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	0.9	0.7	0.6	0.7	+0.1
10th Grade	6.5	6.0	7.0	7.6	8.3	9.4	8.6	7.9	7.6	6.2	5.5	4.4	4.1	3.3	3.1	3.3	2.7	2.0	2.4	2.4	1.9	1.5	1.5	0.0
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	4.7	4.3	4.0	3.4	-0.6
<b>Smokeless Tobacco</b>																								
Daily <sup>t</sup>																								
8th Grade	1.6	1.8	1.5	1.9	1.2	1.5	1.0	1.0	0.9	0.9	1.2	0.8	0.8	1.0	0.7	0.7	0.8	0.8	0.8	0.9	0.8	0.5	0.5	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	2.5	1.7	2.0	1.9	-0.2
12th Grade	—	4.3	3.3	3.9	3.6	3.3	4.4	3.2	2.9	3.2	2.8	2.0	2.2	2.8	2.5	2.2	2.8	2.7	2.9	3.1	3.1	3.2	3.0	-0.2

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

Note. See footnotes on the following page.

## Footnotes for Tables 5 through 8

Approximate Weighted <i>N</i> s	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
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
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
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

Approximate Weighted <i>N</i> s	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
8th Graders	16,500	17,000	16,800	16,500	16,100	15,700	15,000	15,300	16,000	15,100	14,600
10th Graders	15,800	16,400	16,200	16,200	16,100	15,100	15,900	15,200	14,900	15,000	12,900
12th Graders	14,600	14,600	14,700	14,200	14,500	14,000	13,700	14,400	14,100	13,700	12,600

*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.

<sup>a</sup>For 12th graders only: Use of any illicit drug includes any use of marijuana, LSD, other hallucinogens, crack, other cocaine, or heroin; or any use of 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).

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

<sup>c</sup>For 12th graders only: Data based on five of six forms in 1991–1998; *N* is five sixths of *N* indicated. Data based on three of six forms beginning in 1999; *N* is three sixths of *N* indicated.

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

<sup>e</sup>For 12th graders only: Data based on one of six forms; *N* is one sixth of *N* indicated. In 2011 for flavored alcoholic beverages Skyy Blue and Zima were dropped from the list of examples. An examination of the data did not show any effect from the wording change.

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

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

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

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

<sup>j</sup>For 8th and 10th graders only: Data based on one of two forms in 1995; *N* is one half of *N* indicated. Data based on all forms beginning in 1996. For 12th graders only: Data based on three of six forms; *N* is three sixths of *N* indicated.

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

<sup>l</sup>In 2002 the question text was changed in half of the questionnaire forms. The list of examples of narcotics other than heroin was updated: Talwin, laudanum, and paregoric—all of which had negligible rates of use by 2001—were replaced with Vicodin, OxyContin, and Percocet. The 2002 data presented here are based on the changed forms only; *N* is one half of *N* indicated. In 2003, the remaining forms were changed to the new wording. The data are based on all forms beginning in 2003. In 2013 the list of examples was changed on one form: MS Contin, Roxycodone, Hydrocodone (Lortab, Lorcet, Norco), Suboxone, Tylox, and Tramadol were added to the list. An examination of the data did not show any effect from the wording change.

(Footnote continued on next page.)

## Footnotes for Tables 5 through 8 (cont.)

<sup>m</sup>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. In 2010 the remaining forms were changed in a like manner. In 2011 the question text was changed slightly in one form; bennies, Benzedrine and Methadrine were dropped from the list of examples. An examination of the data did not show any effect from the wording change. In 2013 the question wording was changed slightly in two of the 8th and 10th grade questionnaires and in four of the 12th grade questionnaires. Vyvanse was also added to the list of examples in one of the 12th grade forms. 2013 data are based on the unchanged forms only; for 8th and 10th graders  $N$  is one half of  $N$  indicated, for 12th graders  $N$  is one third of  $N$  indicated.

<sup>n</sup>For 8th and 10th graders only: Data based on one of four forms;  $N$  is one third of  $N$  indicated. See text for detailed explanation. In 2011 for flavored alcoholic beverages: Sky Blue and Zima were dropped from the list of examples. An examination of the data did not show any effect from the wording change.

<sup>o</sup>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 sixth  $N$  indicated.

<sup>p</sup>For 12th graders only: In 2004 the barbiturate question text was changed on half of the questionnaire forms. Barbiturates was changed to sedatives including barbiturates, and “have you taken barbiturates . . .” was changed to “have you taken sedatives . . .” In the list of examples downs, downers, goofballs, yellow, reds, blues, rainbows were changed to downs, or downers, and include Phenobarbital, Tuinal, Nembutal, and Seconal. An examination of the data did not show any effect from the wording change. In 2005 the remaining forms were changed in a like manner. In 2013 the question text was changed in all forms: Tuinal, Nembutal, and Seconal were replaced with Ambien, Lunesta, and Sonata. In one form the list of examples was also changed: Tuinal was dropped from the list and Dalmane, Restoril, Halcion, Intermezzo, and Zolpimist were added. An examination of the data did not show any effect from the wording change.

<sup>q</sup>The use of any prescription drug includes use of any of the following: amphetamines, sedatives (barbiturates), narcotics other than heroin, or tranquilizers “...without a doctor telling you to use them.”

<sup>r</sup>For 8th and 10th graders only: Data based on one of two forms in 1996;  $N$  is one half of  $N$  indicated. Data based on three of four forms in 1997–1998;  $N$  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. See text for detailed explanation. 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 in 2002–2009;  $N$  is two sixths of  $N$  indicated. Data for 2001 and 2002 are not comparable due to changes in the questionnaire forms. Data based on one of six forms beginning in 2010;  $N$  is one sixth of  $N$  indicated.

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

<sup>t</sup>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. For all grades in 2011: snus and dissolvable tobacco were added to the list of examples. An examination of the data did not show any effect from the wording change.

<sup>u</sup>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. <sup>v</sup>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.

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

<sup>x</sup>For 12th graders only: Data based on two of six forms in 2000;  $N$  is two sixths of  $N$  indicated. Data based on three of six forms in 2001–2009;  $N$  is three sixths of  $N$  indicated. Data based on two of six forms beginning in 2010;  $N$  is two sixths of  $N$  indicated.

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

(Footnote continued on next page.)

### Footnotes for Tables 5 through 8 (cont.)

<sup>z</sup>For 8th and 10th graders only: Data based on one of four forms; *N* is one third of *N* indicated. See text for detailed explanation.

For 12th graders only: Data based on two of six forms; *N* is two sixths of *N* indicated. For all grades: In 2011 the question text was

“...had an alcoholic beverage containing caffeine (like Four Loko or Joose).” In 2012 the question text was changed to “...had an alcoholic beverage mixed with an energy drink (like Red Bull).” An examination of the data did not show any effect from the wording changes.

