DEPARTMENT

# Illicit Drugs and Youth

Illicit drug use among youth is a serious concern of parents, schools, communities, and governments across the country. Overall drug use among young people peaked in 1979, then declined steadily throughout the 1980s before climbing again between 1992 and 1997. Since then the rate of use among youth has stabilized or decreased slightly. Specifically, adolescent use of tobacco, alcohol (both illegal for youth), inhalants, marijuana, LSD (lysergic acid diethylamide), cocaine, heroin, and methamphetamine has remained stable. Nonetheless today's levels are still well above those of the 1980s.

One exception to this overall trend is MDMA (3,4-methylenedioxymethamphetamine), also known as ecstasy, the use of which has spread rapidly throughout the country and is still increasing. The consequences of high overall drug use are increasing, too, evidenced in the growing numbers of treatment admissions and emergency department visits, particularly for the drugs most popular with young users such as marijuana and the club drugs MDMA and GHB (gamma-hydroxybutyrate).

Young people who use drugs appear to be negatively influenced by many factors, including friends and family members who may use or sell drugs or who do not actively prohibit their use. But these same negative influences can be overcome if parents, schools, communities, and governments



work in concert to educate young people regarding the dangers of illicit substances, to effectively monitor their activities and behaviors, and to actively encourage them to stay or become drug free.

## **Background**

The reduction of illicit drug use among the nation's youth has long been a priority of the federal, state, and local public health and law enforcement communities. To this end, the U.S. Government tracks youth drug use via three nationally representative surveys: the National Household Survey on Drug Abuse (NHSDA), the Monitoring the Future (MTF) study, and the Youth Risk Behavior Survey (YRBS). The NHSDA is a home-based survey, while the MTF and YRBS are school-based. Also, while the NHSDA and MTF are annual surveys that monitor drug use only, the YRBS is biennial and monitors several health risk behaviors, one of which is drug use. Despite these and other differences in methodology, these nationallevel indicators display remarkably similar drug use trends particularly evident among youth.

As part of its efforts to research adolescent drug use and to augment data derived from nationallevel reporting with information at the local level, the National Drug Intelligence Center (NDIC) developed a teen drug use questionnaire in 2001. A directed research project, the questionnaire was administered via telephone to 300 substance abuse counselors across the nation. The questionnaire comprised approximately 30 questions that covered issues ranging from what drugs are used and how they are acquired to the consequences of their use. Responses to NDIC's questionnaire are not representative of the population as a whole but provide anecdotal reporting that, combined with demand and law enforcement sources, helps illustrate adolescent drug use from several perspectives.

#### **Initiation**

Age and use statistics indicate that young people typically first experiment with tobacco, alcohol, inhalants, and marijuana. The age of initiation for each of these substances is lower than for any other illicit substance. According to the latest data from NHSDA, the mean age at first use of tobacco is 15.4; alcohol, 16.3; inhalants, 16.4; and marijuana, 17.0. This higher onset age for marijuana is consistent with research showing that most youth who initiate marijuana use previously have used tobacco, alcohol, or both, and that some have used inhalants. Moreover, rates of use for these substances have been well above those for other specific illicit substances tracked by prevalence studies. For example, NHSDA data for 2000 show that lifetime use among those aged 12 to 17 was much higher for cigarettes (34.6%), alcohol (41.7%), inhalants (8.9%), and marijuana/hashish (18.3%) than for the next highest specific drug— LSD (3.6%).1

The MTF study, too, shows much higher rates of use for these entry-level substances among eighth, tenth, and twelfth graders, particularly noticeable among the youngest users. For example, MTF data for 2001 show that lifetime use among

eighth graders for cigarettes (36.6%), alcohol (50.5%), inhalants (17.1%), and marijuana/hashish (20.4%) was much higher than for the next highest specific drug—MDMA (5.2%).

Data from the 1999 YRBS, which examines the initiation of risk behaviors for tobacco, alcohol, and marijuana—but not inhalants—support the NHSDA and MTF findings. Among students in grades 9 through 12 nationwide, 24.7 percent reported they had smoked a cigarette, 32.2 percent had drunk alcohol, and 11.3 percent had tried marijuana before age 13. For all three substances, males were significantly more likely than females to have initiated these behaviors.

