



ONDCP
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FACT SHEET

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Cocaine

Background

Cocaine, the most potent stimulant of natural origin, is extracted from the leaves of the coca plant (*Erythroxylon*). It was originally used in South America in the mid-19th century by natives of the region to relieve fatigue. Pure cocaine (cocaine hydrochloride) was first used as a local anesthetic for surgeries in the 1880s and was the main stimulant drug used in tonics and elixirs for treatment of various illnesses in the early 1900s. Crack, the freebase form of cocaine, derives its name from the crackling sound made when heating the sodium bicarbonate (baking soda) or ammonia used during production. Crack became popular in the mid-1980s because of its immediate high and its inexpensive production cost.

Cocaine most often appears as a white crystalline powder or an off-white chunky material. Powder cocaine is commonly diluted with other substances such as lactose, inositol, mannitol, and local anesthetics such as lidocaine to increase the volume of the substance and the profits of the drug dealer. Powder cocaine is usually snorted or dissolved in water and injected. Crack, or “rock,” is most often smoked.

Effects

The effects of cocaine normally occur immediately after ingestion and can last from a few minutes to a few hours. The duration of the drug’s effects depends on how it is ingested. Snorting cocaine produces a slow onset of effects that can last from 15 to 30 minutes, while the effects of smoking cocaine last from 5 to 10 minutes and produce a more intense high. Cocaine produces euphoric effects by building up dopamine in the brain, causing the continuous stimulation of neurons.

Users often feel euphoric, energetic, talkative, and mentally alert after taking small amounts of cocaine. Cocaine use can also temporarily lessen a user’s need for food or sleep. Short-term physiological effects include constricted blood vessels, dilated pupils, and increased temperature, heart rate, and blood pressure. Ingesting large amounts of cocaine can intensify the user’s high, but can also lead to bizarre, erratic, and violent behavior. Users who ingest large amounts may experience tremors, vertigo, muscle twitches, and paranoia. Other possible effects of cocaine use include irritability, anxiety, and restlessness.

Cocaine is a powerfully addictive drug. A tolerance is often developed when a user, seeking to achieve the initial pleasure received from first use, increases the dosage to intensify and prolong the euphoric effects.

Prevalence Estimates

During 2000, there were an estimated 2,707,000 chronic cocaine users and 3,035,000 occasional cocaine users in the United States.

According to *What America’s Users Spend on Illegal Drugs*, users spent \$35.3 billion on cocaine in 2000, a decrease from the \$69.9 billion spent in 1990. Americans consumed 259 metric tons of cocaine in 2000, a decrease from the 447 metric tons consumed in 1990.

The U.S. Department of Health and Human Services’ *Results From the 2002 National Survey on Drug Use and Health: National Findings* found that more than 33 million people age 12 and older (14.4%) in 2002 reported that they had used cocaine at least once in their lifetime (see table 1). More than 8 million Americans

Table 1. Percentage of Americans reporting lifetime use of cocaine, by age group, 2002

<u>Age Group</u>	<u>Lifetime</u>	<u>Past Year</u>	<u>Past Month</u>
12–17	2.7%	2.1%	0.6%
18–25	15.4	6.7	2.0
26 and older	15.9	1.8	0.7
Total population	14.4	2.5	0.9

Source: National Survey on Drug Use and Health.

Table 2. Percentage of Americans reporting lifetime use of crack, by age group, 2002

<u>Age Group</u>	<u>Lifetime</u>	<u>Past Year</u>	<u>Past Month</u>
12–17	0.7%	0.4%	0.1%
18–25	3.8	0.9	0.2
26 and older	3.9	0.7	0.3
Total population	3.6	0.7	0.2

Source: National Survey on Drug Use and Health.

(3.6%) age 12 and older had used crack cocaine at least once in their lifetime (see table 2).

According to the University of Michigan’s Monitoring the Future Study, in 2002, 3.6% of 8th graders, 6.1% of 10th graders, and 7.8% of 12th graders surveyed reported using cocaine at least once during their lifetime (see table 3). Of the students surveyed, 2.5% of 8th graders, 3.6% of 10th graders, and 3.8% of 12th graders reported using crack within their lifetime (see table 4).

