

## DRUG ABUSE



### Study Drugs

#### **Stimulants**

**Such as:** Ritalin, Concerta, Adderall, Focalin, Dexedrine.

**How it's taken:** As a tablet; crushed and snorted; or liquefied so it can be injected intravenously (I.V.). Some people opt for inserting the drug anally (plugging).

**Occasional use:** You may feel alert, focused, and awake. Can make blood pressure and heart rate go up. Can suppress appetite and cause sleep problems.

**Sustained use over time:** High potential for addiction, paranoia, and sleep deprivation, which can cause psychotic episodes (like amphetamine psychosis). Also can cause insomnia, digestive problems, and erratic weight change.

**Most dangerous when used with:** Over-the-counter medications, including cold medications containing decongestants; antidepressants, unless supervised by a physician; some asthma medications.

### Pain Killers - Opioids

**Opioids** are a derivative or synthetic version of opium, like heroin.

**Such as:** OxyContin, Codeine, Percodan, Fentanyl, Vicodin (hydrocodone), Methadone, Morphine, Percocet, Demoral.

**How it's taken:** Ingested orally as a tablet or capsule or liquid form; crushed and snorted; or cooked so it can be injected intravenously (I.V.).

**Occasional use:** At first you may feel indifferent to physical or emotional pain, nauseous, and a little drowsy. You may be constipated later. If you take too much (overdose), your breathing may slow down and you could die.

**Sustained use over time:** Painkillers are highly addictive and tolerance can increase over time.

**Most dangerous when used with:** Alcohol, antihistamines, barbiturates, benzodiazepines.

### Anti-Anxiety Drugs - Benzodiazepines

**Such as:** Xanax, Valium, Librium, Klonopin, Ativan.

**How it's taken:** Orally; or crushed and snorted.

**Occasional use:** You may feel calm and sleepy, with less tension, anxiety, or panic. This feeling will diminish over time as the body builds a tolerance to the substance.

**Sustained use over time:** Potential for addiction. Withdrawal can be lengthy, painful, and cause seizures, and should be medically supervised.

**Most dangerous when used with:** Alcohol, pain medications, some over-the-counter cold and allergy medications.

## Over the Counter Medications ("OTCs")

*This category includes a wide variety of substances. The similarity is that they are all cheap, widely available, and legal without a prescription.*

**Such as:** Dextromethorphan (Coricidin Cough and Cold, Robitussin DM, Drixoral), caffeine pills, Sudafed, diet pills, vitamin supplements, herbal remedies.

**How it's taken:** Cough medicines containing DXM are taken orally as a liquid or in capsules, as much as 10-30 times the recommended dose.

**Occasional use:** You may feel euphoric or disconnected. You may experience heart palpitations, dizziness, blackouts, insomnia, delusions, or seizures, and even coma or death from respiratory distress or heat stroke.

**Sustained use over time:** Commonly causes nausea, stomach cramps, or other unpleasant gastrointestinal effects that may persist for days after use. At risk for liver, kidney, lung, pancreas, and/or brain damage. Also can cause users to pee blood. Addiction is possible.

**Most dangerous when used with:** Cold medicines that contain Acetaminophen (like Tylenol), Chlorpheniramine Maleate, MAO Inhibitors and other antidepressants, unless supervised by a physician.

## Antidepressants

*Includes Selective Serotonin Reuptake Inhibitors (SSRIs), MAO Inhibitors, Tricyclics*

**Such as:** Prozac, Zoloft, Celexa, Paxil, Wellbutrin.

**How it's taken:** Orally, with the substance building up in the body over time, so one dose does not have immediate effects.

**Occasional use:** You may not feel much. Most antidepressants take days or weeks to kick in.

**Sustained use over time:** If you happen to take (***unprescribed***) antidepressants for long enough to feel the effects, you are in jeopardy of unbalancing the chemicals in your brain and causing emotional disturbances and risk of withdrawal symptoms. The bigger risk actually is for the person whose medication you are taking, who is being deprived of the medication they may need to function optimally.

