

Awareness Training

On

Cocaine



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Navy Personnel Command
Drug Detection and Deterrence Branch (Pers-671)
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TAKE TIME TO PREPARE!

One of the best ways to combat illicit drug abuse by Sailors is to stay informed and keep them informed.

Goal: From the information presented, participants will become aware of what cocaine/crack cocaine is, who is using cocaine/crack cocaine, the symptoms of cocaine/crack cocaine use and the health consequences associated with cocaine/crack cocaine use.

I. Training Objectives: Participants will be able to:

- ◆ explain what cocaine/crack cocaine is, how these drugs are used and who is using them;
- ◆ identify the behavioral and physical symptoms of cocaine/crack cocaine use;
- ◆ Cite the short and long-term health effects of cocaine/crack cocaine use;
- ◆ Identify the most commonly used street terms associated with cocaine.

II. Information:

- ◆ This awareness training has been developed so the information can be delivered, in whole as part of command GMT or in part via Plan-of-the-Day notes, memos, Division/Workcenter notices, flyers, posters, etc.
- ◆ Before conducting training, trainer may wish to get further information from:

National Institute on Drug Abuse (NIDA) by logging on the NIDA Website: <http://www.drugabuse.gov/> or call toll free 1-888-644-6432;

National Clearinghouse for Alcohol & Drug Information (NCADI) Website: www.health.org or call toll free 1-800-729-6686;

Navy Drug Detection and Deterrence Branch (Pers-603) DSN 882-4240, 4247; commercial (901) 874-4626, 4247; or [E-mail](#)

Cocaine Awareness Training

INTRODUCTION

Cocaine is a powerfully addictive drug. Once having tried cocaine, an individual cannot predict or control the extent to which he or she will continue to use the drug.

Cocaine users snort, inject, and/or smoke the drug. Snorting is the process of inhaling cocaine powder through the nose where it is absorbed into the bloodstream through the nasal tissues. Injecting is the act of using a needle to release the drug directly into the bloodstream. Smoking involves inhaling cocaine vapor or smoke into the lungs where it is rapidly absorbed into the bloodstream.

"Crack" is the street name given to cocaine that has been processed for smoking. The term "crack" refers to the crackling sound heard when the mixture is smoked (heated), presumably from the sodium bicarbonate. Crack is made by mixing cocaine with ether, ammonia or sodium bicarbonate (baking soda) and water and heating the drug to remove the hydrochloride. This creates a processed form of cocaine that can be smoked.

There is great risk whether cocaine is ingested by inhalation (snorting), injection, or smoking. It appears that compulsive cocaine use may develop even more rapidly if the substance is smoked rather than snorted. Smoking allows extremely high doses of cocaine to reach the brain very quickly and brings an intense and immediate high. The injecting drug user is at risk for transmitting or acquiring HIV infection/AIDS if needles or other injection equipment is shared.

WHAT IS COCAINE?

Cocaine is a powerfully addictive stimulant that directly affects the brain. It is one of the oldest known drugs. The pure chemical, cocaine hydrochloride, has been an abused substance for more than 100 years, and coca leaves, the source of cocaine, have been ingested for thousands of years.

Pure cocaine was first extracted from the leaf of a species of coca bush, which grows primarily in Peru and Bolivia, in the mid-19th century. In the early 1900s, it became the main stimulant drug

used in most of the tonics/elixirs that were developed to treat a wide variety of illnesses. Today, cocaine is a Schedule II drug, meaning that it has high potential for abuse, but can be administered by a doctor for legitimate medical uses, such as a local anesthetic for some eye, ear, and throat surgeries.

There are basically two chemical forms of cocaine: the hydrochloride salt and the "freebase." The hydrochloride salt, or powdered form of cocaine, dissolves in water and, when abused, can be taken intravenously (by vein) or intranasal (in the nose) also known as snorting. Freebase refers to a compound that has not been neutralized by an acid to make the hydrochloride salt. The freebase form of cocaine can be smoked.

