Prescription for Disaster How Teens Abuse Medicine



"As America faces an explosive prescription drug abuse problem, parents need to be aware that their family medicine cabinet and the Internet have become today's back alley drug dealers. Teens need to understand that abusing prescription drugs is every bit as dangerous as abusing 'street' drugs. With this booklet, DEA shows the good news for families: That there are simple ways to limit access to these drugs and to keep our teens drug-free."

Michele Leonhart, Administrator, Drug Enforcement Administration



# Prescription for Disaster

# How Teens Abuse Medicine

#### A DEA Resource for Parents

This publication is designed to be a guide to help the reader understand and identify the current medications that teens are abusing. It is not all-inclusive; every dosage unit or generic form of the medications cannot be listed due to space constraints and the frequent introduction of new drugs. For more information, go to www.dea.gov or consult the additional resources at the back of this book.

Millions of teens are using very powerful pain medications to get high. Some of these are the same medications doctors use to treat pain in terminal cancer patients.

For many teens, using prescription or over-the-counter medications is their first introduction to getting high. Until recently, teens began their drug use with marijuana.

USA Today, "Teens use Internet to Share Drug Stories" by Donna Leinwand, June 19, 2007

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# **Prescription Drug Abuse**

Although most people take prescription medications responsibly, an estimated 52 million people have used prescription drugs for non-medical reasons at least once in their lifetime. (NIDA, Nov. 2011)

Prescription medication, such as those used to treat pain, attention deficit disorders, and anxiety, are being abused at a rate second only to marijuana among illicit drug users. (NIDA, Nov. 2011)

In 2010, approximately 7 million people (2.7% of the U.S. population) were current users of psychotherapeutic drugs taken non-medically.

- 5.1 million people used pain relievers
- 2.2 million people used tranquilizers
- 1.1 million people used stimulants
- .4 million people used sedatives (NSDUH 2010, Sept. 2011)

According to the 2010 National Survey on Drugs Use and Health, an estimated 2.4 million Americans used prescription drugs non-medically for the first time in the past year. This averages about 6,600 initiates per day, of which one-third are 12 to 17 years of age.

In 2010, about one-fourth (26%) of first time drug users began with non-medical use of prescription drugs. (NSDUH 2010)

In 2010, one in every 20 people in the United States age 12 and older – a total of 12 million people – reported using prescription painkillers non-medically. (NSDUH, CDC Press Release, Nov. 2011)

Almost 5,500 people start to misuse prescription painkillers every day. (Pamela Hyde, SAMHSA Administrator, CDC Press Release, Nov. 2011)

Over half a million emergency department visits in 2010 were due to people misusing or abusing prescription painkillers. (Highlights of the 2010 DAWN Findings on Drug-Related Emergency Department Visits, July 2012)

Non-medical use of prescription painkillers costs health insurers up to \$72.5 billion annually in direct health care costs.

## How Teens Abuse Medicine

Despite recent reductions in several areas of teen drug use, teens are continuing to use prescription and over-the-counter medications to get high. It's a serious problem that affects all of us.

Many parents don't know enough about this problem, and many teens don't understand the dangers of using the medications to get high.

The latest attitude surveys tell us that:

**Nearly one in five teens** (17%) say they have used prescription medicine at least once in their lifetime to get high.

More than one in ten teens (12%) report lifetime use of over-the-counter cough or cold medicines to get high.

One out of ten teens (10%) report using pain medications (OxyContin® and Vicodin®) to get high in the past year: six percent say they've used pain medications in the past 30 days to get high.

Emergency room visits, as a result of prescription medications, increased by 45% between 2004 and 2010 among children under the age of 20. (Highlights of the 2010 DAWN Findings, July 2012)

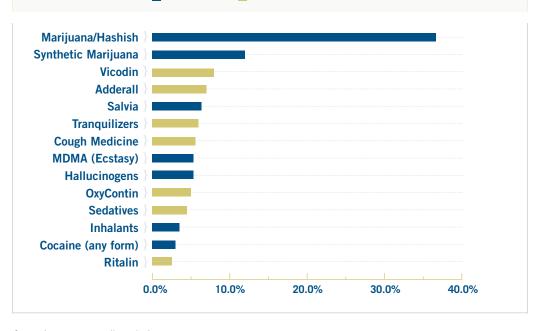
**Nearly three in five teens** (58%) now say that they strongly disapprove of their peers using prescription medication to get high. This is up from 52% in 2010.

Source: Partnership for a Drug Free America, 2011 Partnership Attitude Tracking Survey (PATS)

## How Teens Abuse Medicine

Prescription and Over-the-Counter Medications Account for Most of the Commonly Abused Drugs: Past Year Use Among High School Seniors





Recent drug surveys also provide evidence that the problem of intentional medicine abuse has grown. Six of the top ten drugs abused by 12th graders are prescription and over-the-counter medications.

After marijuana, prescription and over-the-counter medications account for most of the top illicit drugs abused by 12th graders in the past year.

In 2011, **22% of 12th graders** indicated misuse of a prescription drug without medical supervision in their lifetime; and 15% over the past year.

**One in 12 high school seniors** reported past year non-medical use of the prescription pain reliever, Vicodin<sup>®</sup>.

One in 20 high school seniors report abusing OxyContin®

Additionally, recent drug surveys found that teens generally get their prescription drugs from friends and family; **70% of 12th graders** said they were given the drugs by a friend or relative.

Source: 2011 Monitoring the Future

## How Teens Abuse Medicine

In 2010, **three percent of youth 12 to 17** years of age were current medical users of psychotherapeutic drugs.