The study also showed that, in 2002, 8.2% of college students and 13.5% of young adults (ages 19 to 28) reported using cocaine during their lifetime. Almost 2% of college students and 4.3% of young adults reported using crack cocaine during their lifetime.

In another study, among the high school students surveyed in 2001 as part of the Youth Risk Behavior Surveillance System, 9.4% reported using cocaine in their lifetime and 4.2% reported using cocaine in the 30 days before the survey. Hispanic students reported the highest percentage of lifetime cocaine use (14.9%),

Table 3. Percentage of students reporting cocaine use, 2001–2002

<u>Grade</u>	<u>Lifetime</u>		<u>Past year</u>		<u>Past month</u>	
	<u>2001</u>	<u>2002</u>	<u>2001</u>	<u>2002</u>	<u>2001</u>	<u>2002</u>
8th grade	4.3%	3.6%	2.5%	2.3%	1.2%	1.1%
10th grade	5.7	6.1	3.6	4.0	1.3	1.6
12th grade	8.2	7.8	4.8	5.0	2.1	2.3

Source: Monitoring the Future Study.

Table 4. Percentage of students reporting crack use, 2001–2002

<u>Grade</u>	<u>Lifetime</u>		<u>Past year</u>		<u>Past month</u>	
	<u>2001</u>	<u>2002</u>	<u>2001</u>	<u>2002</u>	<u>2001</u>	<u>2002</u>
8th grade	3.0%	2.5%	1.7%	1.6%	0.8%	0.8%
10th grade	3.1	3.6	1.8	2.3	0.7	1.0
12th grade	3.7	3.8	2.1	2.3	1.1	1.2

Source: Monitoring the Future Study.

followed by white students (9.9%), and black students (2.1%). Male students (10.3%) were more likely than female students (8.4%) to report lifetime cocaine use.

Regional Observations

According to *Pulse Check: Trends in Drug Abuse*, during the first half of 2002 powder and crack cocaine were widely to somewhat available in the 20 Pulse Check sites across the United States. Among powder cocaine users, the predominant group consisted of white males who were older than 30 and lived in the central city. Crack cocaine users tended to be young adults between the ages of 18 and 30 who lived in the central city and were usually from low socioeconomic backgrounds. Blacks were twice as likely as whites to be reported as the predominant crack cocaine user group by Pulse Check sites.

In December 2002, the 21 Community Epidemiology Work Group (CEWG) sites reported that cocaine/crack indicators showed mixed patterns of stabilization or decline in 10 sites, while 8 sites remained stable, 1 reported an increase, and 2 reported decreases.

The Arrestee Drug Abuse Monitoring (ADAM) Program collects data on male arrestees testing positive for cocaine at the time of arrest in 36 ADAM sites. According to preliminary 2002 data, the percentage of adult male arrestees testing positive ranged from 9.1% in Honolulu to 49.4% in Atlanta. Of the 23 ADAM sites collecting female-arrestee data, the percentage of female arrestees testing positive for cocaine at the time of arrest ranged from 7.4% in Honolulu to 55.2% in Indianapolis.

Availability

Production and Trafficking

According to the National Drug Intelligence Center’s *National Drug Threat Assessment 2003*, cocaine is the primary drug threat in the United States because of its high demand and availability, its expanding distribution to new markets, the high rate of overdose associated with it, and its relation to violence. Cocaine consumed in the United States originates from coca plants grown in South America. In 2002, there was the potential for 550 metric tons of cocaine production. Some 352

metric tons of export-quality cocaine was available in U.S. markets.

Approximately 75% of the coca cultivated for processing into cocaine is currently grown in Colombia, and Colombian drug trafficking organizations (DTOs) are responsible for most of the cocaine production, transportation, and distribution. Bahamian, Dominican, Haitian, Jamaican, and Puerto Rican criminal groups transport cocaine, usually under the supervision of Colombian DTOs. Mexican DTOs are involved in wholesale cocaine distribution in the United States. Gangs control retail distribution of powder and crack cocaine in urban areas, while local independent dealers are the primary distributors in suburban and rural areas.

Of the cocaine that enters the United States, 72% passes through the Mexico/Central America corridor. Another 27% moves through the Caribbean and 1% comes directly from South America.

