



# **Drugs: The Straight Facts COCAINE AND CRACK**

#### Introduction

This Instructor's Guide provides information to help you get the most out of *Cocaine and Crack*, part of the five-part series *Drugs: The Straight Facts*. The contents of the guide will allow you to prepare your students before using the program and to present follow-up activities to reinforce the program's key learning points.

The pleasure of a cocaine high doesn't last long, but the damage cocaine causes can last a lifetime. This video explores the history of cocaine; the effects of cocaine and crack on the body and the short- and long-term health impacts; and teenage attitudes toward cocaine and crack. The video also delves into the illicit cocaine trade and the South American cartels that control it, as well as addiction to cocaine — both physical and psychological.

*Drugs: The Straight Facts* correlates to National and State Educational Standards, including the NCLB Act. The series includes:

- Marijuana
- Alcohol
- Cocaine and Crack
- Inhalants
- Narcotics

## **Learning Objectives**

After viewing the program, students will understand:

- The history of cocaine use, both legal and illegal
- The routes of administration and physical effects of cocaine
- How cocaine affects the brain
- Concerns about cocaine addiction and the risks involved in abusing cocaine

# **Main Topics**

#### **Topic 1: Introduction**

The program begins by presenting a brief history of cocaine, from its use by native Latin American cultures in the form of coca leaves, to Western medicinal use, recreational abuse, and the development of crack.

#### Topic 2: Health Effects

This section outlines the routes of administration and physical effects of cocaine.

#### Topic 3: Cocaine and the Brain

The effect of cocaine on the brain as it increases dopamine levels is explained in this section.

#### Topic 4: The Business of Cocaine

The difference between the coca leaf and the final cocaine product is discussed here, along with the role of children in the drug trade.

#### **Topic 5: Addiction and Treatment**

The program's final section discusses cocaine addiction and withdrawal, and the risks involved in abusing this drug.

## **Fast Facts**

- Cocaine is a substance produced in the leaves of a bush that grows mainly in Peru and Bolivia. It is thought that the Incas were the first to use cocaine, chewing coca leaves more than a thousand years ago. The practice was originally reserved for priests in ceremonies, and for soldiers and workers to increase their endurance. The amount of cocaine in the leaves is small the effect of chewing them is similar to drinking several cups of strong coffee.
- In the 1980s cocaine manufacturers found a way to make the drug more potent through a process called freebasing, resulting in cocaine that is almost 100% pure. Not long after the appearance of freebase coke came crack, a crystallized form of cocaine that when smoked, is even more potent than injected cocaine.
- The use of crack tends to be concentrated in metropolitan areas. More than 80% of crack users are unemployed or unable to work.
- Inhaling powdered cocaine can make users feel energetic and self-confident, due to its action on neurotransmitters in the brain. The problem though is that users need to keep taking larger amounts of cocaine, and more often ... not only to get high, but just to feel normal.

- Mixing alcohol and cocaine is the most common cause of drug-combination related deaths, mainly due to cardiac arrest, or to seizures followed by respiratory arrest. Alcohol and cocaine combine in the liver to form cocaethylene, a substance that can cause sudden death.
- In addition to activating the brain's reward circuitry, PET scans reveal that cocaine affects the overall level of brain activity in the user. Glucose utilization levels drop, resulting in a disruption of normal brain function.
- Research shows that, due to their still-developing brains, teens are more likely to get addicted to drugs than are older people.
- Cocaine addiction can be psychological as well as physical, with users taking the drug to help cope with difficult emotions. An often overlooked aspect of cocaine addiction is its social aspect
   — that is, the user may associate certain friends and situations with drug use.
   Occaine addiction is its social aspect
- Possible risk factors for cocaine dependency include the following: You use coke to build self-confidence; You get high immediately after having a problem at home, work, or school; You've lost friends since you started using coke; You ever miss school or work due to using cocaine; Someone in your family has an alcohol or drug problem.
- Scientists testing paper money from seventeen different U.S. cities found that up to 90% of
  the bills contained trace amounts of cocaine. Money from larger cities had higher levels —
  Washington, D.C. topped the list with 95% of its bills contaminated. The study noted that
  money can become contaminated even when it is not directly involved in the drug trade due to
  being run through contaminated currency-counting machines at banks. The scientists analyzed
  over 200 banknotes, and presented their findings at the 238th National Meeting of the American
  Chemical Society.

# **Vocabulary Terms**

**addiction:** Compulsive physiological and psychological need for a habit-forming substance, characterized by tolerance and by well-defined physiological symptoms upon withdrawal.

**coca plant:** Plant native to South America from which cocaine is extracted. The leaves of the coca plant contain about 1% cocaine.

**cocaine:** A colorless or white crystalline alkaloid extracted from coca leaves, sometimes used as a local anesthetic especially for the eyes, nose, or throat and widely used as an illicit drug for its euphoric and stimulating effects.