Of 12 to 13 year olds, two percent were current medical users of psychotherapeutic drugs.

Of 14 to 15 year olds, three percent were current medical users of psychotherapeutic drugs.

Of 16 to 17 year olds, almost four percent were current medical users of psychotherapeutic drugs.

# Using prescription drugs to get high is not a problem limited to young teens.

The use of these drugs by college students has increased dramatically within the past decade. According to a 2007 report by the National Center for Addiction and Substance Abuse at Columbia University (CASA), "Wasting the Best and the Brightest: Substance Abuse at America's Colleges and Universities," between 1993 and 2005 the proportion of students abusing prescription drugs increased:

343% for opioids like Percocet®, Vicodin®, and OxyContin®

93% for abuse of stimulants like Ritalin® and Adderall®

450% for tranquilizers like Xanax® and Valium®

225% for sedatives like Nembutal® and Seconal®

In 2010, the abuse of prescription medications was highest among young adults aged 18–25 years of age, with 5.9% reporting non-medical use within the past month. (NSDUH 2010)

The experts give some reasons why teens might turn to prescription drugs to get high:

To party,

Self-medication,

Escape and boredom,

Preservation of friendships, romantic relationships, and family life,

Competing for college admission, including competition for advance placement and honors courses in high school,

To balance between schoolwork, grades, and extracurricular activities, like sports and clubs,

Academic stress in college, and

The desire to have the "ideal" physical appearance.

# **Prescription Drug Basics**

A "prescription drug" is a drug that is available only with authorization from a healthcare practitioner to a pharmacist. An "over-the-counter" medication is a drug that is sold without a prescription.

Both kinds of drugs come with explicit instructions on how to use the drug, and these instructions should be followed to avoid adverse consequences. The Food and Drug Administration (FDA) approves all drugs on the market and provides sound advice to consumers.

Source: www.fda.gov

## → Over-The-Counter (отс)

OTC drug labels contain information about ingredients, uses, warnings, and directions that are important to read and understand. The label also includes important information about possible drug interactions. Further, drug labels may change as new information becomes known. That's why it's especially important to read the label every time you use a drug.

## → Drug-Drug Interactions

Drug-drug interactions occur when two or more drugs react with each other. This may cause you to experience an unexpected side effect. For example, mixing a drug you take to help you sleep (a sedative) and a drug you take for allergies (an antihistamine) can slow your reactions and make driving a car or operating machinery dangerous.

## → Drug-Condition Interactions

Drug-condition interactions may occur when an existing medical condition makes certain drugs potentially harmful. For example, if you have high blood pressure, you could experience an unwanted reaction if you take a nasal decongestant.

It is also important to recognize that everyone's metabolism and brain chemistry are different, and the same drugs can have very different effects on individuals. Experimenting with medicine to get high is extremely dangerous, and mixing drugs to get high can be deadly.

## At What Costs?

→ Drug poisonings, emergency room visits, drugged driving

"Overdoses involving prescription pain killers are at epidemic levels and now kill more Americans than heroin and cocaine combined."

CDC Director Thomas Frieden, MD, MPH, Nov. 1, 2011

#### **Drug Poisonings**

In 2009, the 39,147 drug-induced deaths exceeded the number of deaths from motor vehicle crashes (36,216).

The death toll from overdoses of prescription painkillers has more than tripled in the past decade. More than 40 people die every day from overdoses of narcotic pain relievers like hydrocodone (Vicodin®), methadone, oxycodone (OxyContin®), and oxymorphone (Oxpana®). (CDC Vital Signs Press Release, Nov. 2011)

There was a 91% increase in drug poisoning deaths among teens aged 15-19 between 2000 (30%) and 2009 (57%) due to prescription drug overdose. (CDC Press Release, April 16, 2012)

Drug induced deaths now outnumber gunshot deaths in America. (ONDCP Strategy)

Mark Bauer's father, Phil Bauer, writes: "A few years ago, my life was changed forever. On May 27, 2004, my youngest son, Mark, was a week away from graduating from high school. Mark's day went something like this: He woke up and went to school and played in the student/staff basketball game. When he came home from school he lifted weights and ate dinner. He then went to work and returned home at about 9:30 that night. When he got home, Mark talked to us about the game that day, and we knew what a special day it had been for him.



"That was the last conversation we ever had with Mark.... He never woke up the next day. On Friday, May 28, 2004, his mom and I found his lifeless body in bed. Mark died from an accidental overdose of prescription drugs, including OxyContin® and morphine."

#### **Emergency Room Visits**

Emergency room visits involving misuse or abuse of pharmaceuticals increased 115% between 2004 and 2010, from 626,472 visits to 1,345,645 visits. This compares to about 1,171,024 emergency room visits involving illicit drugs in 2010. During this period, emergency room visits for misuse and abuse of pharmaceuticals for those 20 or younger increased 45%, from 116,176 to 168,409 people.

Of the 2.3 million emergency department visits involving drug misuse or abuse in 2010, 1.3 million visits involved pharmaceuticals.

People 20 years of age or younger accounted for 18.8% of all drug-related emergency department visits in 2010. About half of these visits involved drug misuse or abuse.

About half of emergency department visits (659,969) for misuse or abuse of pharmaceuticals involved pain relievers. Hydrocodone products were responsible for 115,739 visits and oxycodone products for 182,748 visits.

