

Teaching Tool

Substance Use – Grade 8

Core knowledge content

The content in this section is meant to provide the teacher with the background information needed to prepare and teach the Grade 8 substance use class.

Definition of drug

A drug is a substance, other than food, which changes the way a person thinks, feels, and acts.

A drug can come from a plant or can be made in a laboratory. A drug can enter the body by being ingested, smoked, injected, inhaled, or absorbed (e.g. under the tongue or through the skin).

Why people use drugs

Young people may be tempted to try drugs and alcohol because of peer pressure and their desire to “fit in”. Curiosity, rebellion, and boredom are other reasons young people may use drugs. Portrayal of drug and alcohol use in movies, commercials, or TV shows may glamourize drug use and downplay the negative consequences. Individuals experiencing stress or mental health concerns may turn to drugs/alcohol as a way to escape or relax.

Levels of drug use

Level of use	Key features
Non-Use	<ul style="list-style-type: none">• Never used a drug
Experimental	<ul style="list-style-type: none">• Curious about effects of drug; used several times
Irregular	<ul style="list-style-type: none">• Infrequent use; special occasion• When opportunities are available
Regular	<ul style="list-style-type: none">• Regular use• Friends are “doing it”• Feels “in control” of drug use
Dependent (Addiction)	<ul style="list-style-type: none">• Craving• Loss of control of amount or frequency of use• Compulsion to use• Use despite consequences

Teaching Tool

Substance Use – Grade 8

Addiction and abuse potential

The word “addiction” is often used to refer to any behaviour that is out of control in some way. People often describe themselves as being addicted to, for example, a TV show or shopping. The word is also used to explain the experience of withdrawal when a substance or behaviour is stopped, e.g. “I must be addicted to coffee: I get a headache when I don’t have my cup in the morning.”

However, experiencing enjoyment or going through withdrawal do not in themselves mean a person has an addiction.

Because the term “addiction” is commonly used in such a vague way, there have been many attempts to define it more clearly. One simple way of describing addiction is the presence of the **four Cs**:

- **Craving**
- **Control - loss of control** of amount or frequency of use
- **Compulsion** to use
- **Consequences** - use despite consequences

Additional warning signs of substance use may include:

- Changes in behaviour
- Gradual withdrawal from social circles
- Drop in grades
- Loss of interest in normal activities

Stimulants

Stimulants and depressants are a classification of drugs that alter how the brain functions and works. This can result in affecting how people feel and act. Stimulants increase mental and physical functions, such as alertness and heart rate. Stimulants are chemicals that elevate mood, alertness, and energy.

Short-term side effects:

At low doses, stimulants narrow blood vessels in the body, which causes a decrease in blood flow and oxygen to the heart, at the same time causing an increase in blood

Teaching Tool

Substance Use – Grade 8

pressure and heart rate. Stimulants also increase body temperature and breathing rate, as well as decrease the ability to sleep and the desire to eat. Other short-term effects can include sweating, dilated pupils, restlessness, aggressive behaviour, dizziness, tremors, increased ability to concentrate, paranoia, and hallucinations.

Long-term side effects:

Repeated use of stimulants can lead to feelings of hostility and paranoia. At high doses, they can lead to serious cardiovascular complications including heart attack, stroke, and seizures. Long-term use can lead to the development of tolerance, which can lead to reduced effects of the drug. This may prompt the user to increase the dose to reinstate the desired effects. The potential for dependence and addiction increases with repeated use of higher doses. The abuse of stimulants can alter a person's judgment and decision-making ability, which can increase the likelihood of engaging in risky behaviours. If stimulants are used chronically, withdrawal symptoms including fatigue, depression, and disturbed sleep patterns can emerge when the drugs are discontinued.

Examples of stimulants include caffeine, nicotine, steroids, ecstasy (MDMA), cocaine, and methamphetamines.

Depressants

Depressants have a relaxing effect and can slow physical functions, such as breathing. Stimulants and depressants can be found in food components, prescription medicines, and illicit drugs. Like many other drugs that affect the brain, many stimulants and depressants are addictive and may have serious side effects.

Depressants slow activity of the brain and body. They are used medically to help control anxiety, sleeplessness, and seizures. They also reduce heart and breathing rates, blood pressure, muscle tension, and pain. The muscle relaxation and sedation these drugs cause make them useful during certain medical procedures.

Examples of depressants include alcohol, tranquilizers, narcotic analgesics, and sedative hypnotics.

