Adolescent Health Highlight:
Use of Illicit Drugs

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Adolescence is a time when many young people express their autonomy by taking risks. Risk-taking is a normal and positive development on the path to adulthood, but it also carries potential danger. One of the most common, and most dangerous, of adolescents’ risky behaviors is using illicit drugs. Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or psychotherapeutic medications not taken under a health provider’s supervision.2

This Adolescent Health Highlight presents statistical information about the extent, types, and patterns of adolescents’ use of illicit drugs; discusses their effects on adolescents’ health and well-being; shares findings from research about factors that can help adolescents avoid substance use and abuse; and presents strategies for preventing illicit drug use among adolescents and treating those with drug problems. (As used in this Highlight, the illicit drugs category does not include alcohol and tobacco).

Types and patterns of illicit drug use
Marijuana (and hashish, a product derived from marijuana, and included here in all discussions of marijuana use) is by far the most commonly used illicit drug among adolescents. However, adolescents use a wide range of illicit drugs—some newly developed, some “rediscovered.”

Fast Facts

1. Many adolescents occasionally use illicit drugs (such as marijuana, hashish, cocaine, heroin, hallucinogens, inhalants, or psychotherapeutic medications not prescribed for them), and a few do so regularly.1

2. Half of adolescents have used an illicit drug by the 12th grade. The most commonly used illicit drug is marijuana; about one in seven adolescents in 8th, 10th, and 12th grades combined reports having used it in the past 30 days.1

3. About one in five 12th-graders reports having used a prescription drug without medical supervision at some time in his or her life. About one in nine adolescents in 8th, 10th, and 12th grades combined reports having inhaled household substances (such as glues or solvents) to get “high.”1

4. Evidence points to several pivotal factors that can help adolescents stay drug-free: strong, positive connections with parents, other family members, school, and religion; the presence of parents in the home at key times of the day; and reduced access to substances such as alcohol, tobacco, and marijuana in the home.3

5. The proportion of 12th-grade students who report not having used cigarettes, alcohol, or illicit drugs in the last 30 days increased from 26 percent in 1976 to 51 percent in 2011.4
Unfortunately, word about “new” substances to get high with tends to travel much faster among adolescents than does news about the harm associated with these substances. Thus, it can be challenging to stay on top of all the varieties of illicit drugs adolescents are currently using. Moreover, some adolescents use multiple illicit drugs, either concurrently or over the course of their adolescent years.

There are additional difficulties associated with collecting data on adolescents’ illicit drug use. Nearly all such data rely on adolescents’ own accounts, and, because of the sensitive nature of this topic, they may underreport their own drug use. Still, in 2011, half of adolescents (50 percent) reported having used an illicit drug at least once by the 12th grade. Among 12th-graders, 46 percent reported using marijuana; 22 percent reported using a prescription-type psychotherapeutic drug (including amphetamines, sedatives, tranquilizers, and narcotics other than heroin) without medical supervision; and about 8 percent reported using inhalants or hallucinogens, at least once in their lifetime (see Figure 1). About one in four 12th-graders (25 percent) reported having used one or more illicit drugs in the past 30 days. In 2011, the substances that adolescents in grades 8 through 12 most frequently reported having used during the previous 30 days were marijuana, amphetamines, inhalants, and hallucinogens (including ecstasy and LSD).

FIGURE 1: Lifetime prevalence of drug use among 12th graders, 2011


The proportion of 12th-grade students reporting the use, in the previous 30 days, of illicit drugs other than marijuana decreased from 10 percent in 2000 to 9 percent in 2011. Over the same period, the proportion of 10th-graders reporting using these drugs decreased from 9 percent to 5 percent (see Figure 2).
Marijuana is the most commonly used illicit drug among adolescents. It is most often smoked in rolled cigarettes ("joints") or in pipes, but can also be ingested with food.

Some adolescents misuse prescription medications, particularly psychotherapeutic drugs that include amphetamines (such as Ritalin and Adderall); sedatives; tranquilizers; and narcotics (such as Vicodin and OxyContin).