Support for the theory that the use of tobacco and alcohol is associated with an increased risk of subsequent illicit drug use among youth is demonstrated in NHSDA data for 2000. In that year, 42.7 percent of those aged 12 to 17 who smoked cigarettes reported current use of illicit drugs, compared with just 4.6 percent of nonsmokers. Also, 65.5 percent of heavy drinkers aged 12 to 17 reported current use of illicit drugs, while just 4.2 percent of nondrinkers reported current drug use.<sup>2</sup>

As young users age, rates of use generally increase, peaking, according to 2000 NHSDA data, between 18 and 20 years of age for current use. During this period, a number of youth who use tobacco, alcohol, inhalants, or marijuana progress to using other illicit substances, and the mean age at first use for other drugs is as follows: hallucinogens, 18.6; cocaine, 19.5; pain relievers, 19.5; stimulants, 19.6; heroin, 19.8; and methamphetamines, 20.0.3

<sup>&</sup>lt;sup>1</sup> Lifetime use is defined as use of a drug at least once in a user's life; past year use, at least once in the preceding 365 days; current use, at least once in the preceding 30 days.

<sup>&</sup>lt;sup>2</sup> The NHSDA defines "heavy" alcohol use as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days.

<sup>&</sup>lt;sup>3</sup> Includes nonmedical use of any prescription-type pain reliever or stimulant; does not include over-the-counter drugs.

Anecdotal reporting from substance abuse counselors differs somewhat from national-level data in terms of both drug and age initiation. Respondents to NDIC's questionnaire overwhelmingly answered "marijuana" when asked what drug (other than alcohol) teenagers first use. Tobacco was second, followed by inhalants and prescription drugs. Also, the age of initiation reported by respondents was lower, generally ranging between 10 and 14 years, and some respondents noted use as young as 8 or 9, particularly of marijuana or inhalants. Since substance abuse counselors tend to see more youth who are in trouble because of drug use, these initiation patterns may not be typical of youth in general.

#### Use

National-level demand indicators show that the overall teen drug use rate has stabilized or decreased slightly. According to the 2000 NHSDA, past year use of any illicit drug among youth aged 12 to 17 decreased from 1999 (19.8%) to 2000 (18.6%). But lifetime rates of use remain high. In 2000, 26.9 percent of 12 to 17 year olds reported using an illicit drug in their lifetime, and of these, 18.3 percent had used marijuana/hashish, 10.9 percent had abused prescription drugs, and 5.8 percent had used hallucinogens. These figures changed little from the previous year when 27.6 percent had used any illicit drug, of which 18.7 percent had used marijuana/hashish, 10.9 percent had abused prescription drugs, and 5.7 percent had used hallucinogens.

Past Year Use of Any Illicit Drug for Eighth, Tenth, and Twelfth Graders (%)

	1997	1998	1999	2000	2001
8th Grade	22.1	21.0	20.5	19.5	19.5
10th Grade	38.5	35.0	35.9	36.4	37.2
12th Grade	42.4	41.4	42.1	40.9	41.4

Source: The Monitoring the Future Study, 2001.

Similarly, the MTF study indicates that the rate of past year use of any drug by eighth, tenth, and twelfth graders remained relatively stable between 2000 and 2001 (see Table). Changes recorded for tenth and twelfth graders were not significant, and lifetime use rates remain high overall. The MTF study further indicates that 53.9 percent of twelfth graders in 2001 had used an illicit drug at least once in their lifetime. Nearly half (49.0%) reported lifetime marijuana use, 11.7 percent reported lifetime MDMA use, 10.9 percent reported lifetime LSD use, 8.2 percent reported lifetime cocaine use, and 6.9 percent reported lifetime methamphetamine use.

Lifetime use rates covered in the 1999 YRBS are somewhat similar to those in the MTF study. Nationwide, 47.2 percent of students in grades 9 through 12 had used marijuana at least once in their lifetime, 9.5 percent had used cocaine, and 9.1 percent had used methamphetamine.