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

**TABLE 9**  
**Trends in Harmfulness of Drugs as Perceived by 8th Graders**

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying great risk <sup>a</sup>																							2012-2013 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Try marijuana once or twice <sup>b</sup>	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	29.5	28.2	26.0	24.1	-1.9	
Smoke marijuana occasionally <sup>b</sup>	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	44.1	43.4	41.7	37.2	-4.5 sss	
Smoke marijuana regularly <sup>b</sup>	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	68.0	68.3	66.9	61.0	-5.9 sss	
Try synthetic marijuana once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.4	24.2	-0.2	
Take synthetic marijuana occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36.8	36.2	-0.6
Try inhalants once or twice <sup>d</sup>	35.9	37.0	36.5	37.9	36.4	40.8	40.1	38.9	40.8	41.2	45.6	42.8	40.3	38.7	37.5	35.8	35.9	33.9	34.1	35.5	34.7	34.2	33.7	-0.4	
Take inhalants regularly <sup>d</sup>	65.6	64.4	64.6	65.5	64.8	68.2	68.7	67.2	68.8	69.9	71.6	69.9	67.4	66.4	64.1	62.1	61.9	59.2	58.1	60.6	59.0	59.0	56.7	-2.3	
Take LSD once or twice <sup>e</sup>	—	—	42.1	38.3	36.7	36.5	37.0	34.9	34.1	34.0	31.6	29.6	27.9	26.8	25.8	23.8	22.8	21.9	21.4	23.6	21.7	19.9	19.6	-0.3	
Take LSD regularly <sup>e</sup>	—	—	68.3	65.8	64.4	63.6	64.1	59.6	58.8	57.5	52.9	49.3	48.2	45.2	44.0	40.0	38.5	36.9	37.0	38.6	37.8	35.0	34.5	-0.5	
Try ecstasy (MDMA) once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	35.8	38.9	41.9	42.5	40.0	32.8	30.4	28.6	26.0	27.0	25.4	23.6	24.1	+0.5	
Take ecstasy (MDMA) occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	55.5	61.8	65.8	65.1	60.8	52.0	48.6	46.8	43.9	45.0	43.7	41.0	42.1	+1.1	
Try salvia once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.5	8.5	-1.1	
Take salvia occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16.1	14.6	-1.5	
Try crack once or twice <sup>d</sup>	62.8	61.2	57.2	54.4	50.8	51.0	49.9	49.3	48.7	48.5	48.6	47.4	48.7	49.0	49.6	47.6	47.3	47.1	46.6	49.6	48.1	47.0	47.1	+0.2	
Take crack occasionally <sup>d</sup>	82.2	79.6	76.8	74.4	72.1	71.6	71.2	70.6	70.6	70.1	70.0	69.7	70.3	70.4	69.4	68.7	68.3	67.9	66.6	68.4	67.7	67.8	66.5	-1.2	
Try cocaine powder once or twice <sup>d</sup>	55.5	54.1	50.7	48.4	44.9	45.2	45.0	44.0	43.3	43.3	43.9	43.2	43.7	44.4	44.2	43.5	42.7	42.3	42.3	45.7	43.3	42.8	43.5	+0.7	
Take cocaine powder occasionally <sup>d</sup>	77.0	74.3	71.8	69.1	66.4	65.7	65.8	65.2	65.4	65.5	65.8	64.9	65.8	66.0	65.3	64.0	64.2	62.7	62.3	64.2	63.5	63.3	62.7	-0.6	
Try heroin once or twice without using a needle <sup>e</sup>	—	—	—	—	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	62.3	61.7	59.1	59.8	+0.8	
Take heroin occasionally without using a needle <sup>e</sup>	—	—	—	—	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	76.7	75.9	75.1	73.4	-1.7	
Try OxyContin once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	19.9	-2.0	
Take OxyContin occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35.3	32.6	-2.8	
Try Vicodin once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.5	15.0	-2.5 s	
Take Vicodin occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29.4	26.2	-3.2 ss	
Try Adderall once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.6	16.5	-1.1	
Take Adderall occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29.9	28.3	-1.6	
Try bath salts (synthetic stimulants) once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.9	39.3	+14.4 sss	
Take bath salts (synthetic stimulants) occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38.8	51.9	+13.2 sss	
Try cough/cold medicine once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.2	20.1	-1.0	
Take cough/cold medicine occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38.8	37.3	-1.5	
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) <sup>b</sup>	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	14.9	14.5	13.9	13.7	-0.1	
Take one or two drinks nearly every day <sup>b</sup>	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	32.3	31.8	31.4	30.6	-0.8	
Have five or more drinks once or twice each weekend <sup>b</sup>	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	57.2	58.4	58.2	55.7	-2.4	
Smoke one to five cigarettes per day <sup>c</sup>	—	—	—	—	—	—	—	—	26.9	28.9	30.5	32.8	33.4	37.0	37.5	37.0	38.6	38.6	38.6	38.2	37.4	40.4	42.8	+2.4	
Smoke one or more packs of cigarettes per day <sup>f</sup>	51.6	50.8	52.7	50.8	49.8	50.4	52.6	54.3	54.8	58.8	57.1	57.5	57.7	62.4	61.5	59.4	61.1	59.8	59.1	60.9	62.5	62.6	62.4	-0.2	
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	41.8	40.8	37.8	36.2	-1.6	
Take dissolvable tobacco regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34.8	32.2	-2.7
Take snus regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42.2	38.9	-3.3 s	
Take steroids <sup>g</sup>	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 15,300 16,000 15,100 14,600*

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.

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

<sup>b</sup>Beginning in 2012 data based on two thirds of N indicated.

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

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

<sup>e</sup>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.

