# PROJECTALERT

### A SUPPLEMENTAL RESOURCE MANUAL

DXM

PAINKILLERS

SEDATIVES

**STEROIDS** 

**STIMULANTS** 

## • A SUPPLEMENTAL RESOURCE MANUAL

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### INTRODUCTION

Recent information about the non-medical use of prescription drugs, misuse of some over-the-counter drugs, and use of steroids and club drugs raises the need for new prevention education materials that will help teachers respond to questions about these substances.

This resource manual supplements Project ALERT core and booster lessons, which place emphasis on the drugs typically used first and most often by teens: tobacco, alcohol, and marijuana. It provides clinically accurate, accessible, up-to-date information about a growing trend of teen abuse in five specific classes of drugs: over-the-counter cough and cold medications, prescription painkillers, sedatives, steroids, and stimulants. The manual is intended as a resource for answers to students' questions and to inform yourself better about these substances.

For each class of drug, you will find a general description of how the drugs work; answers to questions about where teens get the drugs and how, where, and why they use them; and then, important information that highlights the drugs' most prominent harms. Key prevention messages specific to each drug class are also provided.

### How the Manual Came to Be

As Project ALERT is disseminated to school districts across the nation, the BEST Foundation for a Drug-Free Tomorrow, supported by ongoing funding from the Conrad N. Hilton Foundation, strives to keep the program up-to-date while closely adhering to Project ALERT's core theory and principles.

The development of this manual represents a continuation of RAND's twenty-year history of working with BEST and the Hilton Foundation to promote the development, implementation, and dissemination of Project ALERT. Because developing appropriate materials for Project ALERT teachers requires understanding how adolescents develop, as well as how drugs affect young people, RAND distilled the most important information culled from three panels of experts convened for the purpose of developing this manual. Panel members included physicians, a toxicologist, drug treatment and drug prevention specialists, undercover law enforcement officers, research communicators, and an ethnographer. A literature review was undertaken, user web sites and teen magazines were tapped for illustrative material, and focus groups conducted with 15- to 20-year olds provided further insights.

Seven fact sheets, in language appropriate for addressing specific drugs with students, have been prepared for you. Project ALERT's Core Lessons 9 and 11 and Booster Lesson 1 already touch on a number of these drugs. However, the expanded information from these fact sheets can be integrated into the lessons when students raise drug specific issues. In addition, an optional Home Learning Opportunity has been developed around the "hot" topic of prescription and over-the-counter drugs.

A Student Handout titled *What Teenagers Want to Know About Prescription Drugs and Cough Medicines* can be found at the back of this manual and is available for download on the Project ALERT web site at www.projectalert.best.org

### GENERAL CATEGORIES OF DRUGS THAT TEENS ARE USING

This manual groups the drugs that teens are abusing into five basic categories, based on how the drugs affect teens' minds and bodies.

- Over-the-counter cough and cold medicines (with DXM [dextromethorphan]): Contac, Coricidin, Pertussin, Robitussin, Sudafed, Triaminic, Vicks Formula 44
- Prescription painkillers or opiates, which create a euphoric state: OxyContin, Darvon, Vicodin, Percocet, Perdocan, and Tylenol with codeine
- Sedatives (downers): Xanax, GHB (gamma hydroxybutyrate), Valium, Klonopin, Ativan
- · Steroids: testosterone and testosterone equivalents
- Stimulants (uppers): methamphetamines, prescription stimulants (Adderall, Ritalin), ecstasy

Each of these categories is described below. However, the components of the stimulant category – methamphetamine, prescription stimulants, and ecstasy – are treated separately because they are sufficiently distinct and harmful to merit separate discussion. Club drugs – ecstasy, GHB, and methamphetamine – are really not a separate category of drugs. They get their name from the fact that they are frequently used in dance clubs. But they differ in terms of their effects on teens' brains and bodies. Ecstasy and methamphetamines are stimulants; GHB is a sedative. It is also used by bodybuilders to stimulate growth hormones. Each of these drugs is discussed in the category to which they belong.

### Over-the-counter cough and cold medicines (with DXM [dextromethorphan]).

Some cough and cold medicines contain ingredients that are used "recreationally," often by younger teens. The ingredient most commonly abused is DXM, a cough suppressant found in some over-the-counter cough and cold medications. Common examples are sold under such trademarked brand names as Contac, Coricidin, Pertussin, Robitussin, Sudafed, Triaminic, and Vicks Formula 44; there are also several generic brands. DXM is available as a liquid and in powder, lozenge, tablet, capsule, and gel cap form. It is generally safe when used at recommended doses.

But when abused, DXM is used at up to 30 times the recommended dose. Such doses can produce hallucinations and the sensation of having out-of-body experiences.

**Prescription painkillers (opiates).** Prescription painkillers are used medically to relieve pain. The most commonly prescribed, and the most commonly abused by teens, are OxyContin, Darvon, Vicodin, Percocet, Percodan, and Tylenol with codeine. Opium and heroin are other – and illegal – forms of opiates. Prescription painkillers work by changing how the brain perceives pain. They slow down the body's processes (breathing, heart rate, digestion) and produce a sense of well-being and a calm drowsiness. When not used as prescribed, these drugs can be extremely addicting and can result in accidental overdose and death.