**Marijuana.** As noted, marijuana is the most commonly used illicit drug among adolescents. It is most often smoked in rolled cigarettes ("joints") or in pipes, but it can also be ingested with food. The proportion of adolescents who use marijuana has ebbed and flowed over the years. After staying fairly steady for much of the early 2000s, daily use rates for 10th- and 12th-graders in 2011 showed small, but statistically significant, increases from 2009 (See Figure 3).¹ About one in seven adolescents in 8th, 10th and 12th grades combined in 2011 reported having used marijuana in the past 30 days.¹

**Prescription drug misuse.** Some adolescents misuse prescription medications, particularly psychotherapeutic drugs, which include amphetamines (such as Ritalin and Adderall); sedatives; tranquilizers; and narcotics (such as Vicodin and OxyContin). About one in five 12th-graders in 2011 reported having used one of these drugs without medical supervision at some time in his or her life. A much smaller percentage (about three percent for amphetamines, the most commonly used prescription drug) reported having used one or more of these prescription medications in the past 30 days in 2011.¹
Inhalants. Many household substances (such as glues, aerosols, butane, and solvents) can be inhaled to give a user a “high.” About one in nine adolescents reports having used inhalants at some point in his or her life. These substances tend to be used primarily by younger adolescents.¹

Hallucinogens. Drugs known for their hallucinogenic properties include LSD, MTF, mescaline, concentrated THC, peyote, PCP, psilocybin, and DMT. Past-year reported use of hallucinogens by 8th, 10th, and 12th grade students has been fairly steady in recent years, at between two and six percent.³

“Ecstasy.” Sometimes referred to as MDMA, “E,” and “X,” and one of several so-called “club drugs,” Ecstasy is the most commonly used hallucinogenic drug, with five percent of both 10th- and 12th-graders reporting use in the past year.¹

Other illicit drugs. Among the illicit drugs that are used less commonly by 8th, 10th, and 12th grade students are cocaine, heroin, methamphetamine, and steroids (less than one percent for each, for use in the past 30 days).¹

Differences in illicit drug use by adolescent group
In general, male adolescents are somewhat more likely than are their female counterparts to use illicit drugs. Patterns of use change over the grades, but by 12th grade, white adolescents are more likely than are their black or Hispanic peers to have used any illicit drug within the past year.¹ Few other demographic patterns are consistent across types of illicit drugs and across grade levels. Illicit substance use seems to be something many adolescents engage in occasionally, and a few engage in once a month or more often.¹

According to a recent study, nonmedical prescription drug misuse is more prevalent among adolescents who live in rural areas. Among those living in rural areas, adolescents were more at risk of misusing prescription medications if their health status was poor, if they suffered from...
depression, and if they used other drugs and alcohol. Adolescents living in rural areas were less likely to misuse prescription medications if they were enrolled in school and living in a two-parent household.6

**Effects of illicit drugs on adolescents**
Adolescents may be especially vulnerable to the damaging effects of drug use, because their brains are still developing.7 Use of illicit drugs is associated with many harmful behaviors and can cause both short- and long-term health problems. It is difficult to generalize about what level of use is harmful, because effects vary by individual, and many illicit drugs have no standardized “dosage.” However, adolescents who use illicit drugs are more likely than other adolescents to engage in risky sexual behavior,8 or be involved in delinquency and crime.9,10 Additionally, students using illicit drugs often have problems in school, although it is not easy to determine which comes first—the drug use, or the school problems. These school problems include low attendance, poor academic performance, and a greater likelihood of dropping out or being expelled.11,12 Furthermore, illicit drug use can affect relationships with family and friends by causing adolescents to be unreliable, forgetful, dishonest, or violent; it can also put them at increased risk for being a victim of violence.13

Numerous physical problems are associated with illicit drug use, depending on the type of drug used. These problems can include, in the short term, lung failure, heart attack, and heart failure, and in the long term, obesity, lung and cardiovascular disease, stroke, and cancer.13 Illicit drug use also increases the risk of contracting HIV, hepatitis, and other diseases.13 Adolescents who use illicit drugs have higher death rates than do their peers, because of increased risk of injuries (such as those resulting from car crashes), suicide, homicide, and illness.13 Many mental health disorders are also linked to illicit drug use, including depression, anxiety, paranoia, hallucinations, developmental delays, delusions, and mood disturbances.13,14

**Defining features that help protect adolescents from substance abuse**
Researchers have identified several “protective factors”—conditions and characteristics that make it more likely that adolescents will remain substance-free (defined as no use of cigarettes, alcohol, or illicit drugs). These factors include strong positive connections with parents and other family members, the presence of parents in the home at key times of the day, and reduced access to illegal substances in the home. A strong connection to school and a deep religious commitment also can help adolescents avoid substance use.3 For example, students who plan on completing four years of college are much more likely than are other students to report being substance-free.4

The proportion of 12th-graders who reported being substance-free in the last 30 days increased from 26 percent in 1976 to 51 percent in 2010 (the latest year for which we have these data). The proportion of 10th-graders abstaining from substances remained at 64 percent.4 These numbers would be higher if alcohol use were not included. Although all the reasons for the increase in the percentage of adolescents who are substance-free are not known, prevention activities, particularly those related to reducing cigarette smoking, have likely played a role.15