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

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

**TABLE 10**  
**Trends in Harmfulness of Drugs as Perceived by 10th Graders**

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying great risk <sup>a</sup>																				2012–2013 change				
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		2011	2012	2013	
Try marijuana once or twice <sup>b</sup>	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	19.9	19.3	17.2	15.7	-1.4	
Smoke marijuana occasionally <sup>b</sup>	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	30.9	30.1	26.8	25.1	-1.6	
Smoke marijuana regularly <sup>b</sup>	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	57.2	55.2	50.9	46.5	-4.5 ss	
Try synthetic marijuana once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.6	24.1	-0.5	
Take synthetic marijuana occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34.9	32.8	-2.1	
Try inhalants once or twice <sup>d</sup>	37.8	38.7	40.9	42.7	41.6	47.2	47.5	45.8	48.2	46.6	49.9	48.7	47.7	46.7	45.7	43.9	43.0	41.2	42.0	42.5	42.4	42.4	43.0	+0.6	
Take inhalants regularly <sup>d</sup>	69.8	67.9	69.6	71.5	71.8	75.8	74.5	73.3	76.3	75.0	76.4	73.4	72.2	73.0	71.2	70.2	68.6	66.8	66.8	67.1	66.2	66.1	65.9	-0.2	
Take LSD once or twice <sup>e</sup>	—	—	48.7	46.5	44.7	45.1	44.5	43.5	45.0	43.0	41.3	40.1	40.8	40.6	40.3	38.8	35.4	34.6	34.9	33.9	34.2	34.7	34.7	0.0	
Take LSD regularly <sup>e</sup>	—	—	78.9	75.9	75.5	75.3	73.8	72.3	73.9	72.0	68.8	64.9	63.0	63.1	60.8	60.7	56.8	55.7	56.7	56.1	54.9	56.4	55.9	-0.5	
Try ecstasy (MDMA) once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	39.4	43.5	49.7	52.0	51.4	48.4	45.3	43.2	38.9	36.3	37.2	36.2	36.0	-0.3	
Take ecstasy (MDMA) occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	64.8	67.3	71.7	74.6	72.8	71.3	68.2	66.4	62.1	59.2	60.8	59.8	58.6	-1.2	
Try salvia once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.2	10.7	-1.6	
Take salvia occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20.3	17.1	-3.3 ss	
Try crack once or twice <sup>d</sup>	70.4	69.6	66.6	64.7	60.9	60.9	59.2	58.0	57.8	56.1	57.1	57.4	57.6	56.7	57.0	56.6	56.4	56.5	57.7	58.1	59.5	59.0	60.2	+1.3	
Take crack occasionally <sup>d</sup>	87.4	86.4	84.4	83.1	81.2	80.3	78.7	77.5	79.1	76.9	77.3	75.7	76.4	76.7	76.9	76.2	76.0	76.5	75.9	76.2	76.5	76.7	77.8	+1.1	
Try cocaine powder once or twice <sup>d</sup>	59.1	59.2	57.5	56.4	53.5	53.6	52.2	50.9	51.6	48.8	50.6	51.3	51.8	50.7	51.3	50.2	49.5	49.8	50.8	52.9	53.0	53.4	54.5	+1.0	
Take cocaine powder occasionally <sup>d</sup>	82.2	80.1	79.1	77.8	75.6	75.0	73.9	71.8	73.6	70.9	72.3	71.0	71.4	72.2	72.4	71.3	70.9	71.1	71.0	72.2	72.0	72.6	72.8	+0.3	
Try heroin once or twice without using a needle <sup>g</sup>	—	—	—	—	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	73.0	72.9	72.6	73.2	+0.6	
Take heroin occasionally without using a needle <sup>g</sup>	—	—	—	—	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	84.8	83.4	84.4	84.0	-0.4	
Try OxyContin once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.9	29.4	-1.5	
Take OxyContin occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48.3	44.7	-3.6 s	
Try Vicodin once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.2	21.0	-2.2 s	
Take Vicodin occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40.3	36.0	-4.2 s	
Try Adderall once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19.7	17.6	-2.1 s	
Take Adderall occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34.3	30.5	-3.9 ss	
Try bath salts (synthetic stimulants) once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32.3	50.1	+17.8 sss	
Take bath salts (synthetic stimulants) occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44.9	61.8	+16.9 sss	
Try cough/cold medicine once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.6	21.6	-2.1	
Take cough/cold medicine occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40.4	37.3	-3.0	
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) <sup>b</sup>	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	11.9	12.3	11.3	11.3	0.0	
Take one or two drinks nearly every day <sup>b</sup>	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	33.1	32.9	31.8	30.6	-1.2	
Have five or more drinks once or twice each weekend <sup>b</sup>	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	54.6	55.5	52.8	52.3	-0.5	
Smoke one to five cigarettes per day <sup>c</sup>	—	—	—	—	—	—	—	—	28.4	30.2	32.4	35.1	38.1	39.7	41.0	41.3	41.7	43.5	42.8	41.4	44.8	49.1	47.7	-1.4	
Smoke one or more packs of cigarettes per day <sup>f</sup>	60.3	59.3	60.7	59.0	57.0	57.9	59.9	61.9	62.7	65.9	64.7	64.3	65.7	68.4	68.1	67.7	68.2	69.1	67.3	67.2	69.8	71.6	70.8	-0.8	
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	43.7	45.7	42.9	40.0	-2.9 ss	
Take dissolvable tobacco regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33.3	31.3	-2.1	
Take snus regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.0	38.9	-2.1	
Take steroids <sup>g</sup>	67.1	72.7	73.4	72.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<sup>b</sup>Beginning in 2012 data based on two thirds of *N* indicated.

<sup>c</sup>Data based on one third of *N* indicated.

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

<sup>e</sup>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.

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

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

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

Percentage saying great risk <sup>a</sup>

*How much do you think people risk harming themselves (physically or in other ways), if they . . .*

→  
(Years cont.)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
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	24.5	21.9	19.5
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	39.6	35.6	30.1
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	76.5	72.5	65.0
Try synthetic marijuana once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take synthetic marijuana occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	42.3	39.5	38.8
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	81.8	79.4	79.1
Try PCP once or twice	—	—	—	—	—	—	—	—	—	—	—	—	55.6	58.8	56.6	55.2	51.7	54.8	50.8	51.5
Try ecstasy (MDMA) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try salvia once or twice <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take salvia occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	56.8	57.6	57.2
Take cocaine occasionally	—	—	—	—	—	—	—	—	—	—	—	54.2	66.8	69.2	71.8	73.9	75.5	75.1	73.3	73.7
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	90.2	90.1	89.3
Try crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	57.0	62.1	62.9	64.3	60.6	62.4	57.6	58.4
Take crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	70.4	73.2	75.3	80.4	76.5	76.3	73.9	73.8
Take crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	84.6	84.8	85.6	91.6	90.1	89.3	87.5	89.6
Try cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	45.3	51.7	53.8	53.9	53.6	57.1	53.2	55.4
Take cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	56.8	61.9	65.8	71.1	69.8	70.8	68.6	70.6
Take cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	81.4	82.9	83.9	90.2	88.9	88.4	87.0	88.6
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	50.9	50.7	52.8
Take heroin occasionally	75.6	75.6	71.9	71.4	70.9	70.9	72.2	69.8	71.8	70.7	69.8	68.2	74.6	73.8	75.5	76.6	74.9	74.2	72.0	72.1
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	89.2	88.3	88.0
Try heroin once or twice without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take heroin occasionally without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try any narcotic other than heroin (codeine, Vicodin, OxyContin, Percocet, etc.) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take any narcotic other than heroin occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take any narcotic other than heroin regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try amphetamines once or twice <sup>c</sup>	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	32.6	31.3	31.4
Take amphetamines regularly <sup>c</sup>	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	72.4	69.9	67.0
Try Adderall once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try Adderall occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try crystal methamphetamine (ice) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61.6	61.9	57.5	58.3
Try bath salts (synthetic stimulants) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take bath salts (synthetic stimulants) occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try sedatives (barbiturates) once or twice <sup>d</sup>	34.8	32.5	31.2	31.3	30.7	30.9	28.4	27.5	27.0	27.4	26.1	25.4	30.9	29.7	32.2	32.4	35.1	32.2	29.2	29.9
Take sedatives (barbiturates) regularly <sup>d</sup>	69.1	67.7	68.6	68.4	71.6	72.2	69.9	67.6	67.7	68.5	68.3	67.2	69.4	69.6	70.5	70.2	70.5	70.2	66.1	63.3
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	8.6	8.2	7.6
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	30.6	28.2	27.0
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	70.5	67.8	66.2
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	49.0	48.3	46.5
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	69.2	69.5	67.6
Use smokeless tobacco regularly	—	—	—	—	—	—	—	—	—	—	—	25.8	30.0	33.2	32.9	34.2	37.4	35.5	38.9	36.6
Take steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63.8	69.9	65.6	70.7	69.1	66.1
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	2,684	2,759	2,591