**Sedatives and GHB**. Sedatives (downers) are central nervous system depressants – they slow normal brain function. They are used medically to treat anxiety, acute stress reactions, and panic attacks. They are also used as sleeping pills. Teens may use them to help them "come down" from other drugs. The most commonly prescribed, and the most commonly abused by teens, are the benzodiazepines, such as Xanax, Valium, Ativan, and Klonopin. These drugs induce drowsiness and intense relaxation and reduce social inhibitions. When not used as prescribed, these drugs can be addicting. GHB is another sedative, originally used as a surgical anesthetic, but which became illegal in 2000 because of a number of GHB-related deaths. Often called the "date rape" drug, GHB is also used by some bodybuilders to enhance growth hormones.

**Steroids (Anabolic-Androgenic).** Anabolic-androgenic steroids are man-made substances related to the male sex hormone testosterone. They are used medically to treat conditions such as delayed puberty or impotence, or to help rebuild tissues weakened by diseases such as AIDS. Steroids are used illegally to improve physical performance and body image. These drugs cause masculinization in females (facial hair, shrunken breasts) and breast enlargement and shrunken testicles in males. They can also stunt the height of growing adolescents. The oral drugs are more like to cause liver toxicity, but cancers, heart disease, and emotional problems can also occur. Some of the most commonly prescribed steroids are Anadrol, danazol, and Winstrol (taken in pill form); and boldenone, dihydrotestosterone, nortestosterone, and testosterone (injected).

#### Stimulants (uppers):

**Methamphetamine.** Methamphetamine is a strong physical and mental stimulant that speeds up brain and body activity. The relative ease with which it can be produced has contributed to widespread use. Methamphetamine is extremely addicting, and many teens say they start craving it after just one dose. Subsequent use doesn't produce the same powerful effect as initial use, so teenagers may use more and more, hoping to recapture the initial rush.

**Prescription stimulants (amphetamines).** Prescription stimulants (uppers) speed up brain and body activity, including heart rate and blood pressure. They are used medically to treat depression, obesity, and attention deficit hyperactivity disorder (ADHD). Because they keep users alert for many hours and increase

attention and energy, they have been used in small doses by the military, pilots, truck drivers, and other workers to keep functioning past normal limits. The prescription stimulants most commonly abused by teens are Dexedrine, Ritalin, and Adderall. These drugs are slightly different chemically, but they are all strong physical and mental stimulants.

**Ecstasy (MDMA).** Ecstasy is an illicit, illegally produced stimulant with mild hallucinogenic properties. It causes users to feel emotionally open, sociable, and uninhibited. The drug provides a surge of energy, lasting from three to five hours, during which heart rate and blood pressure are elevated and body temperature rises. Because ecstasy also suppresses thirst, it puts teens at risk for seriously overheating their bodies (hyperthermia) when they are using ecstasy in a dance club or at an all-night dance party. Body temperatures greater than 105° are a medical emergency and can cause severe heat-related illness (seizures, brain damage, and death).

### **REASONS NOT TO ABUSE DRUGS**

There are some general prevention messages that capture why abusing any drug is a bad idea. And, there are important reasons not to use each type of drug described in this manual.

What teens say: Some of the most compelling prevention messages come from teenagers themselves. Here are some of the reasons why they believe taking drugs isn't cool.

- You can permanently derail your future, wreck your family, and lose your friends.
- Your performance in sports and at school will suffer.
- You can get in trouble at home, at school, with the cops.
- You'll come to see yourself as a failure, and that's how others will see you too, including the people you care about the most.
- You can lose physical coordination and good judgment, making yourself vulnerable to serious accidents or sexual abuse.

**What science and experts say:** We supplemented the teens' views with findings from the scientific literature and the perspectives of our expert panelists. Basically, their assessment boils down to four sobering points.

- Some drugs can change the brain and body permanently after just one dose. In addition, in cases such as OxyContin, ecstasy, GHB, or methamphetamines, one dose can be lethal.
- You never know exactly what you are getting. Illegal drugs such as ecstasy can contain anything from methamphetamine to DXM. Legal prescription drugs are made in a controlled environment, but the appropriate dosage varies. Many

teens don't even know what the drugs are for, which ones are the most addicting, which dosages are really dangerous, or how a given dose interacts with other drugs (alcohol,Valium). Teens abusing prescription drugs don't read labels.

- Even if you know what you are getting, you don't know how your body and mind will react. Everyone reacts differently it's random chemistry.
- Teens think they can handle trying something just once, but the line between experimentation and addiction is very fuzzy. Many teens say they became hooked on drugs like methamphetamine and OxyContin after trying them just once.

### ECSTASY

### WHAT IS ECSTASY (MDMA)?

Ecstasy is an illicit, illegally produced stimulant with mild hallucinogenic properties. It is also known as E, X, XTC, Bean, or Roll. It elevates energy, heart rate, blood pressure, and body temperature, and it makes users feel emotionally open, sociable, and uninhibited. The experience of using ecstasy is called rolling, tripping, or wigging.

### WHY DO TEENAGERS USE ECSTASY?

To increase sensory enjoyment (such as listening to music), to enhance physical sensation, to provide energy for all night dance events, and to feel socially powerful.

### How do teens use ecstasy?

It is used almost always in pill form. Repeat users, chasing the initial high, frequently mix ecstasy with other substances such as alcohol.

### WHERE DO TEENS USE ECSTASY?

Ecstasy use is closely tied to the all-night dance club scene – hence its label as a "club drug." However, it is also used in small social settings, at home, and elsewhere.

### WHERE DO TEENS GET ECSTASY?

Because ecstasy is illegal in the United States and in most other countries, teenagers typically get it from dealers or friends. Most of the ecstasy in the United States is smuggled in from other countries.