Warnings and precautions

Stimulants and depressants may negatively affect health and well-being. If the drug has been prescribed by a doctor, the drug must be used exactly as recommended. Using high doses of these drugs, mixing them simultaneously, and/or combining stimulants or

Teaching Tool

Substance Use – Grade 8

depressants with other drugs or alcohol increase the risk for side effects. Side effects may include panic attacks, hallucinations, paranoia, hostile behavior, depression, sleep and appetite problems, overdose and death.

Some side effects of stimulants and/or depressants require immediate medical attention, including:

- shortness of breath, chest pain, dizziness or fainting
- hearing and believing things that are not real
- profuse sweating with chills
- dwelling of the tongue or throat, and trouble breathing
- seizures or loss of consciousness

Alcohol

Alcohol is often thought of as a stimulant, but is actually a depressant that slows down brain functions, breathing and heart rate.

The effect that alcohol has on your health depends on many factors, including your weight, sex, age, overall health, drinking patterns, and the amount of your drink. Women, seniors, and adolescents tend to be more strongly affected by alcohol than men because typically they are smaller and have less of the liver enzyme that breaks down alcohol. Young people are especially vulnerable to the effects of alcohol. This is because their brains and bodies are still developing. They also tend to be less familiar with the effects of alcohol, and are more likely to do something impulsive or dangerous. The younger a person starts drinking, the more likely they are to experience problems with alcohol and poor health.

[Canada's Low-Risk Alcohol Drinking Guidelines](#) recommend no more than:

- 10 [standard drinks](#) a week for **women**, with no more than 2 drinks a day, most days
- 15 [standard drinks](#) a week for **men**, with no more than 3 drinks a day, most days

Binge drinking

Binge drinking as five or more standard drinks on one occasion for males; four or more standard drinks on one occasion for females.

Binge drinking can cause a hangover (headache, nausea/vomiting, and shakiness) and/or alcohol poisoning. Symptoms of alcohol poisoning include slow breathing, vomiting,

Teaching Tool

Substance Use – Grade 8

confusion, shakiness, slow/weak pulse, and/or cold/clammy, pale or bluish skin. Individuals with alcohol poisoning may also lose consciousness (pass out).

Alcohol poisoning is a medical emergency. Alcohol slows breathing and heart rate. If either slows too much then it can result in death. Alcohol also slows down brain and body functions. The body will naturally try to get rid of the poison (alcohol) by vomiting. This could be dangerous or even fatal for individuals who are passed out as they could choke on their own vomit.

Check if person is breathing. Check for pulse. Never leave an unconscious person alone. Turn them on their side ([Bacchus Maneuver](#)) and call 911. Make sure that person returns to confirm that they called. If no one else is around, call 911 and return to the victim. Give nothing by mouth (no coffee). Don't leave person alone, the risk for injuries is high. Notify parent/guardians.

Consequences of drinking alcohol

Alcohol slows down brain and body functions that can result in poor decision making and decreased coordination. As a result, individuals are more likely to experience fights, sexual assault, and injuries when they have been drinking alcohol. Motor vehicle accidents (including car, boats, ATVs) are more likely after consuming alcohol due to its effects on reaction time and vision. Planning a safe ride home can help decrease this risk.

Drinking alcohol can also affect athletic performance due to hangovers, weight gain, and decreased motor skills. Alcohol use has also been associated with poor grades and students who drink dangerously are more likely to drop out of school.

Alcohol use during pregnancy can result in Fetal Alcohol Spectrum Disorder (FASD) in the infant. FASD is a preventable developmental disability that affects the infant physically, cognitively, emotionally, and/or behaviourally.

There are many [short and long-term effects of alcohol use](#), including the development of an alcohol addiction, damage to organs increased risk for many types of cancer.

Hallucinogens

Hallucinogens are a group of drugs that may cause an individual to see, hear, or feel things that are not really there. They distort the way a user perceives time, motion, colours, sounds, and self. These drugs can disrupt a person's ability to think and

Teaching Tool

Substance Use – Grade 8

communicate rationally, or even to recognize reality, sometimes resulting in bizarre or dangerous behaviour.

The effects of hallucinogens on an individual vary depending on a number of factors including a person's size, weight, sex, age, and physical and mental health. The type, quantity, frequency, and duration of drug use will also influence the way a person responds to the drug. Mixing any drugs with other drugs and/or alcohol can further alter a person's response to the drug. As a result, individual's experiences with hallucinogens are often unpredictable. A person using hallucinogens may experience sensations that are enjoyable and mentally stimulating and that produce a sense of heightened understanding. However, individuals may also have negative experiences or "bad trips", including terrifying thoughts and nightmarish feelings of anxiety and despair that include fears of losing control, insanity, or death.

