



HEADS UP
REAL NEWS
ABOUT DRUGS
AND YOUR BODY

Prescription Drugs: Their Use and Abuse



Rx PHARMACY
212-555-XXXX

A prescription label is not just a bunch of words.

It's a **doctor's** instructions to a patient: only this **person** can take this medication, in this amount, for this length of time. When the medication is taken **on purpose** for any other **reason**, that is called **abuse**.

IMPORTANT

MEDICATION SHOULD BE TAKEN WITH PLENTY OF **WATER**

300MG TABLET ORT Qty 36
Date 1/10/06

Prescription drugs have helped millions of people with any number of medical problems. Many people wouldn't even be alive without these medicines. But you've probably noticed that prescription drugs come with warnings such as: *Caution: Federal law prohibits the transfer of this drug to any person other than the patient for whom it was prescribed.... Do not drive or operate machinery.... Take with food.... Avoid prolonged sunlight.*

"The reason these drugs require a prescription is that they are powerful medications," says Wilson Compton, MD, director of the Division of Epidemiology, Services and Prevention Research, at the National Institute on Drug Abuse (NIDA).

Used at certain dosage levels in certain forms at certain times, prescription drugs are safe and effective. But when they are used for nonmedical purposes, that is called **abuse**, and abuse of prescription drugs is not safe. Abuse of a prescription drug—to get high, lose weight, or build up muscle—can have very serious health consequences and can even be deadly.

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HEADS UP: HEALTH RISKS FOR TEENS

Unfortunately, prescription drug abuse is on the rise. While it is important to note that most teens do not abuse prescription drugs, the current level of abuse of certain prescription drugs concerns NIDA scientists. In 2004, nearly 15 million Americans ages 12 and up—that's **6.1 percent of the population**—took a prescription drug for nonmedical purposes, according to a study by the federal government's Substance Abuse and Mental Health Services Administration.

The prescription drugs most often abused by teens are painkillers, anti-anxiety medications (benzodiazepines), stimulants, and steroids—powerful drugs that carry real health risks.

How many teens are abusing these drugs?

Enough to cause a lot of concern.

According to a 2004 NIDA study, 9.3 percent of high school seniors said they had abused the painkiller Vicodin in the past year. "That's a huge and frightening number," says Dr. Compton. Also disturbing

news is that 7.3 percent of 12th-graders had abused benzodiazepines at least once in the last year, 5.1 percent had abused Ritalin, and

Prescription Drug Health Alert for Teens

The following four categories show the dangers of the prescription drugs most abused by teens.

Opioids

OxyContin® and *Vicodin*® are **opioids**. These drugs are prescribed to treat severe pain.

Dangers When Abused

- Extremely addictive
- Slowing down one's breathing or stopping it altogether (death)
- Particularly dangerous with alcohol

Benzodiazepines

Xanax, *Valium*, and *Librium* are examples of **benzodiazepines**—central nervous system (CNS) depressants—prescribed to treat anxiety, acute stress reactions, and panic attacks. The more sedating benzodiazepines, such as *Halcion* and *ProSom*, are prescribed for short-term treatment of sleep disorders.

Dangers When Abused

- Can slow breathing and heartbeat, especially if combined with prescription pain medicines, certain over-the-counter cold and allergy medications, or alcohol
- Discontinuing prolonged use of high doses can lead to withdrawal and possible seizures

Stimulants

Ritalin and *Adderall* are prescribed mainly for attention-deficit/hyperactivity disorder. These drugs are known as **stimulants**.

Dangers When Abused

- Extremely addictive
- Extremely high body temperature

Anabolic Steroids

Anadrol, *Oxandrin*, and *Durabolin* are **anabolic steroids**—artificial versions of the hormone testosterone. They are prescribed in certain cases of delayed puberty or muscle wasting.

