What is a Drug?

LESSON OBJECTIVES

- students will become familiar with the types of drugs and their effects

CONTENT AND TIME (30-MINUTE LESSON)

4.1 Introduction: What is a Drug? (20 minutes)

4.2 Activity: Drug Classifications (10 minutes)

REQUIRED MATERIALS

HANDOUT 4.1: Drug Classifications

657D-V3 (November 2019) Provincial Addiction Prevention, Addiction & Mental Health

Alberta Health Services

4.1 Introduction: What is a Drug? (20 minutes)

The word drug is often used to refer to illegal drugs. There are, however, many different kinds of drugs. Whether the drug is a medicine (prescription or non-prescription), legally available or illegal, it can be classified according to its effect.

Mood-altering drugs

Uppers

Uppers are stimulants. Stimulants speed up the body processes and the central nervous system (CNS). Stimulants are drugs that are used for a quick, temporary, increase of energy. They increase alertness and endurance, decrease appetite, and produce feelings of well-being and euphoria. Chronic use of stimulants can produce severe psychological and physical dependence. Nicotine and caffeine are the two most commonly used stimulants.

Examples: caffeine, nicotine, Ritalin®, Dexedrine®, cocaine, crack, speed, methamphetamine (crystal meth)

- **Ecstasy (MDMA)** is a drug sometimes associated with the rave or electronic music culture. It acts as both an upper or stimulant and a hallucinogen (tending to produce hallucinations). It is most often classified as a hallucinogenic amphetamine. Some short-term effects of ecstasy are:
  - an enhanced sense of touch,
  - feelings of euphoria,
  - feelings of empathy with others, increased alertness and increased physical energy.

  Some physical effects include:
  - rapid heart rate,
  - elevated blood pressure,
  - excessive pupil dilation,
  - tremors, palpitations and sweating,
  - increased salivation and
  - grinding of teeth and clenching of jaw muscles.

After-effects can include drowsiness, muscle aches and generalized fatigue, depression lasting one to two days, difficulty concentrating, paranoid feelings of persecution, and short-lived anxiety and irritability.

Downers

Downers slow down the body processes and depress the CNS.

- **Opioids** (sometimes called narcotics) are highly addictive painkilling drugs that may also produce a euphoric sense of well-being.

  Examples: opium, codeine, morphine, heroin, methadone, fentanyl, oxycodone

Non-narcotic pain relievers differ from narcotics because they do not depress the CNS or have mind-altering effects. Examples of non-narcotic pain relievers are Tylenol® or Aspirin®. They are not classified as "downers."

- **Tranquillizers** and sleeping pills are also drugs that slow down the CNS.
  - Most tranquillizers and sleeping pills prescribed today belong to the benzodiazepene chemical group.
  - In usual doses tranquillizers (e.g. Valium®, Ativan®, Restoril®) produce a sense of calm well-being and are used to treat anxiety. In larger doses, they will also induce sleep and even unconsciousness. Sleeping pills cause greater depression of the CNS in order to induce and maintain sleep.
- **Alcohol** first depresses centres in the brain that inhibit actions and restrain behaviour, which is the reason some people initially appear livelier after consuming alcohol. Excessive consumption can result in further depression of the CNS so that a person may fail to retain memory of the event (a blackout) or lose consciousness (pass out). Death can occur from an overdose of alcohol.
- **Inhalants** are also downers. They are substances that people inhale for their mood-altering effects. Short-term effects include slurred speech, drowsiness, lack of coordination, nausea and possible loss of consciousness. Long-term use may result in permanent health problems such as memory loss, brain damage, personality changes, muscular weakness, fatigue, and nerve damage starting in the hands and feet.

Examples: cooking spray, gasoline, kerosene, lighter fluid, antifreeze, paints, model airplane glue, cleaning fluids and nail polish remover

All-arounders

All-arounders have various effects on the body. They can act like both uppers and downers. Hallucinogens and cannabis fall into this category.

- **Hallucinogens** are drugs used to produce distortion of reality and hallucinations. These drugs are also called illusionogenic or psychedelic. They dramatically affect perception, emotions, and mental processes. They distort the senses and can cause hallucinations.

