Facts on cocaine

Cocaine is a powerful central nervous system (CNS) stimulant that heightens alertness, inhibits appetite and the need for sleep, and provides intense feelings of pleasure. It is prepared from the leaf of the Erythroxylon coca bush, which grows primarily in Peru and Bolivia. Street dealers dilute it with inert (non-psychoactive) but similar-looking substances such as cornstarch, talcum powder, and sugar, or with active drugs such as procaine and benzocaine (used as local anesthetics), or other CNS stimulants such as amphetamines. Nevertheless, illicit cocaine has actually become purer over the years; according to RCMP figures, in 1988 its purity averaged about 75%. With repeated administration over time, users experience the drug's long-term effects. Euphoria is gradually displaced by restlessness, extreme excitability, insomnia, and paranoia - and eventually hallucinations and delusions. These conditions, clinically identical to amphetamine psychosis and very similar to paranoid schizophrenia, disappear rapidly in most cases after cocaine use is ended. Tolerance to any drug exists when higher doses are necessary to achieve the same effects once reached with lower doses. But scientists have not observed tolerance to cocaine's stimulant effect: users may keep taking the original amount over extended periods and still experience the same euphoria. Physical effects of cocaine use include constricted peripheral blood vessels, dilated pupils, and increased temperature, heart rate, and blood pressure. The duration of cocaine's immediate euphoric effects, which include hyperstimulation, reduced fatigue, and mental clarity, depends on the route of administration. The faster the absorption, the more intense the high. On the other hand, the faster the absorption, the shorter the duration of action. The high from snorting may last 15 to 30 minutes, while that from smoking may last 5 to 10 minutes.

Increased use can reduce the period of stimulation. When people mix cocaine and alcohol consumption, they are compounding the danger each drug poses and unknowingly forming a complex chemical experiment within their bodies. NIDA-funded researchers have found that the human liver combines cocaine and alcohol and manufactures a third substance, cocaethylene, that intensifies cocaine's euphoric effects, while possibly increasing the risk of sudden death. Yes. Cocaine is often used with other illicit drugs, especially alcohol, marijuana, and heroin. Some users alternate snorting lines of cocaine and heroin, known as " crisscrossing," or inject the two drugs as a " speedball." Crack is also smoked with marijuana joints or marijuana cigars/blunts, a combination called a " primo." Alcoholic beverages can intensify cocaine's effects, and may place users at greater risk of sudden death. A gram of powder cocaine may cost between $20-$100, while crack rocks can be found for as little as $5-10 each. Powder cocaine is processed with many volatile solvents, such as kerosene, benzene, and gasoline, and these poisons can remain in the cocaine found on the street. In addition, dealers on the street may " cut" or combine the cocaine with other substances, like talcum powder, amphetamines, anesthetics, and other substances that may bring the purity down and cause unwanted side effects. Cocaine use can cause dilated pupils, nausea, headaches, sweating, increased heart rate, elevated blood pressure, insomnia, loss of appetite, and seizures. Cocaine speeds up the heart by stimulating the same nerves that cause fear causing the heart to beat erratically or stop. Cocaine also shrinks the peripheral blood vessels and places extra pressure on the heart and circulatory system. These effects can lead to heart attacks, strokes, brain seizures, cardiac arrest, and respiratory failure in otherwise healthy

people. New and chronic users can die suddenly. In Texas, 200-300 cocaine overdose deaths due to cocaine use have been reported each year. Chronic use of cocaine can cause heart problems, permanent liver damage, nutritional deficiencies, and long-term changes in the brain, triggering intense craving for cocaine. In addition, research has shown that long-term cocaine use can compromise the immune system. Other effects are related to how cocaine is administered. Snorting: Snorting cocaine may cause a loss of the sense of smell, nose bleeds, sores around the nose and upper lip, swallowing problems, hoarseness, and sinus problems. Stuffy or runny noses are common, and chronic use may damage the structures on the inside of the nose. Because of cocaine's anesthetic effects, users may not be aware of the extent of damage to their nose and mouth. Smoking: Smoking crack can cause severe chest pain, wheezing, chronic cough, parched lips, tongue and throat, extreme hoarseness, singed eyebrows and lashes, and burns on fingers. In the extreme, crack can cause bleeding in the lungs and " crack lung," a condition characterized by pneumonia-like symptoms. Injecting: Users may have collapsed and scared veins, bacterial infections, infections of the heart lining and valves, abscesses or boils, pneumonia and tuberculosis, and other infectious diseases. Injecting users are at risk of contracting HIV, the virus that causes AIDS, and hepatitis B and C, liver diseases that can lead to cancer. These diseases are spread by sharing needles and using unsterilized drug paraphernalia. What are cocaine's effects on the mind? Cocaine causes severe behavior changes, causing violent, erratic behavior in some and suicidal feelings in others. Users under the influence may experience tactile hallucinations, where they feel " coke bugs" crawling on their body. After using cocaine, they may be confused, anxious, and