Cocaine is generally sold on the street as a fine, white, crystalline powder, known as "coke," "C," "snow," "flake," or "blow." Street dealers generally dilute it with such inert substances as cornstarch, talcum powder, and/or sugar, or with such active drugs as procaine (a chemically-related local anesthetic) or with such other stimulants as amphetamines.

Crack is the street name given to the freebase form of cocaine that has been processed from the powdered cocaine hydrochloride form to a smokable substance. The term "crack" refers to the crackling sound heard when the mixture is smoked. Crack cocaine is processed with ammonia or sodium bicarbonate (baking soda) and water, and heated to remove the hydrochloride.

Because crack is smoked, the user experiences a high in less than 10 seconds. When cocaine is smoked, the user rapidly experiences a more intense "high" because the drug is absorbed quickly into the bloodstream - directly from the blood vessels in the lungs. This rather immediate and euphoric effect is one of the reasons why that crack is highly addictive and enormously popular since the mid 1980s. Another reason is that crack is inexpensive both to produce and to buy.



Cocaine (powder form).



Crack Cocaine.



Cocaine paraphernalia (hollow straw or currency, razor blade and mirror.)



Crack paraphernalia.

HISTORY OF COCAINE

Cocaine was first synthesized in 1855. It was not until 1880, however, that its effects were recognized by the medical world.

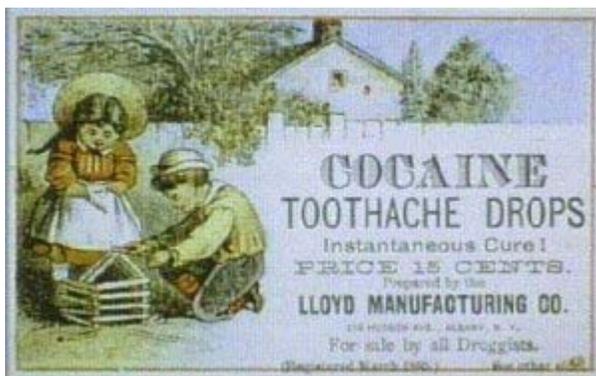
Cocaine was frequently, and mistakenly, promoted as a safe and useful tonic that could cure depression and sexual disorders. In 1886, John Pemberton - a chemist who invented the drink Coca Cola - added cocaine as a main ingredient to the popular drink. Many tonics and elixirs were mixed with Cocaine and opium resulting in mass addiction to both drugs and an increasingly large drug culture in American society. Many famous celebrities during the height of Cocaine use in the world became addicted to the drug.

In the same way as other narcotics like opium and heroin during this time, cocaine also began to be used as an active ingredient in a variety of "cure all" tonics and beverages. In many of the tonics that drug companies were producing at this time, cocaine would be mixed with opiates and administered freely to old and young alike. It wasn't until some years later that the dangers of these drugs became apparent.

In fact, it was the negative side effects of habitual cocaine use that was responsible for coining the phrase, "dope fiend". This terminology came about because of the behavior of a person abusing

cocaine for prolonged periods of time. Because cocaine is such a powerful stimulant, prolonged daily use of the drug creates severe sleep deprivation and loss of appetite. A person might go days or sometimes weeks without sleeping or eating properly. The user often experiences psychotic behavior. They hallucinate and become delusionary. Coming down from the drug causes a severe state of depression for the person in withdrawal. This person can then become so desperate for more of the drug that they will do just about anything to get more of it, including murder. If the drug is not readily available, the depression one experiences in withdrawal can become so great the user will sometimes become suicidal. It is because of this heinous effect on the user that the word "fiend" became associated with cocaine addiction.