> Source: The DAWN Report: Highlights of the 2010 DAWN Findings on Drug-Related Emergency Department Visits, SAMHSA, July 2012

## **Drugged Driving**

Drugged driving is a public health threat and one that we all need to be concerned about, especially where our children are involved. Driving under the influence of any drugs that act on the brain impairs one's motor skills, reaction time, and judgment. This puts not only the driver at risk but also passengers and others who share the road. (NIDA, Drugged Driving)

Teens are the least experienced drivers, which increases their risk of being involved in an accident. When you combine the lack of experience with substances that impair cognitive and motor skills, you increase the chances of tragic results. Vehicle accidents are one of the leading causes of teen deaths.

An analysis of the National Highway Traffic Safety Administration's Fatality Reporting System revealed that almost one in four (23%) of fatally injured drivers who tested positive for drugs were under the age of 25. (ONDCP Press Release, Oct. 2011)

One in three (33%) motor vehicle accidents with known drug test results tested positive for drugs in 2009. (ONDCP Press Release, 2010)

Involvement of drugs in fatal crashes has increased by five percent over the past five years, even though the overall number of drivers killed by motor vehicle crashes has declined. (ONDCP Press Release, Nov. 2010)

## Street Drugs vs. Pharmaceuticals

and OTC medicine

"Street drugs" is a term that refers to drugs that are commonly known as illegal drugs—cocaine, heroin, methamphetamine, marijuana, and others. Many teens mistakenly believe that pharmaceuticals (prescription drugs) are safer than "street drugs" for a variety of reasons:

- → These are medicines.
- They can be obtained from doctors, pharmacies, friends or family members.
- → It's not necessary to buy them from traditional "drug dealers."
- Information on the effects of these drugs is widely available in package inserts, advertisements, and on the Internet.

Parents and teens need to understand that when over-the-counter and prescribed medications are used to get high, they are every bit as dangerous as "street drugs." And when prescribed drugs are used by or distributed to individuals without prescriptions, they are every bit as illegal.

#### **HOW DOES IT WORK?**

Dr. Nora Volkow, Director of the National Institute on Drug Abuse (NIDA), explains how the legitimately prescribed drug Ritalin® (methylphenidate), when abused, can act in the same way as cocaine:

"For example, the stimulant methylphenidate (Ritalin®) has much in common with cocaine: they bind to similar sites in the brain, and they both increase the brain chemical dopamine through the same molecular targets. And when both drugs are administered intravenously, they cause a rapid and large increase in dopamine, which a person experiences as a rush or high. However, when methylphenidate is taken orally, as prescribed, it elicits a gradual and sustained increase in dopamine, which is not perceived as euphoria and instead produces the expected therapeutic effects seen in many patients."

Source: Testimony before the House Government Reform Committee, July 26, 2006

# Common Drugs of Abuse

Illegal drugs and legitimate medications are categorized according to their medical use, potential for abuse, and their potential for creating physical or psychological dependence.

Dependence means that the body adjusts to allow for them and can't function normally without them. When drugs are used in a manner that is inconsistent with the medical or social patterns of a culture, it is called drug abuse. Addiction is defined as compulsive, drug-seeking behavior where acquiring and using a drug becomes the most important activity in a user's life.

Some pharmaceuticals have the same potential for abuse, dependence, and addiction as heroin. They share many of the same properties and effects as "illegal drugs." It is important for parents to know and understand that using medications outside the scope of sound medical practice is drug abuse.

## → Categories of Drugs

There are five classes of drugs of abuse: Narcotics, Stimulants, Depressants, Hallucinogens, and Anabolic Steroids.

Within each class are substances that occur naturally and those created in laboratories (synthetics). When they are used appropriately in the practice of medicine, these substances can have very beneficial properties. When used for non-medical purposes, including the desire to get high, these drugs can cause great damage and even death.

## → Dangerous and Addictive

Drugs are placed into five different schedules by DEA according to their medical use and potential for abuse and dependence. Schedule I drugs have no accepted medical use and have not been shown to be safe for people to use. Drugs in Schedules II-V have medical uses and different potentials for abuse.

Within the five classes, individual drugs are ranked according to their abuse potential. When controlled substances are prescribed by a doctor and used according to directions, they can be safe and effective.

"Street drugs" and legitimate medications often have the exact same addictive properties. It is important to remember that people can react to drugs differently, and even drugs that are considered to have a low abuse potential can be addictive and possibly fatal to some users.

# narcotics

## → substances that dull the senses and relieve pain

HEROIN, MORPHINE, METHADONE, AND OTHER OPIOIDS

Narcotic Medicines

Used to treat mild to severe pain (anything from dental surgery to terminal cancer). Also used to suppress coughs, treat diarrhea, induce anesthesia, and treat heroin addiction.

Forms

Liquid, tablet, capsule, skinpatch, powder, syrup, lollipop, diskette, suppository, and injectable forms.

Adverse Effects Euphoria, drowsiness, slowed breathing. Skin, lung, and brain abscesses; endocarditis (inflammation of the lining of the heart); hepatitis; and AIDS are commonly found among narcotics abusers who inject drugs or engage in other risky behaviors.

OE

Slow and shallow breathing, clammy skin, confusion, convulsions, coma, possible death.

Narcotic medications available only with a prescription:

(Note: Lists are not all-inclusive.)