(Table continued on next page.)



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

	Percentage saying great risk <sup>a</sup>																			2012– 2013 change	
<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Try marijuana once or twice	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	17.1	15.6	14.8	14.5	-0.3	
Smoke marijuana occasionally	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	24.5	22.7	20.6	19.5	-1.1	
Smoke marijuana regularly	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	46.8	45.7	44.1	39.5	-4.6 s	
Try synthetic marijuana once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.5	25.9	+2.4	
Take synthetic marijuana occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32.7	36.2	+3.5
Try LSD once or twice	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	35.6	34.7	33.1	34.9	+1.8	
Take LSD regularly	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	65.3	65.5	66.8	66.8	0.0	
Try PCP once or twice	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	52.4	53.9	51.6	53.9	+2.4	
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	50.6	49.0	49.4	47.5	-1.9	
Try salvia once or twice <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39.8	36.7‡	13.8	12.9	-0.9	
Take salvia occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.1	21.3	-1.8	
Try cocaine once or twice	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	52.8	54.0	51.6	54.4	+2.8	
Take cocaine occasionally	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	67.8	69.7	69.0	70.2	+1.2	
Take cocaine regularly	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	81.7	83.8	82.6	83.3	+0.6	
Try crack once or twice	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	50.2	51.7	52.0	55.6	+3.5	
Take crack occasionally	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	64.3	66.2	66.5	69.5	+3.0	
Take crack regularly	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	83.8	83.9	84.0	85.4	+1.4	
Try cocaine powder once or twice	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	48.2	48.0	48.1	49.9	+1.8	
Take cocaine powder occasionally	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	62.6	64.2	62.6	65.4	+2.8	
Take cocaine powder regularly	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	81.8	83.3	83.3	83.9	+0.6	
Try heroin once or twice	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	58.3	59.1	59.4	61.7	+2.3	
Take heroin occasionally	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	74.8	77.2	78.0	78.2	+0.2	
Take heroin regularly	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	85.5	87.9	88.6	87.6	-1.0	
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	63.8	61.1	63.3	64.5	+1.2	
Take heroin occasionally without using a needle	71.2	71.0	74.3	73.4	73.6	74.7	74.4	74.7	73.0	76.1	73.3	76.2	73.9	73.2	74.8	76.2	74.7	76.1	76.4	+0.3	
Try any narcotic other than heroin (codeine, Vicodin, OxyContin, Percocet, etc.) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40.4	39.9	38.4	43.1	+4.8 s	
Take any narcotic other than heroin occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	54.3	54.8	53.8	57.3	+3.5	
Take any narcotic other than heroin regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74.9	75.5	73.9	75.8	+1.9	
Try amphetamines once or twice <sup>c</sup>	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	40.6‡	34.8	34.3	36.3	+2.0	
Take amphetamines regularly <sup>c</sup>	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	63.6‡	58.7	60.0	59.5	-0.5	
Try Adderall once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33.3	31.2	27.2	31.8	+4.6 s	
Try Adderall occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	41.6	40.8	35.3	38.8	+3.5	
Try crystal methamphetamine (ice) once or twice	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	64.9	66.5	67.8	72.2	+4.4 s	
Try bath salts (synthetic stimulants) once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33.2	59.5	+26.4 sss
Take bath salts (synthetic stimulants) occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	45.0	69.9	+24.9 sss	
Try sedatives (barbiturates) once or twice <sup>d</sup>	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	28.0	27.8	29.4	29.4	+1.6	
Take sedatives (barbiturates) regularly <sup>d</sup>	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	52.1	52.4	53.9	53.3	-0.6	
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	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	10.8	9.4	8.7	9.9	+1.2	
Take one or two drinks nearly every day	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	25.4	24.6	23.7	23.1	-0.6	
Take four or five drinks nearly every day	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	61.1	62.3	63.6	62.4	-1.2	
Have five or more drinks once or twice each weekend	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	46.3	47.6	48.8	45.8	-3.0	
Smoke one or more packs of cigarettes per day	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	75.0	77.7	78.2	78.2	0.0	
Use smokeless tobacco regularly	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	41.2	42.6	44.3	41.6	-2.7	
Take steroids	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	59.2	61.1	58.6	54.2	-4.4 s	
<i>Approximate weighted N =</i>	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	2,440	2,408	2,331	2,098		

(Table continued on next page.)

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

*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.

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

<sup>b</sup>In 2011 the question on perceived risk of using salvia once or twice appeared at the end of a form. In 2012 the question was moved to an earlier section of the same form. A question on perceived risk of using salvia occasionally was also added following the question on perceived risk of trying salvia once or twice. These changes likely explain the discontinuity in the 2012 results.

<sup>c</sup>In 2011 the list of examples was changed from uppers, pep pills, bennies, speed to uppers, speed, Adderall, Ritalin, etc. These changes likely explain the discontinuity in the 2011 results.