Over the course of the next several years the American majority became more and more aware of the dangers of cocaine. As the severity of this problem became more and more apparent, concern mounted to an eventual public outcry to ban the social use of cocaine. This public pressure forced Pemberton to remove cocaine from Coca Cola in 1903. Eventually the public pressure became so great a national prohibition was placed on cocaine. The country's legislators took notice, and in 1920 cocaine was added to the list of narcotics to be outlawed by the passing of The Dangerous Drug Act of 1920. Unfortunately, as with the opiates like heroin, the dangers of cocaine abuse were recognized by lawmakers after the fact. The market for cocaine had already been established and was deeply entrenched into American history and culture and is with us today.



An 1885 Cocaine Toothache Drops advertisement



Circa 1900 Coca-Cola® (with cocaine) advertisement.

**THE SCOPE OF COCAINE
USE**

An estimated 1.5 million Americans (0.7 percent of those age 12 and older) are currently cocaine users, according to the 1997 NHSDA. This number has not changed significantly since 1992, although it is a dramatic decrease from the 1985 peak of 5.7 million cocaine users (3 percent of the population). Based upon additional data sources that take into account users underrepresented in the NHSDA, the Office of National Drug Control Policy estimates the number of current chronic cocaine users at 3.6 million.

Adults 18 to 25 years old have a higher rate of current cocaine use than those in any other age group. Overall, men have a higher rate of current cocaine use than do women. Also, according to the 1997 NHSDA, rates of current cocaine use were 1.4 percent for African Americans, 0.8 percent for Hispanics, and 0.6 percent for Caucasians.

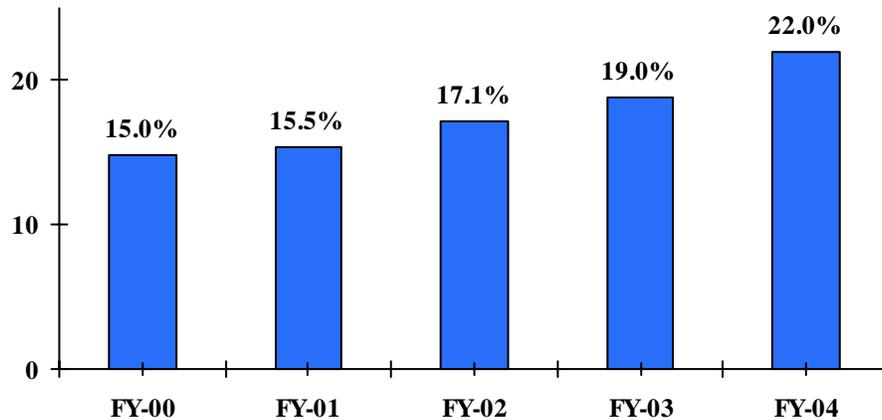
The 2002 Monitoring the Future Survey, which annually surveys teens, college students, and 19-40 year old adults for recent drug use, reported that crack cocaine use spread rapidly from the early to mid-1980s. Among high school seniors, crack cocaine use leveled in 1987 to a 3.9% annual prevalence rate although crack cocaine use continued to spread to new communities. Clearly, crack cocaine had quickly attained a reputation as a dangerous drug. In 1987, the general public regarded crack cocaine as the most dangerous of all drugs. Annual prevalence rates dropped sharply after 1987, declining to 1.5% by 1991, where it remained until 1993. Crack cocaine use began to rise gradually after 1993, when it was 1.5%, to 2.7% by 1999 before declining in 2000 and then leveling.

Crack cocaine use among young adults (1 to 10 years past high school) in 2002 remained unchanged from 1.0% in 1992. Because the crack cocaine epidemic of the mid-1980's is not that long ago, the 2002 survey suggests this age group may still remember the lessons learned and attitudes about crack cocaine during that historical period. The survey also suggests that the leveling off of cocaine crack use may be related to the particularly intense and early media coverage of the hazards of crack cocaine. This precipitated an early "capping off" of an epidemic by deterring many would be crack cocaine users and by motivating many experimental users to desist use.