## { codeine cough syrup }

ROBITUSSIN A-C SYRUP® | MYTUSSIN AC COUGH SYRUP®

Cough syrups sometimes include other ingredients such as antihistamines (promethazine).

slang names: Lean, Purple Drank, Sippin Syrup

## { fentanyl }

DURAGESIC PATCH® | ACTIQ LOZENGE®

Fentanyl is a very powerful painkiller, 80 times more powerful than morphine. It is used in combination with other drugs to treat extreme pain. The biological effects of fentanyl are indistinguishable from those of heroin, with the exception that some forms of fentanyl may be hundreds of times more potent. Encounters with fentanyl that are not medically supervised are frequently fatal. This narcotic is most commonly used by wearing or chewing a patch or sucking on a lozenge, but like heroin, it may also be smoked or snorted. A new effervescent tablet, Fentora®, is now available to place between the cheek and gum.

slang names: Tango and Cash, Perc-a-Pop (Actiq®)

## { hydrocodone }

VICODIN® | LORTAB® | LORECET® | HYDROCODONE WITH ACETAMINOPHEN

Hydrocodone products are used for pain relief and cough suppression and produce effects comparable to oral morphine. Hydrocodone products are the most frequently prescribed opioids in the United States, and they are also the most abused narcotic in the United States.

# narcotics

#### { methadone }

DOLOPHINE® | METHADOSE®

Methadone has been used for years to treat heroin addicts. It is also used as a powerful painkiller. From 1999 to 2004, the Centers for Disease Control and Prevention (CDC) reported that the rate of methadone deaths in younger individuals (15-24) increased 11-fold. For people who are not regular users of methadone, the drug can be dangerous and must be used with a doctor's supervision.

## { oxycodone }

OXYCONTIN® | OXYCODONE WITH ACETAMINOPHEN | PERCODAN® | PERCOCET®

Oxycodone products are very powerful painkillers. Oxycodone is widely used in clinical medicine. It is marketed either alone as controlled release (OxyContin®) and immediate release formulations (OxyIR®, OxyFast®), or in combination with other non-narcotic analgesics such as aspirin (Percodan®) or acetaminophen (Percocet®). Oxycodone's behavioral effects can last up to five hours. The drug is most often administered orally. The controlled-release product, OxyContin®, has a longer duration of action (8-12 hours).

→ slang names: Oxycotton, Percs, OC, OX, Oxy, Hillbilly Heroin, Kicker.

#### Other abused narcotics

```
{ meperidine } DEMEROL®
{ hydromorphone } DILAUDID®
{ oxycodone with acetaminophen } ENDOCET®
{ codeine } FIORINAL®
{ morphine } ORAMORPH SR®
{ oxycodone with acetaminophen } ROXICET®
{ pentazocine } TALWIN®
{ cough syrup with hydrocodone } TUSSIONEX®
```

#### How are narcotics abused?

Oral (swallowing pills or liquid). In the case of fentanyl, Actiq® is sucked; fentanyl patches are worn on the skin, and abusers sometimes scrape off the fentanyl from the patch or chew the patch to get high. Hydrocodone and oxycodone pills are most frequently taken orally but can be crushed and snorted. Crushing the pills negates the time-release features of some medications, so the user experiences the full power and effect all at once. Cough syrups can be drunk or mixed in sodas or sports drinks.

#### Where would a teen obtain narcotics?

Friends, relatives, medicine cabinets, pharmacies, nursing homes, hospitals, hospices, doctors, Internet. They can also be purchased on the street.

# narcotics



## { GLOSSARY }

With repeated use of narcotics, tolerance and dependence develop.

Tolerance is a state in which a drug user becomes less sensitive to the drug's effects after repeated use. The user must take more of a drug and take it more often to achieve the same painkilling, sedating, or euphoric effect. Tolerant users can consume doses far in excess of the dose they started with or that an average person could safely tolerate.

Physical Dependence is a state that develops as a result of repeated use of a drug. A dependent person must consume a drug in order to prevent a withdrawal syndrome. This syndrome can range from mild to severely unpleasant and lifethreatening depending on the drug and pattern of use.

Psychological Dependence is marked by drug craving, an intense desire to take the drug, which can focus all of the person's thoughts and desires on obtaining and using the drug. While physical dependence will go away in days or weeks after drug use, psychological dependence can continue for years.

# stimulants

# → substances that stimulate bodily activity and reverse fatigue ("uppers")





COCAINE, CRACK, METHAMPHETAMINE, AMPHETAMINES, KHAT

#### Stimulant Medicines

Many stimulants have legitimate medical use and are scheduled by the DEA. Caffeine and nicotine are stimulants that are not controlled. Stimulant medicines are used to treat obesity, attention deficit and hyperactivity disorders (ADHD/ADD), and narcolepsy. Pseudoephedrine, found in allergy and cold medications to relieve sinus congestion and pressure, is also a stimulant chemical. Cocaine and methamphetamine have a currently accepted medical use in treatment. Crack cocaine and khat have no legitimate medical uses.

#### Forms

Powder, "rocks," "crystal," pills, and smokable and injectable forms.

#### Adverse **Effects**

Alertness, excitation, euphoria, increase in blood pressure and pulse rates, insomnia, loss of appetite. Abuse is often associated with a pattern of binge use-sporadically consuming large doses of stimulants over a short period of time. Heavy users may inject themselves every few hours, continuing until they have depleted their drug supply or reached a point of delirium, psychosis, and physical exhaustion. During this period of heavy use, all other interests become secondary to recreating the initial euphoric rush. Because accidental death is partially due to the effects of stimulants on the body's cardiovascular and temperature-regulating systems, physical exertion increases the hazards of stimulant use.

#### OD

Agitation, increased body temperature, hallucinations, convulsions, possible death.