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

**TABLE 12**  
**Trends in Disapproval of Drug Use in Grade 8**

Do you disapprove of people who . . .	Percentage who disapprove or strongly disapprove <sup>a</sup>																							2012– 2013 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Try marijuana once or twice <sup>b</sup>	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	73.5	74.4	75.1	72.0	-3.1 ss
Smoke marijuana occasionally <sup>b</sup>	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	79.9	81.1	81.6	78.8	-2.7 ss
Smoke marijuana regularly <sup>b</sup>	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	84.3	85.7	85.6	83.8	-1.8
Try inhalants once or twice <sup>c</sup>	84.9	84.0	82.5	81.6	81.8	82.9	84.1	83.0	85.2	85.4	86.6	86.1	85.1	85.1	84.6	83.4	84.1	82.3	83.1	83.1	82.9	83.1	81.6	-1.6
Take inhalants regularly <sup>c</sup>	90.6	90.0	88.9	88.1	88.8	89.3	90.3	89.5	90.3	90.2	90.5	90.4	89.8	90.1	89.8	89.0	89.5	88.5	88.4	88.9	88.5	88.6	86.8	-1.8 s
Take LSD once or twice <sup>d</sup>	—	—	77.1	75.2	71.6	70.9	72.1	69.1	69.4	66.7	64.6	62.6	61.0	58.1	58.5	53.9	53.5	52.6	53.2	53.7	55.4	51.8	52.0	+0.2
Take LSD regularly <sup>d</sup>	—	—	79.8	78.4	75.8	75.3	76.3	72.5	72.5	69.3	67.0	65.5	63.5	60.5	60.7	55.8	55.6	54.7	55.7	55.8	57.6	54.1	53.6	-0.6
Try ecstasy (MDMA) once or twice <sup>e</sup>	—	—	—	—	—	—	—	—	—	—	69.0	74.3	77.7	76.3	75.0	66.7	65.7	63.5	62.3	62.4	64.2	60.2	60.9	+0.7
Take ecstasy (MDMA) occasionally <sup>e</sup>	—	—	—	—	—	—	—	—	—	—	73.6	78.6	81.3	79.4	77.9	69.8	68.3	66.5	65.7	65.9	67.5	63.2	63.4	+0.1
Try crack once or twice <sup>c</sup>	91.7	90.7	89.1	86.9	85.9	85.0	85.7	85.4	86.0	85.4	86.0	86.2	86.4	87.4	87.6	87.2	88.6	87.2	88.4	89.1	88.5	89.0	88.1	-0.8
Take crack occasionally <sup>c</sup>	93.3	92.5	91.7	89.9	89.8	89.3	90.3	89.5	89.9	88.8	89.8	89.6	89.8	90.3	90.5	90.0	91.2	90.3	91.0	91.5	91.0	91.2	90.3	-0.9
Try cocaine powder once or twice <sup>c</sup>	91.2	89.6	88.5	86.1	85.3	83.9	85.1	84.5	85.2	84.8	85.6	85.8	85.6	86.8	87.0	86.5	88.2	86.8	88.1	88.4	88.3	88.6	88.0	-0.6
Take cocaine powder occasionally <sup>c</sup>	93.1	92.4	91.6	89.7	89.7	88.7	90.1	89.3	89.9	88.8	89.6	89.9	89.8	90.3	90.7	90.2	91.0	90.1	90.7	91.4	91.3	91.5	90.6	-1.0
Try heroin once or twice without using a needle <sup>d</sup>	—	—	—	—	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	89.5	87.5	86.8	87.2	+0.5
Take heroin occasionally without using a needle <sup>d</sup>	—	—	—	—	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	90.6	89.0	87.7	88.2	+0.4
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) <sup>b</sup>	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	54.2	54.0	54.1	53.3	-0.8
Take one or two drinks nearly every day <sup>b</sup>	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	79.5	80.7	81.3	80.2	-1.1
Have five or more drinks once or twice each weekend <sup>b</sup>	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	83.6	84.8	86.0	85.0	-1.1
Smoke one to five cigarettes per day <sup>e</sup>	—	—	—	—	—	—	—	—	75.1	79.1	80.4	81.1	81.4	83.1	82.9	83.5	85.3	85.0	83.6	84.7	86.8	—	—	—
Smoke one or more packs of cigarettes per day <sup>f</sup>	82.8	82.3	80.6	78.4	78.6	77.3	80.3	80.0	81.4	81.9	83.5	84.6	84.6	85.7	85.3	85.6	87.0	86.7	87.1	87.0	88.0	88.8	88.0	-0.8
Use smokeless tobacco regularly <sup>b</sup>	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	81.2	82.6	82.7	81.5	-1.2
Take steroids <sup>g</sup>	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	15,300	16,000	15,100	14,600	

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.

<sup>a</sup>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.

<sup>b</sup>Beginning in 2012, data based on two thirds of N indicated.

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

<sup>d</sup>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.