In agreement with the national-level demand indicators were the substance abuse counselors responding to NDIC's questionnaire who, when asked what drugs teens are using, again overwhelmingly responded "marijuana." Methamphetamine, MDMA, cocaine, hallucinogens, prescription drugs (OxyContin, Valium, Xanax, other benzodiazepines), and inhalants were reported as well.

Data on where and when young people use drugs is somewhat harder to come by than data on the number of users and the frequency of use. But youth surveys and law enforcement sources suggest that drugs continue to have a strong presence in schools across the country. For example, results of the 1999 YRBS indicate that 30.2 percent of students in grades 9 through 12 had been offered, sold, or given an illegal drug on school property within the 12 months preceding the survey. Male students (34.7%) were significantly more likely than female students (25.7%) to experience these situations.

More recently, a 2001 report from the National Center on Addiction and Substance Abuse (CASA) at Columbia University indicates that 60 percent of high school students and 30 percent of middle school students report that drugs are used, kept, or sold at their schools. Also, according to responses to NDIC's National Drug Threat Survey 2001, some state and local law enforcement agencies in Arizona, California, Connecticut, Kentucky, Maine, Maryland, Minnesota, New York, Pennsylvania, Rhode Island, Texas, and Utah report an increase in drug presence at schools in their areas.

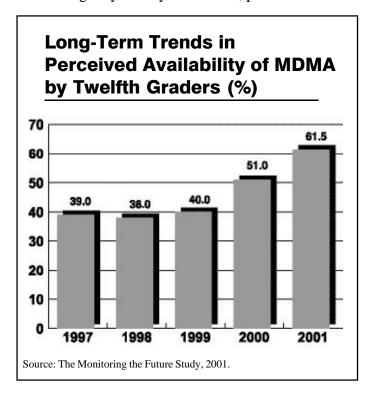
Despite the apparent availability of drugs in schools, most data indicate that young people generally use on weekends and in the late afternoon or early evening after school on weekdays. Data for the 2000–2001 school year from the Parents' Resource Institute on Drug Education (PRIDE) indicate that drug use rates among youth generally are higher during weekends and after school. Drug use among sixth through twelfth graders responding to the PRIDE survey was most prevalent during the weekends for marijuana, cocaine, and hallucinogens. For example, 28.5 percent of the twelfth graders reported using marijuana during weekends, compared with 12.4 percent reporting use after school and 7.9 percent reporting use before school. The time of use for inhalants was more evenly distributed than that of the three drugs mentioned above. In fact, students reported equal or heavier use of inhalants during school hours than after school.

Most substance abuse counselors responding to NDIC's questionnaire also indicated that teens use drugs in the afternoons and evenings after school and on weekends. But several indicated that drug use frequently occurs before school and during lunch as well.

## **Trends**

One of the more notable trends over the past few years concerns the rate of MDMA use, which rose sharply among eighth, tenth, and twelfth graders between 1998 and 2000, according to the MTF study. Past year use of MDMA among twelfth graders, for example, rose from 3.6 to 8.2 percent during that period. While the increase in

use slowed between 2000 and 2001 (to 9.2% for twelfth graders), MTF data further indicate that teens' perceive MDMA as increasingly available (see Chart). While an increase in actual prevalence of the drug may or may not be true, perceived



prevalence could persuade some teens that MDMA use is the norm and thereby increase the likelihood they will try it. Data from MTF further indicate that for the second straight year MDMA use is more prevalent among teenagers than cocaine use.

Likewise, information from the 2001 Partnership Attitude Tracking Study (PATS) shows that teens' lifetime use of MDMA more than doubled from 1995 (5.0%) to 2001 (12.0%) and is now equal with that of cocaine, crack, and LSD and higher than that of heroin. According to the Partnership for a Drug-Free America, one factor contributing to the rising use of MDMA is the perception among teens that the drug is "only slightly more dangerous" than tobacco, alcohol, inhalants, and marijuana.