### WHY IS IT DANGEROUS TO USE ECSTASY?

Because ecstasy both raises body temperature and suppresses thirst, it can cause overheating (hyperthermia). Even more dangerous, overheating destroys the body's temperature sensor. As a result, users' bodies don't recognize that they are overheated and do not activate cooling mechanisms such as sweating. The club environment where ecstasy is often used increases the risk of hyperthermia. A body temperature of greater than 105° is a medical emergency and can lead quickly to death.

Ecstasy users usually know they are supposed to drink a lot of liquid to prevent dehydration. However, they can drink too much, causing hyponatremia or overhydration, which dilutes the salt in the body to dangerous levels. Other harmful effects include seizures, cardiac rhythm abnormalities, liver damage, and psychiatric disorders. Major body systems can be affected, causing brain failure, paralysis, and death.

Another major risk is that ecstasy pills are notoriously impure and often contain chemicals other than MDMA, including caffeine, methamphetamine, or dextromethorphan. Users cannot know exactly what they are taking, even if they get the pills from their "regular" dealer or use the "same" brand. This uncertainty makes mixing ecstasy with alcohol or other drugs especially dangerous – it's random chemistry.

Users like the fact that ecstasy makes them feel socially powerful and less inhibited. But teens often don't know that ecstasy can cause erectile dysfunction in males and decrease libido in females. In addition, feeling uninhibited can make teens vulnerable to sexual assault or other violence.

Users may experience a dramatic drop in mood, often called "the crash," after ecstasy's main effect wears off. Some teens find the comedown so difficult that they re-dose, multiple times, to avoid it. Many users also report depression starting the second day after they used ecstasy and lasting for one to five days, or sometimes for weeks. Other side effects include difficulty concentrating, short-term memory loss, and confusion.

Negative effects increase with frequency of use and size of dose.

#### **MOST IMPORTANT PREVENTION MESSAGES:**

 What you don't know can – and will – hurt you. Ecstasy pills can contain anything from methamphetamine to DXM. Buying it from the same dealer or using the same brand makes no difference. So taking ecstasy is a lot like flipping a chemical coin.

*"Taking ecstasy is a gamble ... I fear that one night of hedonism has cost me a lifetime of happiness."* 

*"I thought I was going to die. I was so sick to my stomach and my head was throbbing. I still feel sick in my brain."* 

"I have gone from being someone who was the life and soul of the party to a shell of a human being ... I can't believe this is me now."

 Ecstasy makes you feel like you can dance forever, and dancing makes you overheat. Overheating can kill you, and once your body overheats, it's more likely to do it again – for the rest of your life – because you've damaged your body's ability to regulate temperature. "Recently one of my friends died after one year of being brain damaged and having all his body systems messed up by taking ecstasy ... he was 16 years old and he was just trying it out for the first time."

• Ecstasy makes you feel self-confident and on top of the world. But it can also blind you to a potentially bad situation, where you could be sexually attacked.

"I suddenly realized I was in love with everyone, male and female."

"My friend remembers taking a break from the party and walking down the street. The next thing is that she was in a man's car and she didn't know how she got there. He took her to a friend's apartment and she remembers her pants coming off. Eventually they let her go."

### **M**ETHAMPHETAMINE

### WHAT IS METHAMPHETAMINE?

Methamphetamine is a strong physical and mental stimulant. It is also known as meth, crystal meth, crank, ice, tweak, glass, and speed. Meth raises blood pressure and heart rate and makes the heart beat with greater force. It can permanently damage nerve cells that produce important brain chemicals.

### WHY DO TEENAGERS USE METHAMPHETAMINE?

Teens typically use meth to increase productivity and because they like the feeling of power it gives them. Girls may also use it to lose weight. Meth's effects usually last 6-12 hours, depending on the size of the dose and the purity of the drug.

### How do teens use methamphetamine?

This drug can be snorted, smoked, injected, drunk, or taken as pills or powder. The choice of method is often an issue of style – in some schools, snorting is considered cooler than smoking. However, smoking is most likely the way that adolescents use meth.

### WHERE DO TEENS USE METHAMPHETAMINE?

Meth is used in many different settings, by many different groups. Teens who are using it to enhance performance or lose weight are likely to use it by themselves. Meth is less of a party drug, although teens may take it unknowingly when it has been added to ecstasy.

### WHERE DO TEENS GET METHAMPHETAMINE?

Because meth is illegal, teenagers have to get it directly from a dealer or indirectly through a friend. Meth is often imported from Mexico, but it is easily manufactured in a home or even in space as small as a trailer.

### WHY IS IT DANGEROUS TO USE METHAMPHETAMINE?

Using this drug is truly playing with fire. It can produce permanent psychosis, even with first use. Chronic use can cause permanent brain damage.

Initially, meth may enhance performance and concentration. But this effect fades quickly. Users may feel that they are being very productive when, in fact, they are engaging in pointless, repetitive activities.

Meth is highly addictive, and the line between just "trying it" and getting hooked is very thin. Many adolescents say they started craving meth after trying it just once. Subsequent use doesn't produce the same powerful effect as initial use. As a result, teens may take more and more, hoping to recapture the initial rush.

Chronic use of methamphetamine brings with it a wide range of serious mental and physical consequences, including paranoia, a weakened immune system, irreversible central nervous system damage, sexual compulsions (rough sex, hard-core porn, sexual toys), and the inability to feel normal sexual pleasure. Their sexual risk-taking makes meth users more vulnerable to hepatitis and HIV. Meth can also cause numerous heart conditions, including heart rhythm disturbances, heart attack, and heart failure.

Ultimately, meth users become "tweakers," emaciated people with rotten teeth. They neglect basic hygiene and pick at their skin, creating sores that often become infected. Many adolescents view "tweakers" as scuzzy, dirty druggies – people who have hit bottom.