**crack:** Pellet-size pieces of highly purified cocaine, prepared with other ingredients for smoking, and known to be especially potent and addicting.

**dopamine:** A neurotransmitter that causes euphoric feelings.

**endorphin:** A naturally occurring opioid peptide. Endorphins react with the brain's opiate receptors to raise the pain threshold.

freebase: A purified form of cocaine; to use freebase cocaine by burning it and inhaling the fumes.

**neurotransmitter:** Chemical released by neurons to communicate with each other.

**psychoactive drug:** A drug that can produce mood changes and distorted perceptions by acting on the central nervous system

# **Pre-Program Discussion Questions**

- 1. Is there cocaine in cola drinks?
- 2. Is 'Just Say No' a good way to discourage drug use?
- 3. How do you think cocaine gets from coca leaf in South America to a final product distributed by American drug dealers?
- 4. Is cocaine addictive?
- 5. Does using cocaine have long-lasting negative effects, either psychological, behavioral, or physical?

## **Post-Program Discussion Questions**

- 1. What is the difference between cocaine and crack?
- 2. Can cocaine be used safely in moderation?
- 3. What are some short-term effects of using cocaine? Long-term effects?
- 4. How is cocaine ingested?
- 5. Who could you go to if you or a friend had any questions about or problems with drugs?

**INHALANTS** 

## **Student Projects**

- Using this program, the library, and the Internet as resources, create a 'Did You Know' brochure to educate others about the risks of cocaine and crack use. The brochure might have a section about celebrities who died as a result of using coke (often in combination with alcohol or other drugs), such as Ike Turner, TV pitchman Billy Mays, The Who's John Entwistle, comedian Chris Farley, singer Andy Gibb, and actor River Phoenix.
- What are some warning signs of cocaine addiction? Using visual aids (such as PowerPoint), give a presentation to your class on how to tell when you or someone else has a problem with this drug (besides the fact of using it at all!). Warning signs might include mood swings, problems with work or school performance, going into debt, panic attacks, and nosebleeds.
- Make a poster illustrating the ways in which using cocaine affects different parts of the body, both instantaneously (e.g., acting on the brain's reward system) and in the long run.
- Participate in a class discussion about drug use and addiction, considering the following questions:
  - Has your attitude about this drug changed at all after viewing this film?
  - How would becoming addicted to cocaine change your daily life?
  - Does the media and entertainment industry glamorize drug use in its portrayal of athletes, musicians, and other celebrities who use drugs, and who may even have problems with addiction? (Consider the energy drink company who named their product Cocaine.)
- With other students, participate in role-playing exercises in which you find yourselves in the following situations:
  - Being offered cocaine after school
  - Being offered cocaine at a party
  - Being offered the opportunity to make some quick cash by selling coke Rehearse responses to these situations that seem realistic, especially if the 'offerer' downplays the danger, tries to embarrass you via peer pressure to be cool, or is especially persistent.
- In the form of a poster, brochure, or Web page, develop a resource to help students who are having problems with drugs. This could include contact information for addiction treatment centers, Web sites, books, hotlines, and even guidance counselors and other resources in your school and community.

## **Assessment Questions**

- 1. By the mid 1800s, purified cocaine was \_\_\_\_\_. (Choose the answer that is NOT true.)
  - a) used in patent medicines as a local anesthetic
  - b) an ingredient in Coca-Cola until the introduction of drug laws
  - c) used only by indigenous peoples
  - d) an ingredient in nerve tonics
- 2. Crack cocaine was developed \_\_\_\_\_.
  - a) with funding by Nancy Reagan as a safer alternative to regular cocaine
  - b) by drug traffickers as a cheaper and stronger alternative when sales of powdered cocaine declined
  - c) accidentally, by pharmacists working on new medications
  - d) in home labs in rural areas, hence its nickname 'hillbilly heroin'
- 3. True or False? You can become psychologically dependent on cocaine, but it is not physically addictive.
- 4. Cocaine is in a class of drugs called \_\_\_\_\_.
  - a) stimulants
  - b) depressants
  - c) psychoactives
  - d) amphetamines
- 5. When taken, cocaine can \_\_\_\_\_. (Choose all that apply.)
  - a) increase your blood pressure and heart rate
  - b) produce feelings of euphoria
  - c) produce feelings of anxiety and depression
  - d) cause you to have seizures
- 6. How can cocaine (including crack) be taken? (Choose all that apply.)
  - a) Snorted
  - b) Smoked
  - c) Dissolved in water and injected
  - d) All of the above