#### Stimulant medications available only with a prescription:

(Note: Methamphetamine and cocaine have limited legitimate medical uses. Lists are not all-inclusive.)

```
amphetamines }
ADDERALL® | DEXEDRINE® | DESOXYN® (methamphetamine)
Amphetamines are used to treat ADHD/ADD.
slang names: Ice, Crank, Speed, Bennies, Black Beauties, Uppers
methylphenidate and dexmethylphenidate
CONCERTA® | RITALIN® | FOCALIN® | FOCALIN XR®
These drugs are used to treat ADHD/ADD.
slang names: Pellets, R-Ball, Skippy, Vitamin R, Illys
```

#### → Other abused stimulants

```
phentermine ADIPEX® | IONAMIN®
benzphetamine > DIDREX®
phendimetrazine > PRELU-2®
```

These drugs are used in weight control.

# stimulants

#### How are stimulants abused?

Oral (swallowing pill forms of stimulants), smoked (crack, methamphetamine), crushed and snorted, injected.

## Where would a teen obtain stimulants?

Friends, relatives, doctors, pharmacies, schools, medicine cabinets, Internet, street dealers.



# depressants → substances that induce sleep, relieve stress, and reduce anxiety ("downers")



ALCOHOL, VALIUM®, XANAX®, TRANQUILIZERS, SLEEPING PILLS, ROHYPNOL®, GHB

#### Depressant Medicines

Used to treat anxiety, insomnia, seizure disorders, and narcolepsy. Also used to relax muscles and to sedate.

#### **Forms**

Mainly pills and liquids. GHB is often found in liquid form.

#### Adverse **Effects**

Slurred speech, disorientation, drunken behavior without the odor of alcohol, impaired memory, vivid and disturbing dreams, amnesia.

#### OD

Shallow respiration, clammy skin, dilated pupils, weak and rapid pulse, coma, possible death.

#### Depressant medications available only with a prescription:

(Note: Lists are not all-inclusive)

## benzodiazepines }

```
VALIUM® | XANAX® | HALCION® | ATIVAN® | KLONOPIN®
```

Benzodiazapines are used as sedatives, hypnotics, anti-convulsants, muscle relaxants, and to treat anxiety. Many times they are abused in combination with other drugs or to counteract the effects of other drugs.

```
slang names: Downers, Benzos
```

## sleeping pills }

```
AMBIEN® | SONATA®
```

These depressants are used to treat insomnia.

## → Other abused depressants

```
choloral hydrate > SOMNATE®
barbiturates, such as amo-, seco- and pentobarbital
GHB } XYREM®
carisoprodol } SOMA®
ketamine } KETALAR®, KETACET®
```

Please note that even though ketamine is a depressant, it is abused by kids for its psychedelic effects.

# depressants

#### How are depressants abused?

Oral (swallowing pills).

## Where would a teen obtain depressants?

Friends, relatives, medicine cabinet, doctors, hospitals, Internet, street dealers.

PARENT'S story

Jason Surks was 19 and in his second year of college, studying to be a pharmacist, when he died of an overdose of depressant pills. After his death, his parents discovered that he had been ordering controlled substances from an Internet pharmacy in Mexico. His mother, Linda, writes: "I thought to myself that this couldn't be possible. I work in prevention, and Jason knew the dangers—we talked about it often. I think back to the last several months of my son's life, trying to identify any signs I might have missed.

"I remember that during his first year in college, I discovered an unlabeled pill bottle in his room. I took the pills to my computer and identified them as a generic form of Ritalin. When I confronted Jason, he told me he got them from a friend who'd been prescribed the medication. He wanted to see if they would help him with his problem focusing in school. I took that opportunity to educate him on the dangers of abusing prescription drugs and told him that if he really thought he had ADD (Attention Deficit Disorder), we should pursue this with a clinician. He promised he would stop using the drug. But as a pre-pharmacy major, maybe he felt he knew more about these substances than he actually did and had a 'professional curiosity' about them."



Source: As recounted on www.drugfree.org/memorials.

# anabolic steroids

drugs used to enhance performance, increase muscle mass, and improve appearance



TESTOSTERONE

#### Anabolic Steroids

Synthetically produced variants of the naturally occurring male hormone testosterone are used to promote muscle growth, enhance performance, or improve physical appearance. Prescribed by doctors for loss of testicle function, breast cancer, low red blood cell count, hypogonadism, delayed puberty, and debilitated states resulting from surgery or sickness (cancer and AIDS). Administered to animals by veterinarians to promote feed efficiency, improve weight gain, and treat anemia and tissue breakdown during illness or trauma.

#### **Forms**

Tablets, sublingual tablets, liquid drops, gels, transdermal patch, subdermal implant pellets, water-based injectable solutions, oil-based injectable solutions.

#### Adverse Effects

**Males**: In adults, shrinking of testicles, reduced sperm count, infertility, development of breasts, acne, fluid retention, increased risk of prostate cancer. In boys, early sexual development, acne, and stunted growth.

**Females:** Acne, oily skin, deepening of voice, increased body and facial hair, menstrual irregularities, fluid retention. Also, in girls, stunted growth.

**Both:** Harm to heart, liver dysfunction, liver tumors, liver cancer, increased blood pressure, increased LDL cholesterol, enlargement of the heart, heart attacks, stroke, hepatitis, HIV, anger, hostility, male pattern baldness.

**Upon discontinuation:** Prolonged periods of depression, restlessness, insomnia, loss of appetite, decreased sex drive, headaches, irritability.