Taking hallucinogens can be dangerous for several reasons. They distort thoughts and can cause paranoia which can lead to unusual and dangerous behavior. They are often illegal and unregulated which means they may contain other drugs or toxins. The effects of drugs use on the body will again vary depending on type and quantity, but may include such negative effects as increased heart rate, elevated blood pressure, elevated body temperature, paranoia, anxiety, and nervousness. Some hallucinogenic plants may be mistaken for lethal plants (i.e. mushrooms). If used during pregnancy, drugs may affect the development of the baby and increase chance for miscarriage. Long-term use of hallucinogens may result in persistent psychosis which is characterized with visual and mood disturbances, paranoia, and disorganized thinking.

Examples of hallucinogens include [LSD](#), mescaline, psilocybin, PCP, [cannabis](#), [ecstasy](#) (MDMA), [ketamine](#), and salvia.

Cannabis (marijuana, hashish)

Cannabis (marijuana) comes from the cannabis sativa plant and contains the chemical THC (Tetrahydrocannabinol). THC is the main mind altering ingredient in the plant. The amount of THC determines its potency or strength. The THC content of cannabis has been increasing over the past few decades. When someone consumes cannabis, THC acts in the brain to produce its effects. If consumed by being "smoked," THC passes quickly from the lungs into the bloodstream which carries the chemical to the brain and other organs in the body. Cannabis can be laced with more than 400 potentially dangerous substances. Street names of cannabis include marijuana, grass, weed, pot, dope, ganja, hashish, hash, hash oil, weed oil, and honey oil. Cannabis is usually smoked as a cigarette (joint), in a pipe, electronic cigarettes (vapes). Cannabis can also be smoked in "blunts," which are

Teaching Tool

Substance Use – Grade 8

cigars that have been emptied of tobacco and refilled with a mixture of tobacco and cannabis. This method combines the dangerous chemicals of cannabis with nicotine and other harmful chemicals. Hashish is a more concentrated and viscous form of cannabis; and hash oil is a sticky, black liquid. Cannabis can also be ingested (e.g. in baked goods).

Youth are at higher risk for negative health effects associated with cannabis use. This is why [Canada's lower-risk cannabis use guidelines](#) recommend youth abstain from cannabis use. For those who choose to use cannabis despite known health risks, it is important to know that the negative effects can be reduced by delaying initiation of cannabis use.

Several studies have shown a link between chronic cannabis (marijuana) use and increased rates of anxiety, depression, and schizophrenia. Some of these studies have shown age at first use to be an important risk factor.

Cannabis increases heart rate by 20-100% shortly after smoking. Increased heart rate, heart palpitations, and arrhythmias can lead to increased risk of heart attacks in users. The smoke from cannabis contains carcinogens and is an irritant to lungs. Cannabis smokers can have many of the same respiratory problems as tobacco smokers, such as chronic cough, phlegm production, and increase in chest and lung infections.

Use of marijuana and other cannabis products has potential to cause problems in daily life or worsen existing problems. Physical and mental health, cognitive abilities, social life, and school/career can be negatively affected. Intoxication leads to decreased concentration, disorientated behavior, loss of coordination, distortions in perception and depth, which can lead to poor decision making. It is dangerous to drive, operate machinery, or play sports when under the influence of cannabis.

Recreational cannabis became legal on October 17, 2018. You must be 19 years of age and older to buy, use, grow or possess cannabis. For more information about cannabis legalization refer to supplemental knowledge section.

Teaching Tool

Substance Use – Grade 8

Designer drugs

This classification of drugs are man-made (synthetically produced), illegal drugs and are not regulated. The contents are often unknown and sometimes referred to as a “club drug” because these types of drugs are sometimes taken at clubs or raves. They may also be known as “rape drugs” because they can be easily slipped into a drink and without changing the colour, taste or look of the drink. Individuals should never leave their drink alone.

Examples of designer drugs include Rohypnol (“roofies”), ecstasy (MDMA), Gamma Hydroxybutyric Acid (GHB or “liquid ecstasy”) and ketamine (“Special K”).

Non-medical use of prescription drugs

The non-medical use of prescription drugs is when someone takes another person’s prescription medication to get high. Taking prescription drugs without a doctor’s supervision (that are not prescribed to you), can be just as dangerous as using illegal/illicit drugs. Prescription drugs are considered to be legal when they are prescribed to you by a doctor. However, taking these types of medications when they have not been prescribed to you is considered illegal.