Illustrating the rapid growth of the drug across the country, "ecstasy," or MDMA, was the overwhelming response from substance abuse

counselors responding to NDIC's questionnaire when asked what drugs teens currently use that were previously unavailable in their communities. Heroin, prescription drugs (primarily OxyContin), GHB, methamphetamine (including crystal methamphetamine), crack cocaine, and hallucinogens were reported as well. Also, some state and local law enforcement agencies in Colorado, Connecticut, Georgia, Kansas, Minnesota, Montana, North Dakota, Nebraska, New Jersey, South Dakota, Tennessee, and Wisconsin reported through the National Drug Threat Survey 2001 that MDMA either was just emerging in their areas or had emerged within the previous year.

## **Consequences**

The consequences of early drug use are shown in the numbers of young people requiring drug-related treatment and emergency health care or exposing themselves to health risks. For example, the 1999 Treatment Episode Data Set (TEDS) indicates that 47 percent of admissions to publicly funded treatment facilities for marijuana abuse were under the age of 20. Moreover, among primary marijuana admissions, more than half (57%) first used the drug by age 14, and 92 percent by age 18. Teens also accounted for more than half of admissions for hallucinogens in 1999: 53 percent were between the ages of 15 and 19.

Data for 2000 indicate that 31 percent of all Drug Abuse Warning Network (DAWN) emergency department cases involved patients aged 25 and under. At least 80 percent of LSD, MDMA, and Rohypnol mentions, more than 70 percent of ketamine mentions, and 60 percent of GHB mentions involved patients aged 25 and under. DAWN data further show that marijuana/hashish mentions among those aged 12 to 17 increased 622 percent between 1990 and 2000.

The use of any drug or alcohol can lower inhibitions and lead to riskier behavior and, subsequently, to potential harm to the user such as exposure to sexually transmitted diseases. The 1999

YRBS results indicate that 24.8 percent of students nationwide who were sexually active at the time of the survey had used drugs or alcohol at the time of their last sexual intercourse. Male students (31.2%) were significantly more likely than female students (18.5%) to engage in this behavior.

A 1999 CASA study that analyzed the YRBS sample from 1997 indicated that 63 percent of high school teens who used alcohol reported having sex compared with 26 percent of those who never used alcohol. Also, 72 percent of teens who used drugs reported having sex compared with 36 percent of those who never used drugs. The CASA study further suggests that teens who use drugs or alcohol are more likely to have sex at younger ages, to have multiple partners, and to be at greater risk of sexually transmitted diseases and pregnancy.

Substance abuse counselors responding to NDIC's questionnaire, when asked what, in their experience, were the consequences of teen drug use, frequently mentioned legal (arrests, violence, criminal activity) and health (emergency room visits, pregnancy, suicides) problems as well as poor family or social relationships. The most commonly reported consequence, however, was poor school performance comprising truancy, cheating, poor grades, disciplinary problems, and expulsions or dropouts.

### Influences

Young people's knowledge and perceptions of illicit drugs are affected, both negatively and positively, by many influences including friends, peers, family members, and television and other media. For example, NHSDA data show that significantly more young people (17%) were likely to be current users of marijuana when a few, some, or all of their friends used marijuana than those reporting none of their friends used marijuana (0.5%). Also, those who knew adults that used marijuana were nine times more likely to be current marijuana users than those who did not know adults that used the drug.

What is more, responses to NDIC's questionnaire indicate that many teens learn how to use drugs—and often acquire them—from their friends, peers, and family members, including parents. Various forms of media also were implicated. For example, some respondents specifically mentioned prime-time news programs that present drug information in such detail that they teach young people how to administer drugs.

Unfortunately many parents are unaware or remain unconvinced of the positive influence they might have in preventing their children from using drugs. According to a 2001 report from the Office of National Drug Control Policy (ONDCP), only 52.0 percent of parents of 12 to 13 year olds believe that monitoring would decrease the likelihood of their children using drugs. Information from the 2001 PATS, however, indicates that one of the biggest risks that teens associate with marijuana use is upsetting their parents. More than two-thirds (66.0%) of teens mentioned this risk in 2001, and this percentage has been relatively stable over the last few years.

