Psychoactive Drugs and Their Classifications

A PowerPoint presentation (no narration) containing some of this information is available at the below web page. Viewers who have PowerPoint software installed on their computers can view the actual PowerPoint presentation (look for the "drugs.ppt" and "indiv_drugs" files), or those without PowerPoint can view the information as a webpage, but only with MS Explorer 4.0 or above (look for "drugs.mht" and "indiv_drugs" files).

http://facweb.northseattle.edu/troot/HEA150/slides/

Psychoactive drugs can be classified in different ways, such as by chemical structure, by common effects, by addiction liability, or by Drug Enforcement Administration schedules. The classification system used in this class is by common effect. Commonly-accepted classifications include stimulants, depressants, narcotics, hallucinogens and cannabis. While the required website reading associated with each drug classification includes basic information with photos, it should not be interpreted as a stand-alone resource for psychoactive drug information.

The United States Drug Enforcement Administration (DEA) classifies drugs in schedules. A Schedule I drug is considered (by the US government) to have a high risk for abuse with no accepted medical value. An example of a Schedule I drug is heroin. A Schedule II drug is considered to have a high risk for abuse but also has some accepted medical value. An example of a Schedule II drug is cocaine. A Schedule III drug has less potential for abuse than a Schedule I or II drug, has some accepted medical value and has a low to moderate risk for physical dependence (the body begins to require the drug) and may have a high risk for psychological dependence (the person requires the drug in order to deal with stressors, emotions, and/or to feel better). An example of a Schedule III substance is anabolic steroids. A Schedule IV drug has a lower potential for abuse compared to Schedule I-III substances, has some accepted medical value, and may lead to limited physical and/or psychological dependence. An example of a Schedule IV substance is the prescription drug Xanax. A Schedule V substance has a low potential for abuse compared to Schedule I-IV substances, has some accepted medical value, and has less potential for dependence than Schedule IV substances. Cough medicines are generally classified as Schedule V substances. The DEA has a list of drugs and their Schedule classifications available on its website (O).

Stimulants

Stimulants are psychoactive substances that tend to give the user a sense of greater alertness or arousal, an enhanced perception of energy, and improved sense of well-being. Physiological responses include an increased heart rate, increased blood pressure, increased breathing frequency, flushed skin, and perspiration. Excessive stimulant use may cause dizziness, irritability, mood swings, headache, heart palpitations, chest pain, hallucinations, and death. The most commonly-used stimulants are nicotine—present in tobacco, and caffeine—present in coffee, tea, and other beverages and foods. Travel to other course web pages or the University of Maryland's Center for Substance Abuse Research (CESAR) for information on the following stimulants (R):
Depressants (Sedative Hypnotics)
Depressants are generally used to induce sleep or relaxation. While depressants are typically associated with sleep or relaxation, they act upon the body by "depressing" or inhibiting the central nervous system's normal activity. Since some parts of the brain function to control outward behavior, the use of depressants may lead to an inhibition of that control. Thus, behavior not occurring under normal circumstances might occur with depressant use. A stereotypical example of this concept is an individual, after consuming too much of the depressant alcohol at a party, loses his ability to control his behavior, and decides to dance with a lampshade on his head. Some typical physiological responses occurring with depressant use include reduced tension, anxiety relief, slurred speech, staggered gait, and relaxed muscles. Excessive use may lead to slowed, shallow breathing; clammy skin; weak, rapid pulse; coma and death. Alcohol is one of the better-known, legal depressants readily available today. Travel to the University of Maryland's Center for Substance Abuse Research (CESAR) and www.streetdrugs.org to gather information on the following depressants (R):

- Barbiturates
- Benzodiazepines
- Glutethimide
- Chlortal hydrate
- GHB
- Rohypnol

View the Moyers' "Close to Home" animation and read the description next to it (O). The animation demonstrates how GABA, a neurotransmitter (a brain chemical), is normally released in the brain. Next, using the same Moyers' resource, watch an animation demonstrating how the GABA neurotransmitter is affected by alcohol (O).

Narcotics
The term "narcotics" refers to substances used to induce sleep or stupor, to dull the senses, and/or to relieve pain. In the legal system, the term, "narcotics" may refer to any addictive drug subject to illegal use, or refer to opium and its natural and synthetic derivatives. Cocaine is considered a "narcotic" under the Controlled Substances Act, but it is not a narcotic in terms of the classification system used for this class. Some of the common physiological responses from narcotics use include respiratory depression (slowed breathing), drowsiness, confusion, and euphoria. Excessive use of narcotics can lead to nausea, vomiting, convulsions, increased risk for STD's when narcotics are injected, convulsions, coma and death.

Travel to another course web page, to www.streetdrugs.org, or to CESAR to gather information on the following narcotics (R):

- Heroin
• Opium poppy and opium
• Morphine
• Hydrocodone
• Oxycodone
• Salvia divinorum

**Hallucinogens**

Hallucinogens, known to alter human perception and mood, are a complex group of substances. Not all hallucinogens produce hallucinations as the name indicates. Physiological changes include elevations in heart rate and blood pressure, erratic behavior and pupil dilation. The psychological changes induced by these drugs are what hallucinogens are most known for, and include paranoia, impaired social functioning, and a disassociation of time and space and a distortion of reality. The hallucinogenic experience, "trip," can be pleasurable or it can be extremely frightening; the final result is unpredictable. Excessive hallucinogen use can lead to memory loss, difficulties with speech and thinking, weight loss and depression. Medical emergencies are rare compared to abuse of other psychoactive substances. Travel to CESAR to obtain information on the following hallucinogens (R):

• Peyote/mescaline
• Psilocybin/psilocyn
• LSD
• Ketamine
• Ecstasy
• PCP
• Foxy Methoxy
• AMT

**Cannabis**

Cannabis sativa is a plant (a hemp plant) growing in more temperate regions of the world. The plant contains chemicals--"cannabinoids"--which are responsible for its characteristic psychoactive effects. The primary cannabinoid present in cannabis is delta-9-tetrahydrocannabinol, also known as THC. Some common responses to cannabis use include euphoria, relaxation, impaired memory, concentration, loss of coordination, enhancement of senses and appetite changes. Excessive use may cause symptoms such as respiratory irritation (from the smoke), fluctuating emotions, impaired memory and psychosis. Some involved with cannabis research believe excessive-use side effects are atypical. Travel to CESAR and [www.streetdrugs.org](http://www.streetdrugs.org) to obtain information on the following cannabis products (R):

• Marijuana
• Hashish
• Hash oil

A Question of Influence is a Canadian teacher education curriculum that offers a summary (R) of drug effects, organized by drug classification. The "opiates" category is similar to the "narcotics" category seen in the online reading.