#### **MOST IMPORTANT PREVENTION MESSAGES:**

• Meth is a one-way ticket to disaster. The line between "just trying it" and being hooked is thin and blurry.

*"I instantly needed more. Eventually I was doing anywhere from 10 to 20 caps in a night. Every night."* 

"I was instantly hooked. I truly believe that's how powerful this drug can be."

 Using meth just once can lead to psychotic episodes as well as to long-term psychosis – you see and hear things that aren't real.

"Three days after my first experience I had not taken a shower, eaten or drank anything, and by the time I was ready to sleep I couldn't due to hallucinations that were bogging my mind down and down right scaring me."

"Then I became aware of a quickly mounting paranoia. I was sure that something horrible was going to happen and could feel my heartbeat race up to about 140 beats per minute."

• Using meth regularly fries your brain. It can cause permanent brain damage and change forever the way you view the world.

"It turns you into someone else, not just when you're on it, it's for life. I'm not who I used to be – yet I can't change it. I can't think the way I used to or act the way I used to."

"Nothing sounds interesting. It isn't worth it to move, sleep, eat, or anything. I'm convinced I've wrecked my life and that I'll never feel better." • Regular meth users become "tweakers," skeleton-like people with rotten teeth who neglect basic hygiene and pick at their skin, creating sores that often become infected.

*"I had what they call 'jib bumps' or 'jib scars' all over my forehead. They are these huge, nasty, purple bumps that kind of resemble zits but aren't."* 

*"He looked so sick. He looked like hamburger. I started calling him 'Meat' because of this."* 

• Regular meth users are typically seen as scuzzy, dirty druggies-people who have hit bottom.

"I am a pariah, I am taboo."

"The worst part of crystal was the relationships I destroyed."

"At my worst, I had run away from home and was in my second week of homelessness, begging during the day for enough money for a fix, eventually finding a friend with a small, dirty drug den of an apartment in the middle of the ghetto. I spent days and days in the same spot on the couch."

### OVER-THE-COUNTER COUGH AND COLD MEDICINES WITH DXM

Why worry about cough and cold medicines? Because some cough and cold medicines are used as "recreational" drugs, often by young teens. The ingredient most commonly abused is DXM, a cough suppressant found in some over-the-counter cough and cold medications. Common examples are sold under such trademarked brand names as Contac, Coricidin, Pertussin, Robitussin, Sudafed, Triaminic, and Vicks Formula 44; there are also several generic brands.

DXM is generally safe when used at recommended doses, but high doses of DXM can produce hallucinations and the sensation of having out-of-body experiences. When abused, DXM is used at up to 30 times the recommended dose.

Street terms for DXM include dex, tussin, DM, drex, robo, rojo, skittles, triple C, and velvet. The experience of using DXM is known as robodosing or robotripping.

### WHY DO TEENS USE DXM?

DXM produces a range of mind-altering effects ("plateaus"), depending on the dose. At lower doses, users feel "stoned," as on marijuana. At higher doses, DXM causes teens to see and hear things that are not there. This "tripping" begins within about 30 minutes of taking DXM; trips can last for up to six hours. Adolescents under the influence of DXM appear to be in their own world.

### How do teens use DXM?

DXM is available as a liquid and in powder, lozenge, tablet, capsule, and gel cap form. Most abusers take capsules or tablets to avoid the nausea associated with drinking large amounts of cough syrup.

### WHERE DO TEENS USE DXM?

At lower doses, teenagers often use it in a social setting (after school at someone's house or even during school). DXM is also used at dance clubs and all-night dance parties. At higher "plateaus," teens probably "trip" by themselves, pursuing DXM's hallucinogenic effects.

### WHERE DO TEENS GET DXM?

DXM is readily available over the counter at low prices. It can be easily shoplifted or taken from medicine cabinets. DXM can also be purchased on the Internet as a powder.

### WHY IS IT DANGEROUS TO USE DXM ABOVE THE RECOMMENDED DOSE?

Most tablets containing DXM are 20-30 mg. But to get mind-altering effects, DXM abusers usually take doses of more than 100 mg. Long-term abusers, having developed a tolerance to DXM, may increase doses to 1,000 mg or more. Almost all cough and cold remedies contain multiple ingredients, including acetaminophen, antihistamines, and pseudoephedrine. Thus taking many times the recommended dose greatly increases the risk of organ damage from these other ingredients. The liver damage caused by very high doses of acetaminophen can be fatal. High doses also increase the likelihood of a bad interaction with other drugs, such as alcohol. High doses taken in a dance-club setting can cause heat stroke.

DXM also alters cognitive processes and judgment and may cause users to make bad sexual judgments. Other risks include hallucinations, psychosis, extreme agitation, and violent behavior.

#### **MOST IMPORTANT PREVENTION MESSAGES:**

• Your friends may start avoiding you.

*"My friends thought cough syrup was gross and no one wanted to be around me ... It was like I had wicked B.O."* 

• You won't be able to stop throwing up.

"After I drank it I got very sick, throwing up the contents of my stomach, then continuing with dry heaves ... I slept on the bathroom floor because I couldn't get to my bed."

"Soon after taking a box of Coricidin my son began to throw up violently ... the ER doctors informed us that he and his friend could have very easily died."

• You will look so freaked out that your friends may take you to the ER and the doctors will call your parents.

"Suddenly there were cops in my room ... fortunately I did not die that night."

"My friend 'J' took 27 and within 10 minutes was immobile. He is now in the hospital and had many seizures and went into cardiac arrest."