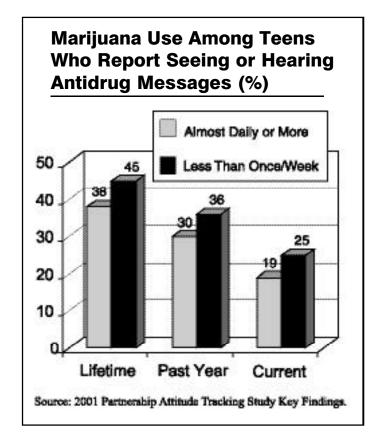
PRIDE data for the 2000–2001 school year also support the contention that parents can positively influence drug use rates among their children. Use rates were lower among sixth through twelfth graders reporting their parents talked with them "a lot" about illicit drugs (18.8%) than among those whose parents seldom (28.4%) or never (34.5%) discussed illicit drugs.

Complementing these findings are results of a 2000 CASA survey. The survey correlated teens' risk of substance abuse with 12 possible actions the teens attributed to their parents. Some of the parental actions included monitoring media exposure, monitoring school performance, knowing where teens are after school and on weekends, and expressing disapproval of drug use. Results of the CASA survey indicate that teens whose parents monitor such activities are at one-quarter the risk of smoking, drinking, and using illegal drugs.

## **Education**

Attitudes drive behavior, and national drug education campaigns over the years may have had an effect on the attitudes of youth toward drug use. Overall drug use declined from the mid-1980s to the early 1990s, a period marked by several antidrug campaigns including the D.A.R.E. (Drug Abuse Resistance Education) and "Just Say No" programs. Drug use then increased from the early to mid-1990s, a time of conflicting drug-related messages, some of which glamorized the use of drugs.

The National Youth Anti-Drug Media Campaign implemented by ONDCP in January 1998 appears to have influenced attitudes especially toward marijuana use, an area the campaign principally targeted. Although the prevalence studies are not designed to evaluate the campaign's effectiveness and definitive evaluation is not yet complete, some data suggest a positive impact. For example, NHSDA data for 2000 show that 81.9 percent of those aged 12 to 17 had either seen or heard a drug



prevention message outside of school in the previous year. Moreover, the 2001 PATS suggests that frequent exposure to antidrug messages correlates to fewer teens reporting lifetime (38%), past year (30%), and current (19%) use of marijuana than less frequent exposure (see Chart).

Conversely, use rates for MDMA, a drug not specifically addressed in the original media campaign, have risen since 1998. In response, the first national education campaign focusing on MDMA was initiated in February 2002. The campaign has been designed to educate parents as well as teenagers and consists of both television and print advertisements that deliver messages about the very real dangers associated with MDMA use in an effort to change the perception that it is a harmless drug.

The D.A.R.E. program also launched a new curriculum that began in limited areas in fall 2001. The new curriculum targets older students by shifting from fifth to seventh graders and incorporating a supplementary program for ninth graders. To counter the theory that some education programs make drug use seem more prevalent than it is and thus encourage youth to see it as a social norm, the revamped D.A.R.E. program allows students to challenge perceived norms through peer discussion groups.

## Outlook

Despite relatively stable to slightly declining overall drug use among young people, rates of use are still relatively high. Moreover, the consequences of drug use to the nation's youth and the ever-present threat of emerging drugs, such as MDMA, demand constant attention.

As long as drugs remain available to young people, antidrug education must be a priority for policymakers and law enforcement as well as for parents and schools. Only through consistent and ongoing antidrug messages from family, friends, schools, and governments—and the supported efforts of youth themselves to remain drug free—can adolescent drug use be substantially reduced.

#### Sources

Centers for Disease Control

Youth Risk Behavior Survey

University of Michigan

Monitoring the Future Study

National Center on Addiction and Substance Abuse at Columbia University

NDIC National Drug Threat Survey responses

NDIC Teen Drug Use Questionnaire responses

Office of National Drug Control Policy

Parents' Resource Institute on Drug Education

Partnership for a Drug-Free America

Partnership Attitude Tracking Study

Substance Abuse and Mental Health Services Administration

Drug Abuse Warning Network

National Household Survey on Drug Abuse

Treatment Episode Data Set