**Approaches to preventing and treating illicit drug use**
Several strategies have been shown to prevent illicit drug use; most of them overlap with what is known about evidence-based substance abuse prevention in general. For example, one effective strategy is to implement family-strengthening interventions during the elementary school years, to enhance parenting skills, reduce parental substance use (if present), and
improve parent-child relationships. As children enter adolescence, school-based drug prevention programs that focus on life-skills training can prepare them to resist social pressures and participate successfully in family, school, and community activities. In 2011, more than one in four (26 percent) high school students reported being offered, sold, or given an illegal drug on school property. School- or community-based parent training programs can help support the growth of adolescents’ positive skills and behaviors, so that they will not be drawn to drugs.

There are many ways for parents to help prevent adolescent drug use. An important first step is to maintain an open and caring relationship with their adolescent. Adolescents who feel that they can trust and communicate with their parents are more likely to follow family rules. To encourage safe choices, parents should explain their expectations clearly, describe the consequences of breaking the rules, and follow through consistently when necessary. More specifically, when it comes to preventing drug use, parents should: a) explain why drug use is harmful; b) communicate their expectations and rules relating to the use of drugs; c) check in with their adolescent on a regular basis; d) get to know their adolescents’ friends; and e) communicate with their adolescents to find out whether they are making safe choices.

Lastly, it is important to teach parents, administrators, and teachers about signs of illicit drug use, so that adolescents using drugs can be identified and offered treatment. Typical signs and symptoms of illicit drug use include mood swings, weight loss, a drop in grades, possession of drug paraphernalia, or increased problem behaviors.

When adolescents display signs of substance use, treatment should be sought to keep problems from worsening. Treatments that provide family therapy and support, and that involve multiple service systems, have been found to be effective, as have interventions such as cognitive-behavioral therapy, motivational interviewing, and/or contingency management (a form of behavioral therapy that gives participants vouchers or special privileges when they attend a program regularly or follow treatment plans). In selecting an appropriate treatment, it is important to consider other problems that may accompany drug abuse, such as mental illness or delinquent behavior. Drug abuse treatments for adolescents who are also juvenile offenders may differ from treatments for adolescents with accompanying mental health disorders.

Resources

The Child Trends DataBank includes brief summaries of well-being indicators, including several that are related to adolescents’ use of illicit drugs:

- Marijuana Use: [http://www.childtrends.org/?indicators=marijuana-use](http://www.childtrends.org/?indicators=marijuana-use)
- Steroid Use: [http://www.childtrends.org/?indicators=steroid-use](http://www.childtrends.org/?indicators=steroid-use)

The Child Trends LINKS (Lifecourse Interventions to Nurture Kids Successfully) database summarizes evaluations of out-of-school time programs that work (or do not) to enhance children’s development. The LINKS Database is user-friendly and directed especially to policymakers, program providers, and funders.
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- Programs related to prevention of abuse of marijuana, illicit/prescription drugs, or all substances are summarized.

- Evaluations of programs proven to work (or do not) in illicit drug use prevention, cessation, and intervention can be found in the article What works for preventing and stopping substance use in adolescents: Lessons from experimental evaluations of programs and interventions.

Other selected resources:

- The Office of National Drug Control Policy (http://ondcp.gov) publishes the presidential Administration’s National Drug Control Policy, as well as information on how parents should dispose of prescription drugs, and steps that parents can take to prevent adolescent drug abuse.

- The National Institute on Drug Abuse (NIDA) has a number of different resources on illicit drug use for adolescents and practitioners. For practitioners, NIDA’s DrugFacts page (http://www.drugabuse.gov/publications/term/160/DrugFacts) reports on adolescents’ trends in drug abuse.

- Adolescents (and others) who need help with a drug problem can call 1-800-662-HELP. To find a local treatment facility, visit the Substance Abuse and Mental Health Services Administration’s Substance Abuse Treatment Facility Locator at http://findtreatment.samhsa.gov/.

- Parents looking for strategies to prevent, or stop, illicit drug use by their adolescent can visit http://www.drugfree.org/.

- Adolescents looking for more information on the science behind drug abuse, and the effects of drug use on the body and brain, can visit the NIDA for Teens site (http://teens.drugabuse.gov).

- To learn how to stay drug-free, adolescents can visit http://www.abovetheinfluence.com, the adolescent-geared Web site of The National Youth Anti-Drug Media Campaign.

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References