depressed. They may even lose interest in food or sex, have trouble feeling pleasure, and act paranoid after long term use. In severe cases, users may exhibit cocaine-induced psychosis where users lose touch with reality and exhibit paranoid behavior. Because of its effects on behavior, cocaine intoxication is often listed as a contributing factor in drownings, car crashes, burns, and suicides. Is cocaine really addictive and what does that mean? Yes. The onset of addiction is rapid and severe, and not even " recreational users" who limit their use to weekends are immune from the threat of addiction. Once more, all methods of cocaine use cause addiction. Clinicians estimate that 10 percent of recreational users will go on to serious, heavy use of cocaine. Users who become addicted will " crave" more of the drug as soon as the intoxicating effects wear off, if they do not get their regular dose of cocaine or crack. Cocaine abusers may have a hard time limiting their use, may build a tolerance to the drug requiring larger amounts to get the same effect, and may develop problems with schools, jobs, and personal relationships. Cocaine addicts have to support expensive habits, which can cause them to quickly turn to lives of shoplifting, theft, drug dealing, and prostitution Does treatment for cocaine addiction work? Yes. Cocaine addiction is a chronic, relapsing " brain disease" characterized by compulsive drug seeking and use as a result of chemical imbalances in the brain. Long-term use of cocaine can alter the brain's chemistry to the point that the individual may have very long-term and possibly permanent cravings for cocaine. A national study has found that treatment for cocaine or crack dependency is effective, reducing cocaine or crack use by over 50 percent. The study did report that clients using cocaine in combination with heroin were harder to treat. In addition, treatment reduces criminal activity up to 80

percent, increases employment, improves health, and reduces risky sexual behavior. How long does cocaine remain in the body? Benzoylecognine, a metabolite unique to cocaine, can be detected in the urine 2-4 days for experimental use and up to three weeks or more for chronic use. The disruption to brain chemistry can remain for much longer. Individuals who have become dependent on cocaine will feel intense cravings for cocaine long after use has ceased making recovery difficult. Cocaine is an alkaloid found in leaves of the South American shrub Erythroxylon coca. It is a powerfully reinforcing psychostimulant. The drug induces a sense of exhilaration in the user primarily by blocking the reuptake of the neurotransmitter dopamine in the midbrain. If the predictions of The Hedonistic Imperative are vindicated, then future millennia will witness what Robert Anton Wilson once called " hedonic engineering"". Mature enhancements of currently drug-induced states of euphoria will be transformed into a absolute presupposition of sentient existence. Life-long happiness will be genetically pre-programmed. " Peak experiences" will become a natural part of everyday mental health. Cocaine, alas, offers only a tragically delusive short-cut. In pre-Columbian times, the coca leaf was reserved for Inca royalty. The natives subsequently used coca for mystical, religious, social, nutitrional and medicinal purposes. They exploited its stimulant properties to ward off fatigue and hunger, enhance endurance, and to promote a benign sense of well-being. It was initially banned by the Spanish. But the invaders discovered that without the Incan " gift of the gods", the natives could barely work the fields - or mine gold. So it came to be cultivated by the Catholic Church. Coca leaves were distributed three or four times a day to the workers during brief rest-breaks. Returning Spanish

conquistadores introduced it to Europe. Coca was touted as " an elixir of life". In 1814, an editorial in Gentleman's Magazine urged researchers to begin experimentation so that coca could be used as " a substitute for food, so that people could live a month, now and then, without eating..." The active ingredient of the coca plant was first isolated in the West around 1860. Freud described cocaine as a magical drug. He wrote a song of praise in its honour. He also practised extensive self-experimentation. To Sherlock Holmes, cocaine was " so transcendentally stimulating and clarifying to the mind that its secondary action is a matter of small moment". Doctors dispensed cocaine as an antidote to morphine addiction. Unfortunately, some patients made a habit of combining both. Cocaine was soon sold over-the-counter. Until 1916, one could buy it at Harrods. It was widely used in tonics, toothache cures and patent medicines; and in chocolate cocaine tablets. Prospective buyers were advised - in the words of pharmaceutical firm Parke-Davis - that cocaine " could make the coward brave, the silent eloquent, and render the sufferer insensitive to pain". When combined with alcohol, the cocaine alkaloid yields a further potently reinforcing compound, now known to be cocaethylene. Thus cocaine was a popular ingredient in wines, notably Vin Mariani. Coca wine received endorsement from prime-ministers, royalty and even the Pope. Frédérick-Auguste Batholdi observed that if only he had used Vin Mariani earlier in his life, then he would have engineered the Statue of Liberty a few hundred meters higher. Coca-cola was introduced in 1886 as as " a valuable brain-tonic and cure for all nervous afflictions". It was promoted as a temperance drink " offering the virtues of coca without the vices of alcohol". The new beverage was invigorating and popular. Until 1903, a typical serving contained around 60mg of cocaine.