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

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

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

**TABLE 13**  
**Trends in Disapproval of Drug Use in Grade 10**

Do you disapprove of people who . . .	Percentage who disapprove or strongly disapprove <sup>a</sup>																						2012– 2013 change	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		2013
Try marijuana once or twice <sup>b</sup>	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	59.2	58.5	56.2	53.2	-3.0
Smoke marijuana occasionally <sup>b</sup>	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	68.0	67.9	65.7	62.1	-3.5 s
Smoke marijuana regularly <sup>b</sup>	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	78.7	78.8	77.3	73.8	-3.5 ss
Try inhalants once or twice <sup>c</sup>	85.2	85.6	84.8	84.9	84.5	86.0	86.9	85.6	88.4	87.5	87.8	88.6	87.7	88.5	88.1	88.1	87.6	87.1	87.0	86.5	86.9	85.7	86.1	+0.4
Take inhalants regularly <sup>c</sup>	91.0	91.5	90.9	91.0	90.9	91.7	91.7	91.1	92.4	91.8	91.3	91.8	91.0	92.3	91.9	92.2	91.8	91.6	91.1	90.8	90.9	90.0	89.7	-0.3
Take LSD once or twice <sup>d</sup>	—	—	82.1	79.3	77.9	76.8	76.6	76.7	77.8	77.0	75.4	74.6	74.4	72.4	71.8	71.2	67.7	66.3	67.8	68.2	68.5	68.3	69.1	+0.8
Take LSD regularly <sup>d</sup>	—	—	86.8	85.6	84.8	84.5	83.4	82.9	84.3	82.1	80.8	79.4	77.6	75.9	75.0	74.9	71.5	69.8	72.2	72.9	72.5	73.0	74.2	+1.2
Try ecstasy (MDMA) once or twice <sup>e</sup>	—	—	—	—	—	—	—	—	—	—	72.6	77.4	81.0	83.7	83.1	81.6	80.0	78.1	76.5	75.5	76.1	75.3	75.4	+0.1
Take ecstasy (MDMA) occasionally <sup>e</sup>	—	—	—	—	—	—	—	—	—	—	81.0	84.6	86.3	88.0	87.4	86.0	84.3	83.0	81.3	81.3	82.2	81.2	81.3	+0.1
Try crack once or twice <sup>c</sup>	92.5	92.5	91.4	89.9	88.7	88.2	87.4	87.1	87.8	87.1	86.9	88.0	87.6	88.6	88.8	89.5	89.5	90.8	90.4	90.3	90.9	91.0	90.6	-0.5
Take crack occasionally <sup>c</sup>	94.3	94.4	93.6	92.5	91.7	91.9	91.0	90.6	91.5	90.9	90.6	91.0	91.0	91.8	91.8	92.0	92.7	92.9	92.8	92.4	93.0	93.0	92.4	-0.7
Try cocaine powder once or twice <sup>c</sup>	90.8	91.1	90.0	88.1	86.8	86.1	85.1	84.9	86.0	84.8	85.3	86.4	85.9	86.8	86.9	87.3	87.7	88.6	88.4	89.0	89.4	89.3	88.7	-0.6
Take cocaine powder occasionally <sup>c</sup>	94.0	94.0	93.2	92.1	91.4	91.1	90.4	89.7	90.7	89.9	90.2	89.9	90.4	91.2	91.2	91.4	92.0	92.1	92.1	92.2	92.5	92.4	91.8	-0.6
Try heroin once or twice without using a needle <sup>d</sup>	—	—	—	—	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	91.4	91.6	91.9	91.3	-0.7
Take heroin occasionally without using a needle <sup>d</sup>	—	—	—	—	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	92.4	92.4	92.9	92.3	-0.6
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) <sup>b</sup>	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	40.3	41.5	39.6	38.5	-1.2
Take one or two drinks nearly every day <sup>b</sup>	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	77.6	80.0	78.0	77.1	-0.9
Have five or more drinks once or twice each weekend <sup>b</sup>	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	75.9	77.3	77.5	77.8	+0.3
Smoke one to five cigarettes per day <sup>e</sup>	—	—	—	—	—	—	—	—	67.8	69.1	71.2	74.3	76.2	77.5	79.3	80.2	79.7	82.5	80.0	80.6	82.1	—	—	—
Smoke one or more packs of cigarettes per day <sup>f</sup>	79.4	77.8	76.5	73.9	73.2	71.6	73.8	75.3	76.1	76.7	78.2	80.6	81.4	82.7	84.3	83.2	84.7	85.2	84.5	83.9	85.8	86.0	86.1	+0.1
Use smokeless tobacco regularly <sup>b</sup>	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	78.5	79.5	79.5	77.7	-1.8
Take steroids <sup>g</sup>	90.0	91.0	91.2	90.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>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 15,200 14,900 15,000 12,900</i>																								

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

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

<sup>a</sup>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.

<sup>b</sup>Beginning in 2012, data based on two thirds of *N* indicated.

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

<sup>d</sup>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.

<sup>e</sup>Data based on one third of *N* indicated.

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

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

**TABLE 14**  
**Trends in Disapproval of Drug Use in Grade 12**

Percentage who disapprove or strongly disapprove <sup>b</sup>

<i>Do you disapprove of people (who are 18 or older) doing each of the following?<sup>a</sup></i>	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	→ (Years cont.)
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	69.9	63.3	57.6	
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	79.7	75.5	68.9	
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	90.1	87.6	82.3	
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	88.1	85.9	82.5	
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	95.5	95.8	94.3	
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	93.0	92.7	91.6	
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	96.9	97.5	96.6	
Trying crack once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.3	92.1	93.1	89.9	89.5	
Taking crack occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.3	94.2	95.0	92.8	92.8	
Taking crack regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	94.9	95.0	95.5	93.4	93.1	
Trying cocaine powder once or twice	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	87.9	88.0	89.4	86.6	87.1	
Taking cocaine powder occasionally	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92.1	93.0	93.4	91.2	91.0	
Taking cocaine powder regularly	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.7	94.4	94.3	93.0	92.5	
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	94.9	94.4	93.2	
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	96.8	97.0	96.2	
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	97.2	97.5	97.1	
Trying heroin once or twice without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Taking heroin occasionally without using a needle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Trying amphetamines once or twice <sup>c</sup>	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	86.9	84.2	81.3	
Taking amphetamines regularly <sup>c</sup>	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	95.6	96.0	94.1	
Trying sedatives (barbiturates) once or twice <sup>d</sup>	77.7	81.3	81.1	82.4	84.0	83.9	82.4	84.4	83.1	84.1	84.9	86.8	89.6	89.4	89.3	90.5	90.6	90.3	89.7	87.5	
Taking sedatives (barbiturates) regularly <sup>d</sup>	93.3	93.6	93.0	94.3	95.2	95.4	94.2	94.4	95.1	95.1	95.5	94.9	96.4	95.3	95.3	96.4	97.1	96.5	97.0	96.1	
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	33.0	30.1	28.4	
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	75.9	77.8	73.1	
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	90.8	90.6	89.8	
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	70.7	70.1	65.1	
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	73.5	70.6	69.8	
Taking steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90.8	90.5	92.1	92.1	91.9	
<i>Approximate weighted N =</i>	<i>2,677</i>	<i>2,957</i>	<i>3,085</i>	<i>3,686</i>	<i>3,221</i>	<i>3,261</i>	<i>3,610</i>	<i>3,651</i>	<i>3,341</i>	<i>3,254</i>	<i>3,265</i>	<i>3,113</i>	<i>3,302</i>	<i>3,311</i>	<i>2,799</i>	<i>2,566</i>	<i>2,547</i>	<i>2,645</i>	<i>2,723</i>	<i>2,588</i>	

(Table continued on next page.)