**Most dangerous when used with:** Alcohol. Use of any drug will detract from the efficacy of most antidepressants.

Sure, prescription drugs may seem harmless — but misuse of any drug can lead to dependence. Drugs like Ritalin and Concerta, when used incorrectly, can have negative effects. Addiction, paranoia, anxiety, irregular heartbeat, headaches, and even hallucinations are possible side effects, just to name a few.

## Increasing illicit prescription drug use on campus

Joannie Yeh - [www.chicagoflame.com](http://www.chicagoflame.com) - Issue date: 7/16/07

*Please note, below is a summary of the information, not the entire article*

Illicit use of prescription medication is rising at an alarming rate on college campuses, but few are hearing of it. Students can't hear the alarm because they often think that prescription medications are safer than street drugs. Physicians may be too busy signing prescription orders to notice it. And pharmaceutical companies mask the alarm with advertisements of happy people.

A recent study by Sean E. McCabe, published in the Journal of American College Health, surveyed 9,161 undergraduate students at a large Midwestern research university.

The research team found that 14 percent of students had abused a prescription medication within the past year, more than the percentage of students who had used cocaine, ecstasy, inhalants, LSD, other psychedelics, crystal methamphetamine, heroin, GHB or Ketamine.

Prevalence of illicit use was 9 percent for pain medication (e.g. Vicodin, OxyContin), 5 percent for stimulant medication (e.g. Adderall, Concerta, Ritalin), 3 percent for sedative/anxiety medication (e.g. Xanax, Valium), and 2 percent for sleeping medication (e.g. Ambien, Halcion).

Feeding this trend is the easy access to prescription drugs from many different sources. 27 percent of students prescribed medication were approached to divert their pills, most of whom were prescribed a stimulant.

Dr. Friedman also finds that the teenagers he interviewed often perceived prescription medications as being safer than street drugs. He partly attributes the growing confidence in prescription drugs to pharmaceutical companies, because they "foster an image of prescription drugs as an integral and routine aspect of everyday life. Any adverse effects are relegated to the fine print of an advertisement or dispatched in a few seconds of rapid-fire speech."

However, without knowing the correct dosage-if any at all-and without a physician's instructions, students may be less aware of the side effects and dangerous drug interactions.

An on-call psychiatrist at the University of Illinois Hospital warns that a stimulant like "ritalin, taken with an antidepressant MAO-inhibitor can cause a hypertensive crisis."

This severe increase in blood pressure, in turn, can lead to a stroke that is comparable to a heart attack from cocaine use.

The rising use of illicit prescription medications and the accompanying student attitudes underscore urgent implications for practice and policy in a wide range of professions.

Physicians need adequate education on substance abuse to be well equipped to handle these cases. Physicians need to be more cautious when prescribing these commonly abused medications, since most circulating prescription drugs are released by the authority of their signatures.

## **Binge drinking and drug abuse a problem on campuses**

Thu Mar 15, 2007

By Will Dunham

WASHINGTON (Reuters) - About half of U.S. college students binge drink or abuse drugs, and the number who abuse prescription medication such as painkillers is up sharply, a report released on Thursday found. The study, issued by the National Center on Addiction and Substance Abuse at Columbia University in New York, provides a detailed look at substance abuse among America's college students based on surveys, interviews and other research.

"I think we have, by almost any standard, a serious public health problem on the college campuses. And it's deteriorating," Joseph Califano, who heads the center and served as U.S. health secretary from 1977 to 1979, said in a telephone interview.

The report found that 49 percent of full-time college students ages 18 to 22 binge drink (consuming five or more drinks at a time), or abuse prescription drugs such as painkillers or illegal drugs like cocaine and marijuana. That translates to 3.8 million students.

In 2005, 23 percent of them met the medical criteria for substance abuse or dependence, it said.

From 1993 to 2005, the proportion of students who abuse prescription painkillers such as Percocet, Vicodin and OxyContin rose more than 300 percent to 3.1 percent (about 240,000 students), the report said.

Abuse of prescription stimulants like Ritalin and Adderall doubled to 2.9 percent (225,000 students), and abuse of tranquilizers also rose, the report said.