#### Steroids available only with a prescription:

(Note: Lists are not all-inclusive)

#### { anabolic steroids }

ANADROL® | ANDRO® | DECA-DURABOLIN® | DEPO-TESTOSTERONE® | DIANOBO® DURABOLIN® | EQUIPOISE® | OXANDRIN® | THG® | WINSTROL®

There are over 100 different types of anabolic steroids.

slang names: Arnolds, Gym Candy, Pumpers, Roids, Stackers, Weight Trainers, Gear Juice

#### How are steroids abused?

Steroids are taken orally, injected, taken under the tongue, or applied with topical creams that allow steroids to enter the bloodstream. There are different regimens for taking steroids to increase body mass; they are widely published and available on the Internet.

#### Where would a teen obtain steroids?

Friends, gyms, school, teammates, coaches, trainers, Internet.

# anabolic steroids

#### THREE PARENTS' STORIES

These three young men were athletes who sought ways to enhance their performance. Each of them turned to steroids, and each of them suffered the depression that comes when steroids are stopped.







{ DEPO-TESTOSTERONE® }

#### TAYLOR HOOTON

Died at age 17. It took a while for his parents to connect Taylor's recent weight and muscle increases with his uncharacteristic mood swings and violent, angry behavior. He'd been using a cocktail of steroids and other hormones to bulk up, and the drugs were wreaking havoc on his body and emotions.... Taylor went to his room and hanged himself. It was only after his death that the whole picture came into focus.

#### ROB GARIBALDI

Died at age 24. When supplements and workouts did not produce the desired results, Rob turned to steroids. According to Rob, he first obtained steroids from his trainer at the University of Southern California, whose name Rob never divulged. With a wink and a nod, they kept his use a secret. The desire and need to look bigger, be stronger, and avoid losing muscle gains already achieved prompted him to continue steroid use. Over time, Rob gained 50 pounds and became the powerhouse the steroids promised.... Drinking alcohol or taking any other drug, including prescription medication, compounds the adverse effects of steroids. The most dangerous effect of steroids is suicide. His parents said: "We know, without a doubt, steroids killed our son."

#### EFRAIN MARRERO

Died at age 19. Efrain had been secretly using steroids to prepare for football season. He had been a standout offensive lineman in high school and was now playing at the junior college level. However, he decided he wanted to move from the offensive line to more of a "glory" position at middle linebacker. Any football fan seeing Efrain would recognize the significant physical transformation it would take for him to make that happen. As his parents tell it, "Efrain began using steroids, under the impression that it would make him bigger, stronger, faster, and earn him the title and recognition he so much desired." Unaware of the serious side effects of steroids, Efrain began to experience severe paranoia and deep depression. Frightened, he turned to his parents for help, who took him to the family doctor. The doctor assured them that the steroids would leave Efrain's system soon and that no further action was required. No one knew that quitting steroids cold turkey was unwise; the physician failed to provide an appropriate course of action. Three weeks later, Efrain shot himself in the head.

# **OVER-THE-COUNTER** -> medications with DXM (hallucinogen)

ROBITUSSIN®, CORICIDIN HBP®, NYQUIL®

OTC Medicines with DXM There are well over 100 medicines that contain dextromethorphan (DXM), either as the only active ingredient or in combination with other active ingredients.

These medications (store brands as well as brand names) can be purchased over-the-counter in pharmacies, some grocery stores, and some other outlets.

Forms

Liquid, gelcaps, pills, powder.

Adverse **Effects** 

High doses produce confusion, dizziness, double or blurred vision, slurred speech, loss of physical coordination, abdominal pain, nausea and vomiting, rapid heart beat, drowsiness, numbness of fingers and toes, and disorientation. DXM abusers describe different "plateaus" ranging from mild distortions of color and sound to visual hallucinations, "out-of-body" dissociative sensations, and loss of motor control. (Note: Many OTC products listing DXM as an active ingredient may also contain antihistamines, acetaminophen, or other substances, which have other side effects.)

OD

Unable to move, feel pain, or remember.

#### → How are OTCs with DXM abused?

Cough syrup is drunk either alone or in combination with soft drinks or alcohol. Gelcaps and pills are swallowed or crushed and put into drinks.

#### Where would a teen obtain OTCs with DXM?

Friends, relatives, pharmacies, grocery stores, medicine cabinets. DXM is also available over the Internet.

There is little in current teen culture—music, movies, fashion, and entertainment—that promotes or even mentions cough medicine abuse. The one exception is the Internet. A number of disreputable websites promote the abuse of cough medicines containing dextromethorphan. The information on these sites includes recommending how much to take, suggesting other drugs to combine with DXM, instructing how to extract DXM from cough medicines, promoting drug abuse in general, and even selling a powder form of dextromethorphan for snorting. You should be aware of what your teen is doing on the Internet, the websites he or she visits, and the amount of the time he or she is logged on.

TRENDS

Source: Partnership for a Drug-Free America,

"What Every Parent Needs to Know About Cough Medicine Abuse," www.drugfree.org.

#### RECOGNIZE THE SIGN

# The Internet, Drugs, and Teens

Many teens obtain illegal drugs, particularly prescription drugs, from their families, friends, or relatives. Since prescription drugs are widely available in the home, teens often do not have to go far to find ways to get high. Other teens turn to the Internet for prescription drugs, and the world wide web plays a big role in providing information and advice to teens.

HERE ARE A FEW THINGS TO CONSIDER

**Your teen probably knows a lot more** about the Internet than you do. It's never too late for parents to jump in and get acquainted with various websites, communication methods, networking systems, and the lingo teens use to fly under parents' radars.

#### { ASHLEY DUFFY }

Ashley Duffy, 18, knew her parents wouldn't tap into her online journal, so she wrote freely about her drug use. She says she used the Internet to contact her dealer and connect at parties with people who had drugs.