**TABLE 14 (cont.)**  
**Trends in Disapproval of Drug Use in Grade 12**

Percentage who disapprove or strongly disapprove<sup>b</sup>

<i>Do you disapprove of people (who are 18 or older) doing each of the following?<sup>a</sup></i>	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012–2013 change
Trying marijuana once or twice	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	51.6	51.3	48.8	49.1	+0.3
Smoking marijuana occasionally	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	62.0	60.9	59.1	58.9	-0.2
Smoking marijuana regularly	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	77.7	77.5	77.8	74.5	-3.3 s
Trying LSD once or twice	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	86.5	86.3	87.2	86.6	-0.5
Taking LSD regularly	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	94.3	94.9	95.2	95.3	+0.1
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	86.3	83.9	87.1	84.9	-2.2
Trying cocaine once or twice	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	90.5	91.1	91.0	92.3	+1.4
Taking cocaine regularly	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	96.0	96.0	96.8	96.7	-0.1
Trying crack once or twice	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	89.8	91.4	92.8	91.4	-1.5
Taking crack occasionally	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	92.6	93.9	95.0	93.6	-1.4
Taking crack regularly	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	93.1	94.4	95.4	94.1	-1.3
Trying cocaine powder once or twice	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	87.0	88.1	88.7	88.2	-0.4
Taking cocaine powder occasionally	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	91.0	92.2	93.0	91.7	-1.3
Taking cocaine powder regularly	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	92.6	93.8	95.0	94.1	-1.0
Trying heroin once or twice	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	93.9	94.3	95.8	95.6	-0.1
Taking heroin occasionally	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	96.2	96.3	97.0	96.9	-0.1
Taking heroin regularly	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	96.4	96.7	97.4	97.4	-0.1
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	93.2	92.6	95.2	93.7	-1.5
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	94.5	94.1	95.9	94.6	-1.3
Trying amphetamines once or twice <sup>c</sup>	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	88.1‡	84.1	83.9	84.9	+1.0
Taking amphetamines regularly <sup>c</sup>	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	94.9‡	92.9	93.9	93.2	-0.8
Trying sedatives (barbiturates) once or twice <sup>d</sup>	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	87.6	87.3	88.2	88.9	+0.7
Taking sedatives (barbiturates) regularly <sup>d</sup>	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	94.7	95.1	96.1	95.8	-0.3
Trying one or two drinks of an alcoholic beverage (beer, wine, liquor)	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	30.7	28.7	25.4	27.3	+1.8
Taking one or two drinks nearly every day	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	71.5	72.8	70.8	71.9	+1.1
Taking four or five drinks nearly every day	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	88.8	90.8	90.1	90.6	+0.5
Having five or more drinks once or twice each weekend	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	68.8	70.0	70.1	71.6	+1.5
Smoking one or more packs of cigarettes per day	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	81.0	83.0	83.7	82.6	-1.1
Taking steroids	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	89.8	89.7	90.4	88.2	-2.2
<i>Approximate weighted N =</i>	<i>2,603</i>	<i>2,399</i>	<i>2,601</i>	<i>2,545</i>	<i>2,310</i>	<i>2,150</i>	<i>2,144</i>	<i>2,160</i>	<i>2,442</i>	<i>2,455</i>	<i>2,460</i>	<i>2,377</i>	<i>2,450</i>	<i>2,314</i>	<i>2,233</i>	<i>2,449</i>	<i>2,384</i>	<i>2,301</i>	<i>2,147</i>	

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

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

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

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

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

<sup>c</sup>In 2011 the list of examples was changed from upper, pep pill, bennie, speed to upper, speed, Adderall, Ritalin, etc. These changes likely explain the discontinuity in the 2011 results.

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

**TABLE 15**  
**Trends in Availability of Drugs as Perceived by 8th Graders**

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

Percentage saying fairly easy or very easy to get<sup>a</sup>

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012–2013 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	41.4	37.9	36.9	39.1	+2.3 s
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	10.0	9.3	7.5	7.4	-0.1
PCP <sup>b</sup>	—	18.0	18.5	17.7	19.0	19.6	19.2	17.5	17.1	16.0	15.4	14.1	13.7	11.4	11.0	10.5	9.5	10.1	9.1	8.0	7.9	6.7	5.8	-0.8
Ecstasy (MDMA) <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	23.8	22.8	21.6	16.6	15.6	14.5	13.4	14.1	13.1	12.9	12.0	9.6	9.5	0.0
Crack	—	25.6	25.9	26.9	28.7	27.9	27.5	26.5	25.9	24.9	24.4	23.7	22.5	20.6	20.8	20.9	19.7	20.2	18.6	17.9	15.7	14.4	13.7	-0.7
Cocaine powder	—	25.7	25.9	26.4	27.8	27.2	26.9	25.7	25.0	23.9	23.9	22.5	21.6	19.4	19.9	20.2	19.0	19.5	17.8	16.6	14.9	14.1	13.5	-0.6
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	11.6	9.9	9.4	10.0	+0.6
Narcotics other than Heroin <sup>b,c</sup>	—	19.8	19.0	18.3	20.3	20.0	20.6	17.1	16.2	15.6	15.0	14.7	15.0	12.4	12.9	13.0	11.7	12.1	11.8‡	14.6	12.3	10.6	9.7	-0.9
Amphetamines <sup>d</sup>	—	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	19.6‡	15.0	13.4	12.8	-0.6
Crystal methamphetamine (ice) <sup>b</sup>	—	16.0	15.1	14.1	16.0	16.3	15.7	16.0	14.7	14.9	13.9	13.3	14.1	11.9	13.5	14.5	12.1	12.8	11.9	10.9	9.6	8.8	8.5	-0.3
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	15.3	12.6	11.1	10.6	-0.5
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	13.7	12.0	10.5	10.4	-0.1
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	61.1	59.0	57.5	56.1	-1.4
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	55.5	51.9	50.7	49.9	-0.9
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	14.2	13.3	12.5	12.9	+0.4
<i>Approximate weighted N =</i>		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	14,485	15,233	14,235	13,605	

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.

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

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

<sup>c</sup>In 2010 the list of examples for narcotics other than heroin was changed from methadone, opium to Vicodin, OxyContin, Percocet, etc. This change likely explains the discontinuity in the 2010 results.

<sup>d</sup>In 2012 the list of examples for amphetamines was changed from uppers, pep pills, bennies, speed to uppers, speed, Adderall, Ritalin, etc. These changes likely explain the discontinuity in the 2012 results.

**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 <sup>a</sup>																				2012–2013 change			
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		2011	2012	2013
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	69.4	68.4	68.8	69.7	+0.9
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	18.3	16.6	14.9	16.3	+1.4
PCP <sup>b</sup>	—	23.7	23.4	23.8	24.7	26.8	24.8	23.9	24.5	25.0	21.6	20.8	19.4	18.0	18.1	15.8	15.4	14.4	13.4	12.6	12.0	10.2	9.4	-0.8
Ecstasy (MDMA) <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	41.4	41.0	36.3	31.2	30.2	27.4	27.7	26.7	25.6	25.7	24.8	21.0	20.7	-0.3
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	22.5	19.7	18.4	17.1	-1.2
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	22.6	20.6	19.2	18.3	-0.9
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	14.5	13.2	11.9	11.9	0.0
Narcotics other than Heroin <sup>b,c</sup>	—	26.9	24.9	26.9	27.8	29.4	29.0	26.1	26.6	27.2	25.8	25.4	23.5	23.1	23.6	22.2	21.5	20.3	18.8‡	28.7	25.0	24.3	22.5	-1.9
Amphetamines <sup>d</sup>	—	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	32.6‡	28.5	27.3	26.5	-0.8
Crystal methamphetamine (ice) <sup>b</sup>	—	18.8	16.4	17.8	20.7	22.6	22.9	22.1	21.8	22.8	19.9	20.5	19.0	19.5	21.6	20.8	18.8	15.8	14.0	13.3	11.8	10.7	10.0	-0.7
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	24.9	22.0	20.2	18.3	-1.8 s
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	21.6	20.8	19.7	18.3	-1.4
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	80.0	77.9	78.2	77.2	-1.0
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	75.6	73.6	72.9	71.4	-1.5 s
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	20.3	18.8	18.0	17.2	-0.8
<i>Approximate weighted N =</i>		<i>7,014</i>	<i>14,652</i>	<i>15,192</i>	<i>16,209</i>	<i>14,887</i>	<i>14,856</i>	<i>14,423</i>	<i>13,112</i>	<i>13,690</i>	<i>13,518</i>	<i>13,694</i>	<i>15,255</i>	<i>15,806</i>	<i>15,636</i>	<i>15,804</i>	<i>15,511</i>	<i>14,634</i>	<i>15,451</i>	<i>14,827</i>	<i>14,509</i>	<i>14,628</i>	<i>12,601</i>	

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

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

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

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

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

<sup>c</sup>In 2010 the list of examples for narcotics other than heroin was changed from methadone, opium to Vicodin, OxyContin, Percocet, etc. This change likely explains the discontinuity in the 2010 results.