During the same period, daily marijuana use more than doubled to 4 percent (310,000 students). Overall use of other illegal drugs such as cocaine and heroin rose by half to 8.2 percent (636,000 students).

"Basically the proportion of college students who drink and binge drink has stayed constant. But what's troubling is the tremendous increase in the intensity of their drinking and drug use and the excessiveness of it," Califano said.

The percentage of students who drink remained about even with a similar 1993 report -- 70 percent then and 68 percent in 2005. Binge drinking stayed at 40 percent of students.

But the proportion who binge drink frequently, defined as three or more times over two weeks, rose by 16 percent from 1993 to 2005. Drinking 10 or more times per month rose 25 percent, and drinking three or more times per month rose 26 percent.

Daily smoking among college students fell from 15 percent in 1993 to 12 percent in 2005.

The substance abuse has contributed to alcohol-related deaths and injuries, and sexual assaults against female students, the report said.

Califano called the report the most exhaustive ever done on substance abuse on U.S. college campuses. "College presidents, deans and trustees have facilitated a college culture of alcohol and drug abuse that is linked to poor student academic performance, depression, anxiety, suicide, property damage, vandalism, fights and a host of medical problems," the report said.

The report was based on results of a nationally representative telephone survey of 2,000 students, surveys of approximately 400 college and university administrators, interviews with researchers in the field and other data.

# STIMULANT ABUSE

Information from [goaskalice@columbia.edu](mailto:goaskalice@columbia.edu)

Dear Alice, Recently I have started snorting Ritalin and Adderall (not at the same time though). I was wondering exactly how dangerous this might be, if even at all, considering it's a prescribed drug and I never snort more than the average dose that you would take orally. If you could tell me what the danger in doing this is and what I might possibly be doing to my body, that would be great.

Thanks, Adderall Addict

Dear Adderall Addict,

Ritalin and Adderall are two of the most prevalent prescription drugs used in the treatment of Attention Deficit Hyperactivity Disorder (ADHD). Both of these medications are classified as Schedule II drugs in the amphetamine class. Even though they are stimulants, when prescribed as directed by a medical provider in standard doses for people with ADHD, these prescription drugs assist people with ADHD to sustain their attention for a longer amount of time. This allows them to study or complete tasks at hand much more effectively minus the feelings associated with the medications' "speed-like" effects.

Schedule II drugs, such as Ritalin and Adderall, however, have a high propensity for misuse, abuse, and dependence. Widely prescribed for school-age persons by medical professionals, many adolescents and young adults snort Ritalin and Adderall as they believe that they are safe alternatives to cocaine. This could not be further from the truth. First, both the potency of Ritalin and Adderall exponentially increase when they are snorted or injected because they enter the bloodstream directly. Second, prescription medications, especially when they are not prescribed for the user, as with illicit drugs, do not diminish their potential for harm. These actions make the misuse/abuses of these substances as or more harmful than cocaine, since the user may believe snorting Adderall and Ritalin is safe.

Dangerous side effects from inhaling Ritalin and Adderall include:

- respiratory problems, such as destruction of the nasal and sinus cavities and lung tissue
- irregular heartbeat (heart arrhythmia)
- problems with circulation
- psychotic episodes
- increased aggression
- toxic shock
- death, in extreme cases

As Adderall is similar in its chemical makeup to methamphetamine, it poses additional dangers. Extended, continuous abuse can result in developmental problems concerning the brain and negative changes in brain wave activity. If someone misuses/abuses Ritalin, Adderall, or both, help is necessary to stop using, not only to prevent further harm, but also to keep the person safe during withdrawal. Once one has become addicted to these substances, stopping could cause withdrawal symptoms similar to those with cocaine, such as:

- severe depression
- psychosis
- restlessness
- extreme feelings of agitation

You may think that you are safer and more frugal by snorting Ritalin and Adderall, rather than cocaine, but you are harming yourself in similar ways. You also run the risk of arrest for having and using these substances without a prescription.