<ul> <li>7. A coca leaf contains about% cocaine; the cocaine sold by drug dealers has been processed to make it stronger.</li> <li>a) .1</li> <li>b) 1</li> <li>c) 10</li> <li>d) 50</li> </ul>
<ul> <li>8. Is is not unusual for drug cartels to use in cocaine production and transportation.</li> <li>a) dogs</li> <li>b) pharmaceutical-company standards</li> <li>c) children as young as 5 years old</li> <li>d) (all of the above)</li> </ul>
9. True or False? Brain scans reveal that cocaine users do not use glucose — the energy source for brain cells — as efficiently as nonusers do.
10. Using cocaine
a) affects different people in different ways; some users never seem to have a problem, others
become addicted or even die even after casual use
<ul> <li>b) affects the reward center of the brain, causing addiction the first time the drug is intro- duced into the body</li> </ul>
c) is physically harmless, as long as the strongly potent leaves are not directly consumed
d) is dangerous, but the process of withdrawal is relatively easy

# **Assessment Questions Answer Key**

- 1. By the mid 1800s, purified cocaine was \_\_\_\_\_. (Choose the answer that is NOT true.)
  - a) used in patent medicines as a local anesthetic
  - b) an ingredient in Coca-Cola until the introduction of drug laws
  - c) used only by indigenous peoples
  - d) an ingredient in nerve tonics
- A: (c) used only by indigenous peoples
- 2. Crack cocaine was developed \_\_\_\_\_.
  - a) with funding by Nancy Reagan as a safer alternative to regular cocaine
  - b) by drug traffickers as a cheaper and stronger alternative when sales of powdered cocaine declined
  - c) accidentally, by pharmacists working on new medications
  - d) in home labs in rural areas, hence its nickname 'hillbilly heroin'
- A: (b) by drug traffickers as a cheaper and stronger alternative when sales of powdered cocaine declined
- 3. True or False? You can become psychologically dependent on cocaine, but it is not physically addictive.
- A: False. Cocaine is a highly addictive drug that works by interacting with the brain's pleasure and reward systems.
- 4. Cocaine is in a class of drugs called \_\_\_\_\_.
  - a) stimulants
  - b) depressants
  - c) psychoactives
  - d) amphetamines
- A: (a) stimulants
- 5. When taken, cocaine can \_\_\_\_\_. (Choose all that apply.)
  - a) increase your blood pressure and heart rate
  - b) produce feelings of euphoria
  - c) produce feelings of anxiety and depression
  - d) cause you to have seizures
- A: All of these answers are correct.

	How can cocaine (including crack) be taken? (Choose all that apply.)  a) Snorted b) Smoked c) Dissolved in water and injected d) All of the above
7.	A coca leaf contains about% cocaine; the cocaine sold by drug dealers has been processed to make it stronger.  a) .1  b) 1  c) 10  d) 50
<i>A:</i>	(b) 1
	Is is not unusual for drug cartels to use in cocaine production and transportation.  a) dogs b) pharmaceutical-company standards c) children as young as 5 years old d) (all of the above) (c) children as young as 5 years old
	True or False? Brain scans reveal that cocaine users do not use glucose — the energy source for brain cells — as efficiently as nonusers do.  *True*
10	<ul> <li>Using cocaine</li> <li>a) affects different people in different ways; some users never seem to have a problem, other become addicted or even die even after casual use</li> <li>b) affects the reward center of the brain, causing addiction the first time the drug is introduced into the body</li> <li>c) is physically harmless, as long as the strongly potent leaves are not directly consumed d) is dangerous, but the process of withdrawal is relatively easy</li> </ul>

A: (a) affects different people in different ways; some users never seem to have a problem, others become

addicted or even die even after casual use

# **Additional Resources**

#### Freevibe: National Youth Anti-Drug Media Campaign

www.freevibe.com

#### **Just Think Twice**

Drug Enforcement Administration: Demand Reduction/Street Smart Prevention www.justthinktwice.com

#### National Institute on Drug Abuse

The Science of Drug Abuse & Addiction www.drugabuse.gov

#### **NIDA for Teens**

Facts, Stories, Brain Games http://teens.drugabuse.gov

#### U.S. Department of Health and Human Services

Substance Abuse & Mental Health Services Administration Alcohol & Drug Information http://ncadi.samhsa.gov

#### The Partnership for a Drug-Free America

www.drugfree.org

#### **Cocaine Anonymous**

www.ca.org

#### **Drug Policy Alliance Network**

www.drugpolicy.org

#### www.streetdrugs.org

www.streetdrugs.org

## **Additional Products from Films Media Group**

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#### Stimulants: The Mechanics of Pleasure (DVD/VHS)

Like an avenue filled with neon signs, the brain's so-called pleasure pathway can light up or go dark, depending on what sort of stimulation it receives. This program explores the workings of the human nerve center under the influence of cocaine, amphetamines, and other stimulants, and shows how our understanding of brain disorders and drug addiction has increased by studying these drugs. Profiling the pioneering work of Bruno Giros, Gaetano Di Chiara, Nora Volkow, Wolfram Schultz, Barry Everitt, Trevor Robbins, and others, the program provides viewers with a detailed history of the discovery and development of euphoria-inducing substances. (52 minutes) © 2005 (# 36365)

#### Addiction: The HBO Series (DVD/VHS)

Featuring valuable case studies and expert commentary, this 14-part series offers a wide-ranging look at the science and the human face of addiction. Personal stories from drug users and their family members are combined with in-depth perspectives from leading psychologists, drug counselors, and other experts on substance abuse. Educators will find the series format — beginning with a comprehensive overview followed by 13 short documentaries — helpful for both group discussions and lectures. Contains mature themes, occasional explicit language, and some graphic injury footage. An HBO Production.