  Examples: LSD (acid, blotter), PCP (angel dust), mescaline or peyote, psilocybin (magic mushrooms)

- **Cannabis**, commonly referred to as marijuana, is derived from the plant, Cannabis Sativa. THC and CBD are the two main chemicals in the cannabis plant. People who use cannabis report feeling relaxed, free and open. Cannabis can make a person slow to react, can interfere with learning and concentration, and can cause anxiety and panic attacks. Cannabis can also be used for medical purposes in some cases, with authorization from a physician.

  Examples: marijuana (the dried flowering buds and leaves of the plant), cannabis extracts (oils, waxes and resins), edible cannabis products (eaten or drunk), topical products (applied to external surfaces on the body).

- **Ecstasy (MDMA)** is sometimes classed as an all-arounder because of its hallucinogenic properties.

Drug effects and the individual

The effect of a drug varies from person to person depending on the following:

- Specific drug. Example: Different types of cannabis will have different potencies.
- Amount taken or dose.
- How the drug is taken. Example: Injecting cocaine produces effects more quickly and intensely than smoking it.

- The body. Example: In general, a larger person will need to drink more alcohol than a smaller person to feel similar effects. Also, food a person has eaten will slow down the absorption of alcohol into the blood stream.
- Previous exposure of the body to this and other drugs. Regular users of a drug may require more to produce the desired effect.
- Biology. Example: Women have less of an enzyme called ADH. ADH breaks down alcohol in the body. Usually, women have a higher blood alcohol concentration (BAC) than men after consuming an identical amount of alcohol.
- The setting or location. Example: The physical environment in which the drug is taken can affect the user's experience.
- A person's mental state. Example: A person who is very anxious about a drug experience may be more likely to have a panic reaction than someone who is not.
- Other drugs being used.

4.2 Activity (10 minutes)

Have the group generate ideas on what their definition of a drug is. Ask questions such as: "What is a drug?", "What does a drug do?" or "What happens when a person uses a drug?" Some of the answers may be: some drugs are not good for you, drugs get you high, people use them for medicine, etc.

One definition of the term "drug" is:

A drug is any non-food substance that changes the way the mind or body works.

Drugs are neither good nor bad; they are simply a substance and it's the way they are used that has good or bad results. For example, medicines can be used to heal, but they can also make someone sick if not used properly.

Drug Classifications

Mood-altering drugs (MADs), also called psychoactive drugs, can affect the way a person thinks, feels, or acts. These drugs usually have physical effects as well, but it is their ability to work on the mind that sets them apart from other drugs. Because they can affect moods, they can be very attractive to some people and at the same time cause problems.

On the board, write the headings for the different mood altering drug classifications. To simplify things, use the terms "Uppers," "Downers," and "All-arounders." Have students list the names of the drugs they know, whether it's street names or proper names. List them on the board according to their classification. See the back of this page for information on how to classify the drugs.

Give students the handout showing the classifications. As a group or individual assignment, students can research the short and long-term effects of the various groups of drugs. Upon completion, they can present the information to the class.

DEBRIEF

- What are drugs used for?
- Do drugs affect everyone in the same way? Why or why not?
- Can drugs that are used medically be harmful?
- How do the different classes of drugs affect the body?

HANDOUT 4.1

Drug Classifications

Uppers (stimulants)	
Nicotine	
Caffeine	
Cocaine	also called C, Coke, Snow, Nose, Candy, Blow
Ecstasy	also called Adam, rave euphoria, X, MDM, M&M, hug drug
Amphetamines	also called speed, ice, crystal,

Downers (depressants)	
Alcohol	(beer, wine, spirits)
Inhalants	(sniff, huffers)
Opioids	(codeine, morphine, oxycodone, opium)
Tranquillizers	(Valium®, Librium®, Quaalude®)

All-arounders	
Cannabis	(also called marijuana, weed, pot, bud, joint)
Hallucinogens	(LSD, also called acid, blotter)
Psilocybin	also called magic mushrooms, shrooms
PCP	(phencyclidine) also called angel dust, horse tranquillizer