Sold today, it still contains an extract of coca-leaves. Coca Cola imports eight tons from South America each year. Nowadays the leaves are used only for flavouring since the drug has been removed. A coca leaf typically contains contains between 0. 1 and 0. 9 percent cocaine. If chewed in such form, it rarely presents the user with any social or medical problems. When the leaves are soaked and mashed, however, cocaine is extracted as a coca-paste. The paste is 60 to 80 per cent pure. It is usually exported in the form of the salt, cocaine hydrochloride. This is the powdered cocaine most common, until recently, in the West. Drug testing for cocaine aims to detect the presence of its major metabolite, the inactive benzoylecgonine. Benzoylecgonine can be detected for up to five days in casual users. In chronic users, urinary detection is possible for as long as three weeks. Yet old-fashioned cocaine hydrochloride still wasn't good enough. Sensation-hungry thrill-seekers have long sought the ultimate high from the ultimate " rush". They haven't been satisfied with the enhanced mood, sexual interest, self-confidence, conversational prowess and intensified consciousness to be derived from just snorting cocaine. Normally, only the intravenous route of administration could be expected to deliver the more potent and rapid hit they have been seeking. Yet there are very strong cultural prejudices against injecting recreational drugs. So a smokeable form was developed. Since the hydrochloride salt decomposes at the temperature required to vaporise it, cocaine is instead converted to the liberated base form. Initially, " free-base" cocaine was typically produced using volatile solvents, usually ether. Unfortunately, this technique is physically dangerous. The solvent tends to ignite. Hence a more convenient method of producing smokeable free-base became popular. Its product is crack. To obtain crack-cocaine, ordinary

cocaine hydrochloride is concentrated by heating the drug in a solution of baking soda until the water evaporates. This type of base-cocaine makes a cracking sound when heated; hence the name " crack". Base-cocaine vaporises at a low temperature, so it can be easily inhaled via a heated pipe. Crack-cocaine delivers an intensity of pleasure completely outside the normal range of human experience. It offers the most wonderful state of consciousness, and the most intense sense of being alive, the user will ever enjoy. (S)he will access heightened states of being whose modes are unknown to chemically-naÃ¨ve contemporaries. Groping for adequate words, crack-takers sometimes speak of the rush in terms of a " whole-body orgasm". Drug-naive virgins - slightly shop-soiled or otherwise - cannot be confident (unless in thrall to ill-conceived logical behaviorist theories of meaning) that they have grasped the significance of such an expression. For to do so, it would be necessary to take the drug via its distinctive delivery-mechanism oneself. This is at best very imprudent. Ultimately, the emotional baseline, and affective analogue of Absolute Zero, characteristic of post-humanity in its hedonically enriched modes of awareness may be greater than anything we can now grasp. It may be higher than the rapturous transports of the most euphoric coke-binge in paleo-human history. In the meantime, a drug which induces a secular parody of Heaven commonly leads the user into a biological counterpart of Hell. When Is It Best To Take Crack Cocaine? As a rule of thumb, it is profoundly unwise to take crack-cocaine. The brain has evolved a truly vicious set of negative feedback mechanisms. Their functional effect is to stop us from being really happy for long. The initial short-lived euphoria of a reinforcer as powerful as crack will be followed by a " crash". This involves anxiety, depression, irritability,

extreme fatigue and possibly paranoia. Physical health may deteriorate. An intense craving for more cocaine develops. In heavy users, stereotyped compulsive and repetitive patterns of behaviour may occur. So may tactile hallucinations of insects crawling underneath the skin (" formication"). Severe depressive conditions may follow; agitated delirium; and also a syndrome sometimes known as toxic paranoid psychosis. The social consequences of heavy cocaine use can be equally unpleasant. Non-recreational users are likely eventually to alienate family and friends. They tend to become isolated and suspicious. Most of their money and time is spent thinking about how to get more of the drug. The compulsion may become utterly obsessive. The illusion of free-will is likely to disappear. During a " mission", essentially a 3-4 day crack-binge, users may consume up to 50 rocks a day. Whereas " empathogens" such as ecstasy - which trigger the release of far more serotonin than dopamine - will typically promote empathy, trust, compassionate love and sociability, mainly dopaminergic drugs, if taken on their own and to excess, can easily have the reverse effect. Simplistically, cocaine tends to be a " selfish" drug. There is perhaps a single predictable time of life when taking crack-cocaine is sensible, harmless and both emotionally and intellectually satisfying. Indeed, for such an occasion it may be commended. Certain estimable English doctors were once in the habit of administering to terminally-ill cancer patients an elixir known as the " Brompton cocktail". This was a judiciously-blended mixture of cocaine, heroin and alcohol. The results were gratifying not just to the recipient. Relatives of the stricken patient were pleased, too, at the new-found look of spiritual peace and happiness suffusing the features of a loved one as (s)he prepared to meet his or her Maker. Drawing life to a

close with a transcendentally orgasmic bang, and not a pathetic and god-forsaken whimper, can turn dying into the culmination of one's existence rather than its present messy and protracted anti-climax. There is another good reason to finish life on a high note. In a predominantly secular society, adopting a hedonistic death-style is much more responsible from an ethical utilitarian perspective. For it promises to spare friends and relations the miseries of vicarious suffering and distress they are liable to undergo at present as they witness one's decline. A few generations hence, the elimination of primitive evolutionary holdovers such as the ageing process and suffering will make the hedonistic death advocated here redundant. In the meanwhile, one is conceived in pleasure and may reasonably hope to die in it.