### **PRESCRIPTION PAINKILLERS (OPIATES)**

### WHAT KIND OF PRESCRIPTION PAINKILLERS ARE TEENS USING?

Vicodin (Vics), OxyContin (OCs, Oxy, hillbilly heroin), Tylenol with codeine (T3s, Threes, Fours), Percocet (Percs), and Percodan.

### WHY DO TEENS USE THEM?

Many teens use these drugs to get high and to "enjoy the school day." Athletes may use them before games to numb pain, perhaps combining them with stimulants to get "juiced up" for the game. Teenagers may also self-medicate for the pain of menstrual cramps or migraines.

### HOW DO TEENS USE PRESCRIPTION PAINKILLERS?

Usually in pill form. Teens see pills as cleaner and safer than other forms of drugs. Prescription drugs are especially appealing because they are easy to get and "legal," doctor-prescribed and FDA-approved.

Teens may also crush the pills and snort the powder or mix it with water and inject it. They may combine prescription painkillers with alcohol or with tranquilizers such as Valium or muscle relaxants such as Soma. Some adolescents, usually older teens, "speedball" by combining these "downers" with an "upper" such as cocaine.

### WHERE DO TEENAGERS USE PRESCRIPTION PAINKILLERS?

When self-medicating, teens often use these drugs alone. To get high, they typically use them at school or at parties, where they may share pills in a candy bowl ("pharming").

### WHERE DO TEENS GET PRESCRIPTION PAINKILLERS?

These drugs are relatively easy to get – for example, shared with/stolen from parents or relatives or bought illegally on the street. Some prescription painkillers can be purchased on the Internet. Teenagers who get a legitimate prescription for one of these drugs are likely to be asked to share with their friends.

### WHY IS IT DANGEROUS TO USE PRESCRIPTION PAINKILLERS THAT ARE NOT PRESCRIBED FOR YOU?

The most important reason is that prescription painkillers can be lethal. An overdose can suppress breathing and result in death, even with only one dose. And it's easy to overdose. Opiates come in many forms and the appropriate dosage varies. But teens who are self-medicating don't read labels, and teens who are "pharming" have no idea what they are taking. Many teenagers don't even know what the drugs are

for, or which pills are more powerful than others. They don't understand that all pills of a single substance aren't the same. They also don't know what dosages are really dangerous and how a given dose interacts with other drugs (alcohol, Valium).

Prescription painkillers are extremely addicting, and self-medicating for relatively minor pain can lead to addiction very quickly. Tolerance builds with drug use, so the more often teenagers use these drugs, the larger the dose they need the next time.

Continued use produces both psychological and physical craving. When teenagers become dependent, finding and using the drug become the main focus of life. Because users learn to associate the drug with pleasure, taking the drug away causes depression and anxiety. Physical symptoms of withdrawal include abdominal cramps, aches, sweating and chills, nausea, tremors, and insomnia. Even after treatment, relapse rates are very high.

Abusing prescription painkillers can have permanent effects on the brain, including loss of interest in everything except the drug, inability to enjoy normal pleasures, depressive symptoms, and impaired cognitive functioning.

#### **MOST IMPORTANT PREVENTION MESSAGES:**

• Prescription painkillers can kill you – even one dose. You just stop breathing.

"My friend took Oxy one night and that night was his last."

"That Sunday she went to sleep not knowing she would never wake up."

*"I couldn't breathe. I sat up and tried breathing but my throat wouldn't open. I pounded on my neck ... very small amounts of air finally reached my lungs."* 

• What you don't know can hurt you. All prescription painkillers aren't the same, and you don't know the effect of one pill compared with another.

"I accidentally (took) the entire 80 mg pill ... within a couple of minutes I had lost consciousness. The next thing I remember is waking up in the ER ... (I) suffered a heart attack, kidney and liver failure."

 It's very easy to get addicted – easy to go from experimenting to having the drug be the most important thing in your life.

"Even one dose can make you fall in love with the feeling."

Q: "How long did it take for you to get hooked on OxyContin?" A: "*Probably instantly. I remember waking up the next morning ... rubbing my finger on the desk, seeing if there was any (OxyContin) left.*"

*"I thought I was safe with these drugs (Vicodin). I thought these sorts of withdrawal symptoms only happened to hardcore users and heroin addicts. I will never be totally the same."* 

 Addiction changes you and your brain – forever. It damages your memory and makes you depressed. You stop caring about life's normal pleasures. The drug is always in control.

"I used to be a very outgoing person, able to liven any party ... now its been about 9 months and I still have trouble talking to anybody, even my friends and family."

"My brother took his own life due to severe depression from OxyContin ... this drug is a killer in more ways than just overdoses."

### **PRESCRIPTION STIMULANTS**

### WHAT ARE PRESCRIPTION STIMULANTS (AMPHETAMINES)?

Prescription stimulants or amphetamines are a general class of drugs that speed up brain and physical activity by stimulating the central nervous system. They are used medically to treat depression, obesity, and attention deficit hyperactivity disorder (ADHD).

The prescription stimulants most commonly abused by teens are Dexedrine, Ritalin, and Adderall. They are quite similar chemically. Street names for these drugs include speed, dex, dexies, and Jollies. Adderall is sometimes called "kiddie cocaine." Prescription stimulants may also be referred to as "study pills." The experience of using these drugs is referred to as speeding, tweaking, spinning (or being spun) up.

### WHY DO TEENS USE PRESCRIPTION STIMULANTS?

To stay alert or to study more effectively, to provide energy to hit every party, or just to get high.