Despite these changes, crack cocaine remains a serious problem in the United States. The National Household Survey on Drug Abuse (NHSDA) estimated the number of current crack users to be about 604,000 in 1997, which overall, does not reflect any significant change since 1988. The 2002 Monitoring the Future Survey, reports that more than one in seven young Americans (15% in 2002) have tried cocaine by the age of 30.

Data from the Drug Abuse Warning Network (DAWN) showed that cocaine-related emergency room visits, after increasing 78 percent between 1990 and 1994, remained level between 1994 and 1996, with 152,433 cocaine-related episodes reported in 1996.

Between FY-00 and FY-04, cocaine use among Navy personnel accounted for 14-22% of all positive drug urinalysis results. The graph below identifies the percentage of sailors who tested positive for cocaine from FY-00 to Jan 04. This information is based upon Drug and Alcohol Abuse Reports submitted from the fleet and reported to the Alcohol and Drug Management Information



PERCENT OF POSITIVE URINALYSES POSITIVE FOR COCAINE

Tracking System (ADMITS).

SHORT-TERM EFFECTS OF COCAINE

Cocaine's effects appear almost immediately after a single dose. Cocaine powder is snorted while crack cocaine is smoked. The user experiences a more rapid intense "high" after smoking crack cocaine than by snorting the powder. Taken in small amounts (up to 100 mg), cocaine usually makes the user feel euphoric, energetic, talkative, and mentally alert, especially to the sensations of sight, sound, and touch.

The duration of cocaine's immediate euphoric effects depends upon the route of administration. The faster the absorption, the more intense the high. Also, the faster the absorption, the shorter the duration of action. The high from snorting is relatively slow in onset, and may last 15 to 30 minutes, while that from smoking may last 5 to 10 minutes.

The adverse side effects of cocaine include constricted blood vessels; dilated pupils; and increased temperature, heart rate, and blood pressure. As with any drug, the more drug a person uses, the more intense the effects, which include bizarre, erratic and violent behavior. Other adverse side effects include dizziness, muscle twitches, paranoia, and tremors. The cocaine user will appear to be restless and irritable. In some 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.

Short-term effects of cocaine

- Increased energy
- Decreased appetite
- Mental alertness
- Increased heart rate and blood pressure
- Constricted blood vessels
- Increased temperature
- Dilated pupils

LONG-TERM EFFECTS OF COCAINE

Cocaine is a powerfully addictive drug! Once having tried cocaine, an individual may have difficulty predicting or controlling the extent to which he or she will continue to use the drug. Cocaine's stimulant and addictive effects are thought to be primarily a result of its ability to inhibit re-absorption of dopamine by nerve cells. Dopamine is released as part of the brain's reward system, and is either directly or indirectly involved in the addictive properties of every major drug of abuse.

A tolerance to cocaine's high may develop, with many addicts reporting that they seek but fail to achieve as much pleasure as they did from their first experience. Some users will frequently increase their doses to intensify and prolong the euphoric effects. While tolerance to the high can occur, users can also become more sensitive (sensitization) to cocaine's anesthetic and convulsant effects, without increasing the dose taken. This increased sensitivity may explain some deaths occurring after apparently low doses of cocaine.

Long-term effects of cocaine

- Addiction**
- Irritability and mood disturbances**
- Restlessness**
- Paranoia**
- Auditory hallucinations**

Use of cocaine in a binge, during which the drug is taken repeatedly and at increasingly high doses, leads to a state of increasing irritability, restlessness, and paranoia. This may result in a full-blown paranoid psychosis, in which the individual loses touch with reality and experiences auditory hallucinations.

MEDICAL CONSEQUENCES OF COCAINE USE

There are enormous medical complications associated with cocaine use. Some of the most frequent complications are cardiovascular effects, including disturbances in heart rhythm and heart attacks; such respiratory effects as chest pain and respiratory failure; neurological effects, including strokes, seizure, and headaches;

and gastrointestinal complications, including abdominal pain and nausea.