Dangers When Abused

- Infertility
- Breast development in males
- Facial hair in females
- Halted bone growth
- Liver tumors
- Cancer
- Premature heart attacks*

* Some of the health consequences of steroid abuse take months or years to develop, and they may occur long after a person has stopped taking these drugs. For example, people who abuse steroids increase their risk of having heart attacks at a young age.



HEADS UP REAL NEWS ABOUT DRUGS AND YOUR BODY

Tracking Prescription Drug Abuse

Wilson Compton, MD, heads NIDA's Division of Epidemiology, Services and Prevention Research. That means he's in charge of tracking drug-abuse trends in this country, then helping figure out what to do about them. We talked with him about his job and about prescription drug abuse.

Q: HOW DO YOU IDENTIFY TRENDS AMONG TEENS AND DRUG ABUSE IN THIS COUNTRY?

A: We go directly to teens and ask about their use of drugs. We go to homes and interview teens personally as well as to schools to administer questionnaires.

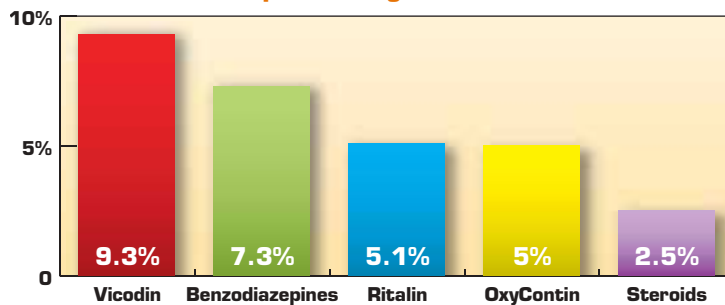
Q: WHAT ARE THE KEY RESEARCH AREAS REGARDING TEENS AND PRESCRIPTION DRUG ABUSE THAT YOU ARE INTERESTED IN TRACKING?

A: How many kids are using? What are their attitudes and behaviors? Knowing this is useful in predicting future behavior and drug patterns. Also, I'd like to know where kids get these drugs. Do they get them from their friends, the medicine cabinet, the Internet, drug dealers?

Q: WHAT WOULD YOU SAY TO A TEEN WHO SAYS, "I DON'T HAVE ANYTHING TO WORRY ABOUT. I ONLY TAKE PRESCRIPTION DRUGS OCCASIONALLY"?

A: If your friend said to you that they were only taking heroin occasionally, would you be concerned? If your friend said they were only taking crystal meth occasionally, would you be concerned? Prescription drugs have a lot of the same effects, and are just as dangerous as street drugs."

Percentage of High School Seniors Who Have Abused Prescription Drugs at Least Once in 2004



This data is taken from the 2004 Monitoring the Future survey, a yearly study of the behaviors, attitudes, and values of teens in America. For information on the latest findings, visit www.monitoringthefuture.org.

5 percent said they had abused the powerful pain reliever OxyContin. Adding to concern, teens in some communities are engaging in dangerous trading sessions, where they gather whatever medications they can find—old prescriptions of their own, pills from their families' medicine cabinets—and swap them. The bar graph above illustrates abuse among teens of five different prescription drugs.

**HEADS UP:
GET THE FACTS**

NIDA scientists are searching for reasons why teens abuse prescription drugs. One reason may simply be availability. The number of prescriptions being written has gone way up in recent years, especially for pain relievers and stimulants.

Another reason is that abusers may mistakenly believe that prescription drugs, because they come from a pharmacy and not a drug dealer, are safer to take, even at high doses or without a prescription. And still another might be that abusing prescription drugs follows a pattern of behavior among people who abuse other drugs.

**HEADS UP:
KILLER PAINKILLERS**

Just how harmful *are* the most abused prescription drugs? Extremely harmful.

One of the most dangerous is OxyContin, a pill that is designed to deliver pain relief over a 12-hour period. After the patient swallows the pill, medicine is released into the body little by little. But some abusers bypass the time-release

Myths About Prescription Drugs—and the Facts!