### HOW DO TEENS USE PRESCRIPTION STIMULANTS?

All of these drugs can be swallowed, snorted, or injected; pills are one of the most common ways that teenagers abuse them.

### WHERE DO TEENS USE PRESCRIPTION STIMULANTS?

Teens who are using these drugs to study will most likely take them when alone. Recreational use occurs before or during parties or at school.

### WHERE DO TEENAGERS GET PRESCRIPTION STIMULANTS?

Like other prescription medications that teenagers abuse, prescription stimulants are easy to get. They can be stolen from or shared with parents or relatives, obtained (as a favor or for money) from teens who have a legitimate prescription, or purchased on the Internet.

### WHY IS IT DANGEROUS TO USE PRESCRIPTION STIMULANTS THAT ARE NOT PRESCRIBED FOR YOU?

These powerful central nervous system stimulants have a wide range of adverse physical and psychological effects. Common symptoms include loss of appetite, sleeplessness, dangerously high body temperature, and nervousness. Hostility and paranoia are also common.

Symptoms requiring medical attention include increased blood pressure, fast or irregular heartbeats, chest pain (angina), joint pain, uncontrolled body movement, and fever.

The risk of adverse effects increases with higher doses. Long-term abuse leads to severe weight loss or malnutrition, paranoia, feelings of hostility, mental illness, periods of delirium and panic, heart failure, seizures, and even death.

Like methamphetamine, to which they are chemically related, prescription stimulants are very addicting, and tolerance develops over time. Increasing amounts are required to get the same effect. Users may reach a point where they need to use alcohol or tranquilizers to come down from their high.

Sudden withdrawal of these drugs produces fatigue; long, disturbed periods of sleep; irritability; psychosis or anxiety; intense hunger and overeating; and moderate to severe depression.

Adolescents tend to think that prescribed drugs are "safe" because they have a legitimate medical use. But prescription stimulants have idiosyncratic effects, which physicians take into account when prescribing them. Physicians also consider a patient's height, weight, and other medical problems. Teens abusing these drugs cannot know how they will react to any given pill, nor do they know how the drug they are abusing interacts with other drugs.

#### **MOST IMPORTANT PREVENTION MESSAGES:**

• It's easy to get hooked on these drugs; pretty soon the only thing that matters is getting more.

*"I don't even feel the good effects, it's mainly all bad but I can't stop taking them."* 

*"It went from like a weekend thing to a few times a week thing to an everyday, must have it thing."* 

• You may start taking these drugs to keep awake, but you'll end up not being able to sleep when you want to.

*"We ended up staying up all night but no good feelings. I felt terrible but could not sleep."* 

*"I couldn't go to sleep. I stayed up for three, four days and I'd keep on taking more and more ... I thought I was going to die."* 

• Your heart will pound, you'll wonder who's out to get you, you'll see things that aren't there.

"The worst side effect yet is the social problem it gives me ... I think people are talking about me behind my back ... and I can't even talk right with people."

*"I suddenly started to get paranoid and experience severe hallucinations ... I mostly saw people out of my window or down my hallway, and insects crawling out from underneath doors. All of them were very frightening."* 

• Experimenting with drugs prescribed for other people is a huge gamble. There are so many important things you can't control – what you actually took, how powerful the pill is, and how it will affect you.

"Taking a drug that was prescribed for someone else is just plain dumb."

"By the time we got him to the emergency room his heart had stopped. He died later that night. He was 19 years old. When the autopsy came back only one drug was in his system – Ritalin."

### SEDATIVES (BENZODIAZEPINES AND GHB)

### WHAT ARE SEDATIVES AND WHICH ONES ARE TEENAGERS ABUSING?

Sedatives are central nervous system depressants – they slow normal brain function. Commonly prescribed and commonly abused by teens are Xanax (known as Zanies or Z bars), Valium, Ativan, and Klonopin. Candy, downers, sleeping pills, and tranks are other street names for these drugs. Teens also use GHB, another sedative, which became illegal in 2000. Increasingly, teens are turning to alternative forms of GHB that are easier to get.

### WHY DO TEENS USE SEDATIVES?

To replace alcohol (get intoxicated without the calories), to detox from opiate addiction, or to come down from stimulants. Sexual predators use sedatives to knock out their victims. Teens who have a medical prescription for sedatives may share the pills with others to gain popularity.

### How do teens use sedatives?

Usually in pill form. GHB can be produced in white powder, clear liquid, and capsule forms. Sedatives are often used in combination with other drugs.

### WHERE DO TEENS USE SEDATIVES?

At parties as part of "pharming," where pills are shared in a candy bowl, or at school with friends. Teenagers also use sedatives at home, where parents may give them these drugs to relax. Girls may use sedatives to get unpleasant sexual experiences "over with." Other teens take them to feel free to be reckless.

### WHERE DO TEENS GET SEDATIVES?

These drugs can be diverted from friends with legitimate prescriptions or obtained from, shared with, or stolen from parents or friends. They can also be purchased on the illicit market.

### WHY IS IT DANGEROUS TO USE SEDATIVES THAT HAVE NOT BEEN PRESCRIBED FOR YOU?

Because sedatives are often used in a combination of drugs, it's easy to overdose. You go to sleep and may never wake up.

Mixing two different kinds of sedatives can be lethal. Mixing any sedative with alcohol is particularly dangerous. At high dosages, users may lose the normal reflexes that protect their airway and choke to death on their own vomit.

Sedatives can also be addicting. Taking them daily or even several times a week can build tolerance, so users need ever larger doses to get the desired effect. Withdrawal can cause anxiety, panic attacks, delirium, insomnia, extreme sensitivity to light and sound, seizures, psychotic behavior, and even death.