"Kids are really open about it. I see posts from other people describing a night on acid or whatever," says Duffy of West Chester, Pennsylvania, who underwent treatment and says she has been drug-free for 16 months. "I think they think their parents are clueless. And I guess they are."

Source: USA Today, "Teens use Internet to Share Drug Stories" by Donna Leinwand, June 19, 2007

**Some pharmacies operating on the Internet** are legal, and some are not. Some of the legal Internet pharmacies have voluntarily sought certification as "Verified Internet Pharmacy Practice Sites" (VIPPS®) from the National Association of Boards of Pharmacies. "Rogue" pharmacies pretend to be authentic by operating websites that advertise powerful drugs without a prescription or with the "approval" of a "doctor" working for the drug trafficking network. Teens have access to these websites and are exposed to offers of prescription drugs through email spam or pop-ups. Parents should be aware of which sites their teens are visiting and should examine credit card and bank statements that may indicate drug purchases.

# The Internet, Drugs, and Teens

#### RYAN HAIGHT

Francine Haight, Ryan's mother, shares her son's story with the world: "Ryan Thomas Haight overdosed and died on February 12, 2001, on narcotics (Vicodin®) that he had easily purchased on the Internet. A medical doctor on the Internet that he never saw prescribed them, an Internet pharmacy mailed them to his home. He was only 17 when he purchased them; he was only 18 when he died.

"It is too easy to meet and chat with strangers on Internet websites that glorify the use of drugs and who can easily talk our children into experimenting. These websites encourage our children to take drugs and share their highs, which is extremely dangerous and can lead to death," Francine Haight said.

Source: USA Today, "Teens use Internet to Share Drug Stories" by Donna Leinwand, June 19, 2007

Through the efforts of Francine Haight and members of Congress, with support of DEA, the Ryan Haight Online Pharmacy Consumer Protection Act of 2008 was enacted in October 2008. The act focuses on removal from the web and prosecution of unscrupulous or rogue internet pharmacies that exist to profit from the sale of controlled prescription medicines to buyers who have not seen a doctor and don't have a prescription from a registered physician. These pharmacies lack quality assurance and accountability, and their products pose a danger to buyers. This law makes it harder for cybercriminals to supply controlled substances and easier for DEA to prosecute them, and has resulted in the reduction of these online pharmacies.

**Teens sometimes brag about their drugging** and drinking on social networking sites such as Facebook, Twitter, and YouTube. Their behavior is out there in the open for future employers, college admissions offices, and others to see.

**The Internet is a tremendous resource** for teens to learn about the dangers of drug abuse. However, it is also full of information about how to use prescription drugs to get high—how much to use, what combinations work best, and what a user can expect to experience.

"Teens who spend more time on social networking sites are more likely to smoke, drink, and use drugs."

The survey of 12 to 17 year olds found that 70% spent time on social networking sites. Of the 70%, 40% have seen pictures on the sites of teens getting drunk, passed out, or using drugs. Half of these teens saw these pictures when they were 13 years of age or younger; 90% first saw them when they were 15 or younger.

# The Internet, Drugs, and Teens

Compared to teens that have never seen pictures of kids getting drunk, passed out, or using drugs on social networking sites, teens that have seen these images are much likelier to have friends and classmates who abuse illegal and prescription drugs.

Compared to teens that do not watch suggestive teen programming, teens that watch one or more shows are more than one- and-a-half times likelier to try to get prescription drugs without a prescription within a day or less.

Source: CASA, National Survey XVI

There are thousands of websites dedicated to the proposition that drug use is a rite of passage. So-called experts are more than happy to walk your kids through a drug experience.

# DON'T LET THEM.



## What You Can Do



"Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for a month. Although most of these pills were prescribed for medical purposes, many ended up in the hands of people who misused or abused them." (CDC Vital Signs, Nov. 2011)

We know that 70% of youth get their prescription drugs from family and friends, yet fewer parents report safeguarding prescription medications. "Anyone can access prescription medicines in the medicine cabinet" went from 50% in 2010 to 64% in 2011, meaning medications are available to anyone in their homes.

Slightly over two-thirds of parents of ninth through twelfth graders say they have ever had a discussion with their children about prescription medicine to get high. This is down from 82% in 2009.

Teens that report learning a lot from their parents about the risks of drugs are half as likely as those who learn nothing from their parents to have ever used prescription medicines to get high, but only 16% say they have discussed prescription medicine with their parents in the past year.

Take the time to talk to your children about prescription medications and over-the-counter drugs. Let them know that just because a doctor has prescribed it or you can buy it in the store does not mean it is safe for them to use. Just because it's not bought from a drug dealer does not mean it's safer. Just because you use it does not mean that it is safe for them to use.

Set an example. If your children see you taking drugs make sure they know what you are taking and why. Kids are smart, and they will know if you are abusing drugs. They watch and often emulate their parents.

Studies have also revealed that parents are increasingly misusing or abusing prescription medications themselves. Nearly one in five parents (18%) reports using a prescription medicine that was not prescribed to them three or more times in their lifetime. Fifteen percent of parents say they've used a prescription medicine not prescribed to them at least once in the past year, a 25% increase from 2010. More frequent past-year misuse of prescription medicines (three or more times) is up 50% from 2010 (5%) to 2011 (10%).

Source: PATS 2011



## Keeping prescription drugs out of the hands of teens is important, and there are things you can do:

Get information about prescription drug medications abused by teens. Learn what the medication is used for, what it looks like, its effects and interactions, and how teens are using it.

**Understand the power and danger of these medications.** Many drugs, particularly narcotic painkillers (opioid medications), are extremely powerful and are designed to relieve extreme pain. New medications are continually being approved for medical use, and it is important to be informed about the drugs' uses and properties.