Cocaine is readily available in most major cities in the United States. Powder cocaine is typically shipped to one of six main transportation hubs—Central Arizona (Phoenix/Tulsa), El Paso, Houston, Los Angeles, Miami, and Puerto Rico. New York City also is becoming a main transportation hub. Powder cocaine is then distributed through one of the primary distribution centers—Atlanta, Chicago, Dallas, Detroit, New York City, and Philadelphia.

Crack cocaine is not usually transported in large quantities or over long distances due to the more severe mandatory sentencing for possession and distribution of the drug. Retail distributors often convert powder cocaine into crack closer to the marketing areas.

Price and Purity

In 2001, the wholesale price for powder cocaine ranged from \$10,000 to \$36,000 per kilogram, \$400 to \$1,800 per ounce, and \$20 to \$200 per gram. Prices for crack cocaine ranged from \$3 to \$50 per rock, with prices usually ranging from \$10 to \$20. In 2001, the average nationwide purity of powder cocaine was 69% for kilogram quantities and 56% for gram quantities.

Enforcement

Arrests

The Federal Bureau of Investigation estimates that, during 2001, cocaine and heroin and their derivatives accounted for 9.7% of drug abuse violation arrests for sale and manufacturing and 23.1% for possession arrests (estimates of cocaine arrests alone are not available).

From October 1, 2000, to September 30, 2001, there were 12,457 Federal drug arrests for cocaine, representing 37% of all Federal drug arrests. Of those arrested by

Federal agents for cocaine, 40% were white and 59% were black.

Seizures

According to the Federal-wide Drug Seizure System (FDSS), U.S. Federal law enforcement authorities seized 105,885 kilograms of cocaine in 2001 and 60,874 kilograms from January to September 2002. FDSS consolidates information about drug seizures made within the jurisdiction of the United States by DEA, the Federal Bureau of Investigation, and U.S. Customs and Border Protection, as well as maritime seizures made by the U.S. Coast Guard. FDSS eliminates duplicate reporting of seizures involving more than one Federal agency.

According to U.S. Customs and Border Protection, more than 171,000 pounds of cocaine were seized nationally during fiscal year (FY) 2002. Large amounts of cocaine were seized at the Southwest border and in South Florida—a total of more than 30,000 pounds at each location.

Adjudication

During FY 2001, 5,356 Federal drug offenders were convicted of committing an offense involving powder cocaine and 4,999 were convicted of committing a crack cocaine offense. Of those convicted of a Federal drug offense for powder cocaine, 50.2% were Hispanic, 30.5% were black, 18.1% were white, and 1.2% were of another race. Of those convicted of a Federal drug offense involving crack cocaine, 82.8% were black, 9.3% were Hispanic, 7% were white, and 0.9% fell into another race category.

Corrections

Federal drug offenders received longer sentences for crack cocaine than for any other drug. In FY 2001, the average length of sentence received by Federal crack cocaine offenders was 115 months, compared with 88.5 months for methamphetamine offenders, 77 months for powder cocaine offenders, 63.4 months for heroin offenders, 38 months for marijuana offenders, and 41.1 months for other drug offenders. According to a 1997 Bureau of Justice Statistics survey of Federal and State prisoners, approximately 65.5% of Federal and 72.1% of State drug offenders were incarcerated for a cocaine offense.

Consequences of Use

Cocaine use can lead to medical complications such as cardiovascular effects (disturbances in heart rhythm, heart attacks), respiratory failure, neurological effects (strokes, seizure, and headaches), and gastrointestinal complications such as abdominal pain and nausea. Cocaine use has been linked to heart disease, has been found to trigger ventricular fibrillation (chaotic

heart rhythms), can accelerate a user's heart beat and breathing, and can increase a user's blood pressure and body temperature. Additional physical symptoms of cocaine use include blurred vision, fever, muscle spasms, convulsions, and coma. In rare instances, sudden death can occur on the first use of cocaine or unexpectedly thereafter. Cocaine-related deaths are often a result of cardiac arrest or seizures followed by respiratory arrest.

Other medical complications are related to the method of ingestion. For example, users who snort cocaine may lose their sense of smell, have nose bleeds, have problems swallowing, and have an overall irritation of their nasal septum that leads to a chronic runny nose.

Combined cocaine and alcohol use converts in the body to cocaethylene and causes a longer duration of effects in the brain that is more toxic than each drug used alone. This mixture results in more drug-related deaths than any other combination of drugs.