The loss of inhibition that accompanies these drugs may result in undesired sexual activity. Poor judgment can snowball, increasing the risk of accidents, especially among boys.

GHB in particular is associated with sexual assault – put into the victim's drink, it renders him or her unconscious or immobile. And the margin between a recreational dose of GHB and overdose is very narrow.

As with other prescription drugs that are abused, sedatives give the illusion of safety because they have a real medical use. However, individuals react idiosyncratically to a given dose of sedatives. Physicians take this into account when prescribing these drugs; teens abusing them can't. In addition, dosage between different kinds of sedatives can vary significantly. For example, 1 mg of Xanax is very different from 1mg of Valium.

### **MOST IMPORTANT PREVENTION MESSAGES:**

Mixing sedatives with alcohol can be deadly.

*"I kept nodding off and my friend just told me to go to bed. The next time I was able to talk was three days later, after I awoke from my coma."* 

"My friend stuck his fingers down my throat and made me throw up over and over again. If I had just gone into that bathroom and passed out, I know that I wouldn't have woken up."

 These drugs can put you into such a deep sleep that you can literally choke on your own vomit.

"My friend saw that I had puked pink stuff all over myself and that I was making some kind of gargling noise like I was choking. She called 911 ... I awoke from my coma to see all my family and friends gathered around me like it was my funeral."

• You don't know how strong the pill is that you are taking or how you are going to react to it.

"I did not know what I was getting when I took these pills or how potent Xanax is ... the next thing I knew, I woke up the next afternoon not knowing what happened."

*"I have no memories of this day whatsoever ... I ended the day in a hospital, in some sort of a coma."* 

*"I had no idea what had happened. Evidently, I was driving and lost control, slamming into a set of neighborhood mailboxes."* 

 Always watch your glass or bottle at a party – even if you are just drinking a soft drink.

"[At the hospital], they found GHB in my body. It happened at a party ... I don't remember much of that evening." – Anonymous rape victim

"My memory fades in and out from last night but I remember saying 'I don't want this' as he was doing his thing." – Anonymous rape victim

### STEROIDS

### WHAT ARE ANABOLIC STEROIDS?

Anabolic steroids are man-made substances that are related to testosterone, the main male sex hormone. (They are different from the female steroid estrogen or the steroids produced by our adrenal glands that are used to treat inflammation, asthma, and rashes.) As legally prescribed, steroids are used to treat conditions such as delayed puberty or impotence or to help rebuild tissues weakened by diseases such as AIDS.

Commonly prescribed steroids include Anadrol, danazol, and Winstrol (pills) and dihydrotestosterone, nortestosterone, boldenone, and testosterone (injections). Street names include Arnolds, roids, vitamins, product, gym candy, juice, pumpers, and stackers.

### WHY DO TEENS USE STEROIDS?

Male and female athletes use steroids to improve their physical performance; use for this purpose is higher among boys. Both sexes also use steroids to improve their body image; girls may cluster steroids with amphetamines, diet pills, or laxatives to decrease body fat. Depending on the dose, steroids remain in the body anywhere from a couple of weeks to several months.

### How do teens use steroids?

They can be taken orally, injected, or blended into gels or creams to rub into the skin. Teens typically start with pills. Since oral use causes liver problems, long-term users may inject the drugs, often sharing needles when doing so.

Steroids are typically taken in cycles of weeks or months ("cycling"). Often doses are increased, then decreased during a cycle ("pyramiding"). Abusers often combine several types of steroids to maximize their effectiveness ("stacking").

### WHERE DO TEENS USE STEROIDS?

Athletes, especially team members, are likely to use steroids in a group. This is probably more common among males. Bodybuilders may also use steroids in groups, especially if only one person has access to the drugs and is sharing them. Females are often secretive about using steroids to improve their bodies. Both males and females are likely to use steroids the first time with someone else to learn how to use them.

### WHERE DO TEENS GET STEROIDS?

Gyms, sports training centers, and the Internet.

### WHY IS IT DANGEROUS TO USE STEROIDS THAT ARE NOT PRESCRIBED FOR YOU?

Steroids can lead to significant physical and emotional problems. Major side effects include liver and kidney tumors, cancer, jaundice, high blood pressure, cholesterol abnormalities, blood clots, severe acne, and stunted height.

Steroids also have gender-specific effects. For boys, these can include shrunken testicles, reduced sperm count, infertility, hair loss, baldness, and development of female breasts. Enlarged breasts may require surgery to correct; baldness may be irreversible.

Girls who take steroids become masculine. They get facial hair, their voices get deeper, and their breasts shrink. These effects can be permanent.

Abusers who are injecting steroids often use dirty needles or share needles, putting themselves and others at risk for HIV and hepatitis B and C.

Steroids also have troubling behavioral consequences including aggression, irritability, extreme mood swings, impaired judgment, and delusions. The depression that accompanies abrupt withdrawal from steroids has been linked to teen suicide, especially for girls.

Professional athletes who use steroids are dangerous role models. Programs that teach boys about sports nutrition and provide alternatives to drug use to improve strength and performance have been successful in deterring use.

#### MOST IMPORTANT PREVENTION MESSAGES:

• Steroids can make boys look like girls and girls look like boys.

*"I was a singer ... music is my life. Correction, was my life ... The deepening of my voice is permanent."* 

 Steroids can cause impotence and breast development in boys and facial hair and shrunken breasts in girls.

"Matt developed puffy, fatty lumps under both his nipples ... he stopped getting the constant attention from girls that he was used to."