Cocaine use has been linked to many types of heart disease. Cocaine has been found to trigger chaotic heart rhythms, called ventricular fibrillation; accelerate heartbeat and breathing; and increase blood pressure and body temperature. Physical symptoms may include chest pain, nausea, blurred vision, fever, muscle spasms, convulsions, and coma.

Different routes of cocaine administration can produce different adverse effects. Regularly snorting cocaine, for example, can lead to loss of sense of smell, nosebleeds, problems with swallowing, hoarseness, and an overall irritation of the nasal septum, which can lead to a chronically inflamed, runny nose. Ingested cocaine can cause severe bowel gangrene, due to reduced blood flow. And, persons who inject cocaine have puncture marks and "tracks," most commonly in their forearms. Intravenous cocaine users may also experience an allergic reaction, either to the drug, or to some additive in street cocaine, which can result, in severe cases, in death. Because cocaine has a tendency to decrease food intake, many chronic cocaine users lose their appetites and can experience significant weight loss and malnourishment.

Research has revealed a potentially dangerous interaction between cocaine and alcohol. Taken in combination, the two drugs are converted by the body to coca ethylene. Coca ethylene has a longer duration of action in the brain and is more toxic than either drug alone. While more research needs to be done, it is noteworthy that the mixture of cocaine and alcohol is the most common two-drug combination that results in drug-related death.

The full extent of the effects of prenatal drug exposure on a child is not completely known, but many scientific studies have documented that babies born to mothers who abuse cocaine during pregnancy are often prematurely delivered, have low birth weights, smaller head circumferences, and are often shorter in length.

Estimating the full extent of the consequences of maternal drug abuse is difficult, and determining the specific hazard of a particular drug to the unborn child is even more problematic, given that, typically, more than one substance is abused. There are many factors that combined make it difficult to determine the direct impact of perinatal cocaine use on maternal and fetal outcome. Some examples of such factors include the amount and number of all drugs

abused; inadequate prenatal care; abuse and neglect of the children due to the mother's lifestyle; socio-economic status; poor maternal nutrition; other health problems; and exposure to sexually transmitted diseases.

Many may recall that "crack babies," or babies born to mothers who used cocaine while pregnant, were written off by many a decade ago as a lost generation. They were predicted to suffer from severe, irreversible damage, including reduced intelligence and social skills. It was later found that this was a gross exaggeration. Most crack-exposed babies appear to recover quite well. However, the fact that most of these children appear normal should not be over-interpreted as a positive sign. Using sophisticated technologies, scientists are now finding that exposure to cocaine during fetal development may lead to subtle, but significant, deficits later, especially with behaviors that are crucial to success in the classroom, such as blocking out distractions and concentrating for long periods of time.

**A FEW OF THE STREET TERMS FOR
COCAINE**

Aspirin	Aunt Nora	Bernice
Bernie's Flakes	Birdie powder	Bolivian marching
Bouncing powder	Candy C	Candy sugar
Devil's dandruff	Fast white lady	Flake
Flave	Foolish powder	Friskie powder
Happy powder	Joy powder	Line
Mama Coca	Marching powder	Nose stuff
Paradise Pariba	Powder diamonds	Peruvian Lady
Sugar boogers	White dragon	Shake
Shrile	Soft White boy	Star-spangled powder
Tardust	Uptown	White mosquito
Yao		

**FOR MORE INFORMATION ON COCAINE
USE**

More information can be obtained from:

National Institute on Drug Abuse (NIDA) by logging on the NIDA website: www.drugabuse.gov or call toll free 1-888-644-6432.

National Clearinghouse for Alcohol & Drug Information (NCADI) Website: www.health.org or call toll free 1-800-729-6686; or

Navy Drug Detection and Deterrence Branch (Pers-603) DSN 882-4252, 4240, or 4400; commercial (901) 874-4252, 4240, or 4400. [E-mail](#)