The series includes Addiction: A Comprehensive View | What Is Addiction? | Understanding Relapse | The Search for Drug Treatment: A Challenging Journey | The Adolescent Addict | An Interview with Nora D. Volkow, M.D. | An Interview with Mark L. Willenbring, M.D. | An Interview with Michael L. Dennis, Ph.D. | An Interview with Kathleen T. Brady, M.D., Ph.D. | Getting an Addict into Treatment: The CRAFT Approach | Treating Stimulant Addiction: The CBT Approach | Opiate Addiction: Understanding Replacement Therapy | South Boston Drug Court | A Mother's Desperation: Resorting to the Law. (21-87 minutes each) © 2006 (# 39791)

#### Twelve: Young Addicts Speak from the Heart (DVD/VHS)

Kat grew up in an alcoholic home. John made drinking the center of his life at a young age. Rene's parents divorced when he was five, while Chris and Dante both seemed to have everything they wanted — but all became substance abusers. Through detailed, candid conversations, this program goes inside the childhood memories and emotional lives of recovering addicts who started their habits at, or close to, age 12. Their stories reveal unique qualities and experiences as well as patterns seen over and over again among alcoholics and drug abusers—often involving crime and social isolation. In addition to their pain and regret, the participants also discuss the most daunting challenge of all: the ongoing process of recovery. (45 minutes) © 2008 (# 40034)

#### Altered States: A History of Drug Use in America (DVD/VHS)

Whether it's caffeine, nicotine, or morphine, drugs of choice have defined our lives and history, with sometimes benevolent, sometimes tragic results. This program focuses on the history of America's drug use and abuse, from the days when the early European settlers became enamored of tobacco, through Prohibition, and up to today. The problems we see today existed in other forms and with other drugs throughout our history. The reasons for using drugs have also remained constant: to ease pain, alleviate boredom, or to expand our consciousness. The program traces the patterns of American drug use and abuse and documents the cultural, social, and political movements that impacted, or were impacted by, the use of drugs. (58 minutes) © 1993 (#5863)

#### If ... Drugs Were Legal (DVD/VHS)

The year is 2015. A coalition of European countries has decriminalized most stimulants, narcotics, and hallucinogens. But has legalization made drug use — or the streets of London — any safer? This program depicts a future in which police officers, Big Pharma executives, and recreational drug consumers would, depending on one's perspective, either reap the benefits or suffer the consequences of a reversal in drug policy. Interwoven with the fictional narrative are real-world interviews highlighting both sides of the debate. Former chief constable Francis Wilkinson and Transform Drug Policy Foundation director Danny Kushlick argue for legalization, while toxicology expert John Henry and former customs investigator David Raynes warn against it. A BBCW Production. (61 minutes) © 2005 (#37525)

#### An Honest Citizen: Cocaine and Corruption in Colombia (DVD/VHS)

Colombia's \$5-billion-a-year cocaine trade has funded a brutal civil war involving leftist guerillas, right-wing paramilitaries, and a national government severely undermined by corruption. This Wide Angle report spotlights the efforts of Maria Cristina Chirolla, head of the Colombian attorney general's anti-money laundering office, to crack down on the drug lords. But the cost of her integrity is a life of almost constant fear as she evades drug barons plotting to assassinate her. This program also includes an interview with Marc Grossman, former U.S. Under Secretary of State for Political Affairs. (57 minutes) © 2004 (#36144)

### **Drugs:** A Destructive Force (Eight 17" x 22" posters)

How can substance abuse educators combat the allure of cocaine, LSD, tobacco, and other killers? By communicating the downside of drugs in no uncertain terms. This eight-poster series speaks directly to young people about the alarming risks and all-too-frequent tragedies linked with drug abuse. In addition to several types of dangerous substances — including prescription and over-the-counter medication — the deadly pitfalls of drunk driving are also examined. A Cambridge Educational Product. The set includes: *Cocaine* | *Alcohol* | *Marijuana* | *Smoking* 

| Prescription/OTC Drugs | Hallucinogens | Inhalants | Drunk Driving. © 2007 (# 37035)



Please send comments, questions, and suggestions to custserv@films.com