<sup>d</sup>In 2011 the list of examples for amphetamines was changed from uppers, pep pills, bennies, speed to uppers, speed, Adderall, Ritalin, etc. These changes likely explain the discontinuity in the 2011 results.



**TABLE 17**  
**Trends in Availability of Drugs as Perceived by 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?	Percentage saying fairly easy or very easy to get <sup>a</sup>																			
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Marijuana	87.8	87.4	87.9	87.8	90.1	89.0	89.2	88.5	86.2	84.6	85.5	85.2	84.8	85.0	84.3	84.4	83.3	82.7	83.0	85.5
Amyl/butyl nitrites	—	—	—	—	—	—	—	—	—	—	—	—	23.9	25.9	26.8	24.4	22.7	25.9	25.9	26.7
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	44.5	49.2	50.8
Some other hallucinogen <sup>b</sup>	47.8	35.7	33.8	33.8	34.6	35.0	32.7	30.6	26.6	26.6	26.1	24.9	25.0	26.2	28.2	28.3	28.0	29.9	33.5	33.8
PCP	—	—	—	—	—	—	—	—	—	—	—	—	22.8	24.9	28.9	27.7	27.6	31.7	31.7	31.4
Ecstasy (MDMA)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.7	22.0	22.1	24.2	28.1	31.2
Cocaine	37.0	34.0	33.0	37.8	45.5	47.9	47.5	47.4	43.1	45.0	48.9	51.5	54.2	55.0	58.7	54.5	51.0	52.7	48.5	46.6
Crack	—	—	—	—	—	—	—	—	—	—	—	—	41.1	42.1	47.0	42.4	39.9	43.5	43.6	40.5
Cocaine powder	—	—	—	—	—	—	—	—	—	—	—	—	52.9	50.3	53.7	49.0	46.0	48.0	45.4	43.7
Heroin	24.2	18.4	17.9	16.4	18.9	21.2	19.2	20.8	19.3	19.9	21.0	22.0	23.7	28.0	31.4	31.9	30.6	34.9	33.7	34.1
Some other narcotic (including methadone) <sup>c</sup>	34.5	26.9	27.8	26.1	28.7	29.4	29.6	30.4	30.0	32.1	33.1	32.2	33.0	35.8	38.3	38.1	34.6	37.1	37.5	38.0
Amphetamines <sup>d</sup>	67.8	61.8	58.1	58.5	59.9	61.3	69.5	70.8	68.5	68.2	66.4	64.3	64.5	63.9	64.3	59.7	57.3	58.8	61.5	62.0
Crystal methamphetamine (ice)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24.1	24.3	26.0	26.6	25.6
Sedatives (barbiturates) <sup>e</sup>	60.0	54.4	52.4	50.6	49.8	49.1	54.9	55.2	52.5	51.9	51.3	48.3	48.2	47.8	48.4	45.9	42.4	44.0	44.5	43.3
Tranquilizers	71.8	65.5	64.9	64.3	61.4	59.1	60.8	58.9	55.3	54.5	54.7	51.2	48.6	49.1	45.3	44.7	40.8	40.9	41.1	39.2
Alcohol	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Steroids	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46.7	46.8	44.8	42.9
<i>Approximate weighted N =</i>	2,627	2,865	3,065	3,598	3,172	3,240	3,578	3,602	3,385	3,269	3,274	3,077	3,271	3,231	2,806	2,549	2,476	2,586	2,670	2,526

→  
(Years cont.)

(Table continued on next page.)

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

<i>How difficult do you think it would be for you to get each of the following types of drugs, if you wanted some?</i>	Percentage saying "fairly easy" or "very easy" to get <sup>a</sup>																			2012–2013 change	
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Marijuana	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	82.1	82.2	81.6	81.4	-0.2	
Amyl/butyl nitrites	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	—	—	—	—	—	
LSD	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	25.1	25.1	27.6	24.5	-3.1	
Some other hallucinogen <sup>b</sup>	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	39.5	38.3	37.8	36.6	-1.2	
PCP	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	18.5	17.2	14.2	15.3	+1.1	
Ecstasy (MDMA)	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	36.4	37.1	35.9	35.1	-0.9	
Cocaine	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	35.5	30.5	29.8	30.5	+0.7	
Crack	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	26.1	24.0	22.0	24.6	+2.6	
Cocaine powder	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	29.0	26.4	25.1	28.4	+3.3	
Heroin	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	24.1	20.8	19.9	22.1	+2.3	
Some other narcotic (including methadone) <sup>c</sup>	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‡	54.2	50.7	50.4	46.5	-3.9 s	
Amphetamines <sup>d</sup>	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	44.1‡	47.0	45.4	42.7	-2.7	
Crystal methamphetamine (ice)	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	18.3	17.1	14.5	17.2	+2.7	
Sedatives (barbiturates) <sup>e</sup>	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	36.8	32.4	28.7	27.9	-0.7	
Tranquilizers	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	18.4	16.8	14.9	15.0	+0.1	
Alcohol	—	—	—	—	95.0	94.8	94.3	94.7	94.2	94.2	93.0	92.5	92.2	92.2	92.1	90.4	88.9	90.6	89.7	-1.0	
Steroids	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	27.3	26.1	25.0	28.5	+3.5 s	
<i>Approximate weighted N =</i>		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	2,395	2,337	2,280	2,092	

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.

<sup>a</sup>Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

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

<sup>c</sup>In 2010 the list of examples for narcotics other than heroin was changed from methadone, opium to Vicodin, OxyContin, Percocet, etc. This change likely explains the discontinuity in the 2010 results.

<sup>d</sup>In 2011 the list of examples was changed from uppers, pep pills, bennies, speed to uppers, speed, Adderall, Ritalin, etc. These changes likely explain the discontinuity in the 2011 results.

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