Ask your teens what they are experiencing at school, at friends' homes, and at parties. Share with them what you have learned about the dangers of abusing prescription drugs.

Ask your doctor and pharmacist about the medications you are being prescribed. Ask about their side effects and potential addictiveness. Ask which category the drug is: Narcotic, stimulant, depressant, steroid?

**Review what is in your medicine cabinet.** Keep powerful medications in a safe place, not in the family medicine or kitchen cabinet, under lock if necessary. Count your pills when you receive them, and periodically check to see how many are in the container.

**Read the labels.** A drug label includes important information about a prescription drug. Many generic prescriptions are substituted for brand name drugs, and it may be easy to overlook the fact that the doctor has prescribed a very powerful narcotic painkiller, for example.

Different pharmaceutical companies produce many products that have the same basic ingredients. Usually, the generic name of the drug is printed in addition to the brand name, making it clearer that the customer is receiving ibuprofen/oxycodone HCL, for instance.

## What You Can Do



## Report Suspicious Internet Pharmacies

If you or your teen is aware of someone distributing prescription drugs or selling them on a suspicious internet pharmacy site, please call the DEA hotline. Callers will be able to make confidential reports by dialing toll free 1-877-RxAbuse (1-877-792-2873) around the clock, 365 days per year. The hotline is staffed by bilingual operators employed by DEA. This is a toll-free call from Mexico as well. During normal business hours, the caller will be connected directly to someone at the responsible DEA Domestic Field Office. After-hours tips will be forwarded by an internal, secure email system for further investigation and follow-up by DEA Special Agents and Diversion Investigators.

## Medicine Take-Back Programs

Medicine Take-Back programs are an excellent way to remove expired, unwanted, or unused medicines from your home, and reduces the chances that others may accidently or intentionally take the medicine.

In an effort to further address the abuse and misuse of unused controlled substances in households throughout the country, DEA, working with state and local law enforcement agencies, implemented the National Take-Back Initiative. The purpose of the initiative is to provide a venue for people who want to dispose of unwanted and unused prescription drugs, particularly controlled substances from our nation's medicine cabinets.

The first National Take-Back Day, September 25, 2010, citizens turned in over 121 tons of pills. Due to the success of this initiative, three more Take-Back days have been held. In total, over 774 tons of medication has now been removed from circulation.

In September, right after the first Take-Back Day Initiative, Congress passed the Secure and Responsible Drug Disposal Act of 2010, which amends the Controlled Substances Act to allow an "ultimate user" of controlled substance medications to dispose of them by delivering them to entities authorized by the Attorney General to accept them. This act also allows the Attorney General to authorize long term care facilities to dispose of their residents' controlled substances in certain instances. DEA is in the process of drafting regulations to implement the Act.

While a uniform system for prescription drug disposal is being finalized, DEA will continue to sponsor Take-Back opportunities in coordination with state and local organizations, as a service to our communities.

Additional information on the safe disposal of medications can be found on the U.S. Food and Drug Administration's website at www.fda.gov/Drugs/ResourcesForYou/Consumers.

# courtesy of **Wolters Kluwer Health—MediSpan** or the **Drug Enforcement Administratio**

# DEA plays a critical role in preventing prescription drug abuse.

DEA investigates physicians who sell prescriptions to drug dealers or abusers; pharmacists who falsify records and subsequently sell the drugs; employees who steal from inventory; executives who falsify orders to cover illicit sales; prescription forgers; and individuals who commit armed robbery of pharmacies and drug distributors.

DEA investigates unscrupulous Internet pharmacies. Rogue pharmacies exist to profit from the sale of controlled prescription medications to buyers who have not seen a doctor and don't have a prescription from a registered physician. The pharmacies lack quality assurance and accountability, and their products pose a danger to buyers.

DEA works with state, local, and foreign partners to interdict controlled substances and precursor chemicals.

DEA's authority to enforce laws and regulations comes from the Controlled Substances Act, Title 21 of the United States Code. DEA also provides objective and timely information to the public about the dangers of drugs through publications, websites and presentations.

#### ADDITIONAL RESOURCES

Community Anti-Drug Coalitions of America (CADCA), the Consumer Healthcare Products Association (CHPA), D.A.R.E., and the Partnership at DrugFree provide information on over-the-counter cough medicines at *www.StopMedicineAbuse.org*.

Drug Abuse Resistance Education (D.A.R.E.) provides an information kit and curricula on helping communities respond to Rx and OTC abuse at www.dare.com/home/featurs/RX.asp.

Drug Enforcement Administration (DEA) www.dea.gov

DEA's Office of Diversion Control www.deadiversion.usdoj.gov

DEA's teen website www.JustThinkTwice.com

DEA's parent website www.GetSmartAboutDrugs.com

Institute for Behavior and Health, Inc. provides information on drugged driving at www.stopdruggeddriving.org.

National Institute on Drug Abuse (NIDA) provides information on prescription and over-the-counter drugs at www.nida.nih.gov.

NIDA's teen website on prescription and over-the-counter drugs www.teens.drugabuse.gov/peerx/

National Institute of Mental Health's Library of Medicine www.medlineplus.gov

Spanish version www.medlineplus.gov/Spanish

Office of National Drug Control Policy (ONDCP) www.whitehouse.gov/ondcp/

ONDCP's teen website www.abovetheinfluence.com

ONDCP's parent website www.theantidrug.com

Partnership at Drug Free provides information for parents on teen prescription drug abuse at www.drugfree.org.