 Stopping steroid use suddenly can cause deep depression and may lead to suicide.

"Not only did I have no strength, couldn't digest food, had pains all over my body ... I was consumed by depression and had constant thoughts of suicide."

### WHAT TEENAGERS WANT TO KNOW ABOUT PRESCRIPTION DRUGS AND COUGH MEDICINES

#### 1. AREN'T DRUGS THAT ARE PRESCRIBED BY A DOCTOR SAFE FOR ANYONE?

Drugs are usually safe when they are used by the person they were prescribed for and taken according to the doctor's instructions. But that doesn't make the drugs safe for someone else to take.

When doctors write prescriptions, they are treating a specific condition. They also think about their patients' height, weight, age, allergies, medical problems, and the other drugs that the patients are taking. Then they tell their patients how much of a drug to take, when to take it, how to take it, and what not to mix with it.

But when you take a medicine prescribed for someone else, you have no idea how your body and brain will react. You could be taking many times the amount that a doctor would prescribe for you. Or you might be taking something that a doctor would never prescribe for you because it would cause you more harm than good, or because it is meant to treat a problem you don't have.

Taking a drug prescribed for someone else is like playing with fire.

### 2. CAN'T UPPERS - PRESCRIPTION STIMULANTS LIKE DEXEDRINE, RITALIN, OR ADDERALL - HELP YOU STAY AWAKE AND STUDY BETTER?

Some people might start taking one of these drugs to stay awake, but end up not being able to sleep when they want to. These powerful drugs change the way your body's control center – the central nervous system – works. They speed it up. That's a very dangerous thing to do. In addition, prescription stimulants can cause sleeplessness, twitching, fast and irregular heartbeats, severe weight loss, high blood pressure, and panic.

If you are taking these drugs to get high, it's easy to get hooked. The more you use them, the more your body gets used to having them, so you need to take more and more to get the same effect.

### **3.** You said Ritalin is a stimulant and can have a bad effect on your nervous system. But a doctor prescribed Ritalin for my friend, who has attention deficit hyperactivity disorder (ADHD).

Doctors do prescribe Ritalin to treat ADHD, a specific medical problem. But if you don't have ADHD, Ritalin can speed up your body in dangerous ways. When you use Ritalin to get high, you can become addicted to it.

#### 4. Is it dangerous to mix downers like Xanax and Valium with other drugs?

It is always dangerous to mix drugs. It is especially dangerous to mix downers (sedatives) with each other and with alcohol. The combination slows the body down so much that you can become unconscious. You won't know what's happening to you and you can lose control of your body. You could actually choke on your own vomit or stop breathing altogether.

#### 5. WHY ARE UPPERS AND DOWNERS BOTH SO DANGEROUS?

Uppers (stimulants) and downers (sedatives) are dangerous because they change the basic way your body and brain work. They affect your central nervous system – that's the control center for everything you do. Like the central controls for other complex things like computers or space shuttles, your central controls are a delicate system, tuned for just one purpose: to make your brain in your body do all the things you need them to do to keep you going and keep you healthy.

Trying to change how your controls work without knowing what you are doing makes about as much sense as just pulling wires out of a computer or changing the fuel for the space shuttle without testing it. You have no idea what the result will be, but it probably won't be good.

### 6. Someone told me that I should always watch my glass or bottle at a party. Why is that?

It's a good idea to do this so that no one can secretly put anything in your drink. Some drugs (especially one called GHB) have no smell and no taste. They can be slipped into a drink without your knowing it. These drugs can make you unconscious or so dopey that you can't defend yourself against a sexual assault or other kind of violent attack. And you might not even remember what happened to you.

If you see someone put something in a drink at a party, you should tell the person whose drink it is immediately so that nothing bad happens to them. You should also let an adult know that someone is adding things to people's drinks.

### 7. I'VE HEARD THAT STEROIDS CAN MAKE BOYS LOOK LIKE GIRLS AND GIRLS LOOK LIKE BOYS. IS THAT TRUE?

Yes, it is true. Boys who take steroids get shrunken testicles and don't produce sperm. They can also develop female breasts, start to lose their hair, and over time, become bald. Boys with enlarged breasts may require surgery; those who become bald may be bald forever. Girls who take steroids become masculine – they get facial hair, their voice gets deeper, and their breasts shrink. Those effects can also be permanent.

### 8. What's wrong with using prescription painkillers such as OxyContin unless they are prescribed for you?

The most important reason is that these drugs can kill you. Even one dose. You just stop breathing. There are many different kinds of prescription painkillers and they come in very different strengths. You don't know if even just one pill would be too much for you.

#### 9. CAN JUST TRYING VICODIN OR OXYCONTIN ONE TIME MAKE YOU WANT MORE OF THEM?

Yes, you can start craving these drugs instantly after trying them just one time – it's not safe to experiment. Once you are addicted, you and your brain are changed – forever. Addiction messes up your memory and makes you depressed. The things that you used to enjoy stop mattering because the drug is always the most important thing.

Unless a doctor prescribes these drugs for you, you should think of them as poison.

### **10.** Can you get high by taking cough syrup? The kind you can just buy in a drug store?

If you follow the instructions on the bottle, taking cough syrup will just help you stop coughing. But taking too much cough syrup, or taking a lot of cold medicine in pill or gel cap form, can cause hallucinations and make you violent and crazy acting. You will look freaked out and spend a lot of time throwing up.

Cold medicines usually have a lot of other things in them, so taking more than the recommended dose can damage your liver and kidneys. High doses can also make you lose control of your body – people can do anything to you and you won't be able to stop them.