(1)

Dear Alice, I have a large amount of course work, which is combined with a job and extra-curriculars, and while I want to succeed in all of them, I find that I simply don't have enough time, even though I currently sleep only 4 or 5 hours a night. I mentioned this to a group of my friends here at school, and it turns out they all take stimulants to help them manage jam-packed undergraduate life. The pills are called ADDERALL and PROVIGIL. I have acquired some for myself, but before I take them, could you tell me if either has serious health risks? I do not have any other health problems or take any other medications. A few of my friends tell me that they sometimes stay awake for as long as 3 or 4 days. If it is reasonably safe, that would be great! Thank you.

Sincerely, "No time for sleep"

(2)

Dear Alice, Given the fact that this is a top-notch school, it's total hoo-ha that you haven't included any info on all the non-hard core, but still illegal, "study stimulants." Is all this ADDERALL gonna do me permanent damage or what?

awaiting your response, "awake"

Dear No time for sleep and awake, Your questions reminded Alice of a poem:

*I burn my candle at both ends, It will not last the night.  
But ah, my foes, and oh, my friends,  
It gives a lovely light.*

— Edna St. Vincent Millay

Academics, jobs, extracurricular activities, a social life, and other responsibilities eat up students' time. It makes logical sense that you'd feel the need to burn your candle at both ends, just to get everything done. It also makes sense that you'd be curious about substances that promise to help you burn your candle for just a little bit longer. While drugs such as Provigil and Adderall may help you stay awake, taking them can be risky, especially when used without a health care provider's prescription and supervision.

Adderall, or amphetamine-dextroamphetamine, is a prescription stimulant that is used to treat the sleep disorder narcolepsy, as well as attention-deficit disorder with hyperactivity (ADHD). Adderall is a habit-forming drug, meaning that people who use it excessively or improperly can become physically and psychologically dependent on it. People who take this medication regularly for several weeks need to be careful when going off of it in order to avoid withdrawal symptoms. People who take MAOI (monoamine oxidase inhibitors) anti-depressant medication or have heart problems, glaucoma (an eye condition), or a history of substance abuse need to avoid using Adderall.

Someone needs to stop taking Adderall and to see a health care provider *immediately* if s/he has any of the following uncommon, but serious, side effects:

- irregular heartbeat
- allergic reaction, such as difficulty breathing, hives, facial swelling, and/or closing of the throat
- hallucinations
- extremely high blood pressure (symptoms include severe headaches and vision problems)
- abnormal behavior or confusion
- seizures

More commonly, Adderall can cause some less serious side effects. While these do not require emergency medical attention, it's a good idea to consult a health care provider if someone has any of the following:

- anxiety
- increased heart rate
- dizziness
- insomnia

- restlessness
- diarrhea or constipation
- erection problems
- changes in sex drive
- loss of appetite
- depression

Similar to Adderall, Provigil (also called modafinil) is a prescription drug used to treat people with sleep disorders. Provigil can also be habit forming and, similar to Adderall, can lead to physical and psychological dependence and withdrawal symptoms if used improperly. Provigil can also decrease the effectiveness of hormone-based birth control options, such as Norplant and Depo-Provera.

People with the following conditions need to avoid taking Provigil:

- heart problems or chest pain
- high blood pressure
- history of mental illness
- kidney disease
- liver disease

Provigil's serious, uncommon side effects, those that call for *immediate* medical attention, are allergic reaction, extremely low or high blood pressure, and breathing problems. Provigil's less serious side effects can include headache, nausea, and insomnia.

When dealing with medications such as these, it's wise to check in with a health care provider before giving anything a try. Both Adderall and Provigil affect different people in different ways. Until someone is sure how either one makes him or her feel, it's best to be safe. Since both drugs act on the body's central nervous system, it's a good idea to be cautious when driving or performing any task that requires alertness and coordination. Drug interactions are another consideration — both medicines can interact with many other substances, too many to list here — and the potential to overdose is also a concern.

As you're trying to figure out how to manage your time, it might be helpful to know that non-chemical resources can help you deal with the flood of commitments that accompany student life. Take a look at Alice's answers on stress and time management before you decide to jump on the study stimulant bandwagon — they're listed in the Related Q&As section below.

Finally, you may need to make choices concerning dropping some of your commitments to get more sleep — at least this semester.

Alice