Although the effects of prenatal cocaine exposure are not completely understood, scientific studies have shown that such afflicted babies are often born prematurely, have low birth weights and smaller head circumferences, and are shorter in length. Originally thought to suffer irreversible neurological damage, these "crack babies" now appear to recover from the drug exposure. This is not to underestimate the many subtle but significant effects such babies later experience because of their exposure to cocaine, including impairment in behaviors that are crucial to concentrating in school.

According to emergency department (ED) data collected by the Drug Abuse Warning Network (DAWN), there were 135,711 reported mentions of cocaine in 1995 (see table 5). A drug mention refers to a substance that was recorded (mentioned) during a visit to the ED. This number increased to 199,198 in 2002.

According to DAWN's 2001 mortality data, of the 42 metropolitan areas studied, 14 reported a decrease in cocaine mentions and 14 saw an overall increase since 2000. The remaining metropolitan areas had stable cocaine mentions.

Treatment

Medications to treat cocaine addiction are not available, although researchers are working to identify and test new options. The most promising experimental medication is selegiline, which still needs an appropriate method of administration. Disulfiram, a medication that has been used to treat alcoholism, has been shown to be effective in treating cocaine abuse in clinical trials. Antidepressants are usually prescribed to deal with mood changes that come with cocaine withdrawal.

Table 5. Number of emergency department mentions of cocaine, 1995–2002

1995	1996	1997	1998	1999	2000	2001	2002
135,711	152,420	161,083	172,011	168,751	174,881	193,034	199,198

Source: Drug Abuse Warning Network.

Medical treatments are also being developed to deal with cocaine overdose.

Treatments such as cognitive-behavioral coping skills have been shown to be effective in addressing cocaine addiction but are a short-term approach that focuses on the learning processes. Behavioral treatment attempts to help patients recognize, avoid, and cope with situations in which they are most likely to use cocaine.

According to the Treatment Episode Data Set, cocaine was the third most common illicit drug responsible for treatment admissions in 2000, accounting for 13.6% of all drug treatment admissions. There were 158,524 total admissions for smoked cocaine, accounting for 9.9% of all drug treatment admissions (73% of all cocaine admissions), and 59,787 total admissions for non-smoked cocaine, accounting for 3.7% of all drug treatment admissions.

Those admitted for smoking crack cocaine were predominantly black (59%), followed by whites (32%) and Hispanics (6.3%). Approximately 42% of those admitted for smoking crack were female. Of all individuals admitted for smoking crack, most (59%) did not use the drug until age 21 or older and 41% reported daily use.

Those admitted for nonsmoked cocaine were predominantly white males (29%), followed by black males (23%), white females (18%), and black females (12%). More than 40% of those admitted for nonsmoked cocaine reported first using the drug by the age of 18. The more common form of nonsmoked cocaine ingestion was by inhalation (70%), followed by injection (15%).

Scheduling and Legislation

Cocaine was first controlled in the United States under the Harrison Narcotic Act of 1914. Currently, cocaine falls under Schedule II of the Controlled Substances Act. A Schedule II Controlled Substance has a high potential for abuse, is currently accepted for medical use in treatment in the United States, and may lead to severe psychological or physical dependence. Currently, cocaine can be administered by a doctor for legitimate medical uses, such as for a local anesthetic for some eye, ear, and throat surgeries.

Street Terms

Street terms for cocaine	
All American drug	Icing
Aspirin (powder cocaine)	Jelly
Barbs	Lady
Basa (crack cocaine)	Mama coca
Base (crack cocaine)	Mojo
Bernie	Nose stuff
Big C	Oyster stew
Black rock (crack cocaine)	Paradise
CDs (crack cocaine)	Pariba (powder cocaine)
Candy sugar (powder cocaine)	Pearl
Coca	Real tops (crack cocaine)
Crack	Rocks (crack cocaine)
Double bubble	Roxanne (crack cocaine)
Electric Kool-Aid (crack cocaine)	Scorpion
Flave (powder cocaine)	Sevenup
Florida snow	Snow white
Foo foo	Sugar boogers (powder cocaine)
Gin	Twinkie (crack cocaine)
Gold dust	Yam (crack cocaine)
Happy dust	Zip

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