Myth: Prescription drugs come from a doctor and a pharmacy, so they must be safe.

Fact: If they are not taken responsibly and exactly as the doctor intended, prescription medicines can land you in the emergency room—or the morgue.

Myth: It's OK for me to use a prescription from the medicine cabinet that was prescribed for someone in my family.

Fact: Just because a medication has been prescribed doesn't mean it is appropriate and safe for everyone. Many prescribed medicines are custom fit to the patient's medical history, weight, allergies, etc. Bottom line: *Never take anyone else's prescriptions. It's not only unsafe—it's illegal.*

Wake-up Call: Steroid Abuse

If you follow the news, you've been hearing a lot lately about anabolic steroids in pro sports. These drugs are sometimes prescribed to treat body wasting in patients with AIDS and other diseases that result in loss of lean muscle mass. They are also prescribed to boys or men to treat conditions that occur when the body produces abnormally low amounts of testosterone, such as delayed puberty and some types of impotence.

But recently, some professional, amateur, and Olympic athletes

have been accused of abusing steroids to improve their performance—to cheat, in other words.

Why do some athletes take steroids? The drugs build muscle and bone mass—mainly by stimulating the muscle and bone cells to make new protein. Athletes who abuse steroids can train longer and build new muscle more quickly.

But when used for this reason, steroids are dangerous. Steroids can disrupt the normal production of hormones in the body and can



cause side effects ranging from stunted growth in young people, to facial hair in women or breast growth in males, to premature heart attacks, cancer, and serious psychiatric problems.

system by crushing or chewing the pills. That way, they get all of the drug in their system at one time, and the body responds very differently. It's like taking several doses of medicine all at once.

The risk of overdose then becomes huge. And an overdose of OxyContin can kill you.

To make matters worse, young people may abuse OxyContin at parties where alcohol is also on hand. This is a deadly situation because both OxyContin and alcohol can depress respiration (in other words, slow down a person's breathing or stop it altogether).

When the two substances are taken together, the risk of serious harm or death becomes much greater than with either taken alone.

Sadly, last year this combination claimed the life of a 20-year-old student at the University of California, San Diego. Daniel died in his dorm room after he took OxyContin to get high, then drank alcohol at a party. Daniel had a 3.2 grade-point average. He wanted to be a lawyer. Prescription drug abuse

killed that dream.

What about Vicodin, Ritalin, and Adderall? Can they kill you? Yes, definitely—but not nearly as easily as OxyContin can. Can they land you in the hospital? Yes. But the biggest known risk—and it is a real and serious risk—is addiction.

HEADS UP: LIFE OF ADDICTION?

When a person becomes addicted to a drug, his or her brain is changed. Normally, the brain's pleasure center releases the neurotransmitter dopamine in response to positive experiences like a walk on the

and diminish in importance. All that matters is finding and taking the drug that changed their brain to begin with.

"That's a terrible life sentence," says Dr. Compton. "It means your life gets narrower instead of bigger."

HEADS UP: USE AS DIRECTED

A recent NIDA-sponsored survey found that one in four teens with legitimate prescriptions said other kids had asked them for pills.

Students need to know that abusing prescription drugs is no different from abusing illegal drugs. If you wind up addicted to a

painkiller or hospitalized because you've stopped breathing, it makes no difference whether the drugs that got you there were picked up from a legitimate pharmacy or bought from a drug dealer.

Now that you have the facts about prescription drug abuse, share them with your friends and family. Everyone needs to understand that abusing prescription drugs is a prescription for disaster.

For help with a drug problem or to locate treatment centers, go to www.findtreatment.samhsa.gov, or call the national hotline at 1-800-662-HELP.

When a person becomes addicted to a drug, his or her brain is changed.



beach, a chat with friends, or victory in a big game. When a person becomes addicted to a drug, all those things lose their impact