Prescription drugs have side effects even when used as prescribed. When prescription drugs are used without doctor’s supervision and/or combined with other drugs/alcohol the side effects can increase. The side effects could even be life threatening (i.e. opioids affect the part of the brain responsible for breathing and so do other depressants such as alcohol.) Combined, an individual could stop breathing.

Tolerance may develop with many prescription drugs (i.e. opioids). This means that an individual would gradually need to take more of a drug to achieve the same effect. This increases risk for overdose.

Opioids and other prescription drugs can be highly addictive.

Examples: Percocet, Oxycontin, Tylenol #3.

Teaching Tool

Substance Use – Grade 8

Mental health and substance abuse

Problematic substance use and mental illness can be closely connected. The presence of a mental illness such as depression, psychosis, and personality disorder, have been found to have links to substance abuse. In addition, traumatic events, grief or loss, and social isolation may also lead to substance use.

Mental illness may contribute to problematic substance use.

OR

Drug use can lead to the development of mental illnesses.

Substance use can cause changes in a person's life that result in serious and prolonged distress. This distress can contribute to the onset of mental health problems.

Warning signs of substance abuse:

- Changes in behaviour
- Gradual withdrawal from social circles
- Drop in grades
- Loss of interest in normal activities

Where to get help

- Kids Help Phone (1-800-668-6868)
- [Mental Health Helpline](http://www.mentalhealthhelpline.ca) (www.mentalhealthhelpline.ca) or 1-866-531-2600
- [Community Addictions Services of Niagara \(CASON\)](http://www.cason.ca) (www.cason.ca) or 905-684-1183
- Pathstone Mental Health – Crisis Services (1-800-263-4944)
- Parents
- Teacher/Principal/Vice-Principal
- Child and Youth Worker
- Public Health Nurse
- Doctor

Supplemental knowledge

Questions kids have when a parent drinks

[When a parent drinks too much alcohol... What kids want to know](#) (CAMH)

Body image and substance abuse

There is a link between eating disorders and substance use. Youth who engage in disordered eating are more likely to use substances. The reverse is also true.

Substance abuse and eating disorders can exist together. In addition, both of these problems can overlap with other mental health problems. Outward signs of substance use or withdrawal that mirror those related to an eating disorder include:

- Cognitive and emotional symptoms such as irritability and anxiety; and
- Physical symptoms such as shaking, seizures, headaches and body aches.

The physical symptoms listed above can be the result of either starvation or intoxication. Youth who suffer from anorexia nervosa might also have rapid or irregular heartbeats, as might an individual who is using stimulants. For these reasons, assessments are needed for both problems since the presence of one disorder can mask the other.

Eating disorders occur across gender and demographic groups; however, eating disorders tend to be more common in females.

Eating disorders and substance abuse are often linked with mental illness (i.e. depression, anxiety, post-traumatic stress).

Societal views may also contribute to body image issues. Media tends to portray ideal body shape as being thin.

Body image issues can lead to abuse of supplements, vitamins, steroids, and other substances.

Examples:

- Stimulants may be used to suppress appetite.
- Laxatives may be used for purging (i.e. Bulimia nervosa)

Teaching Tool

Substance Use – Grade 8

- Steroids for building muscle

Consequences of abusing substances to change physical appearance include:

- Dehydration
- Irritability
- Aggressiveness
- Mood swings
- Acne
- Change in sex organs
- Hair loss
- Organ damage
- Addiction

Stress

Stress is the body's response to a real or perceived threat that is meant to prepare a person for some kind of action to avoid danger. Most of the threats people face are not something that they can fight or run away from; they are problems that they have to work through.

Some stress can be a good thing because it motivates us to focus on a task or take action and solve a problem. In this situation, stress is manageable and even helpful.

When stress is unhelpful, people may feel overwhelmed or feel like they cannot possibly fix the problem. In these cases, some people avoid dealing with the original problem altogether, which may make the problem, and stress, worse. It can be very hard to concentrate, make decisions, and feel confident when a person experiences a lot of stress. Physical signs of stress include sweating, a racing heart, or tense muscles. Over time, stress can also have a big impact on physical health. Sleep difficulties and headaches are common problems related to stress. People are also more likely to get sick when they're experiencing a lot of stress.

Stress is a *reaction* to a situation — it is not about the actual situation. We usually feel stressed when we think that the demands of the situation are greater than our resources to deal with that situation.

Teaching Tool

Substance Use – Grade 8

How to manage stress:

Identify the problem. Is your job, school, a relationship with someone, or worries about money causing stress? Identifying the real problem allows you to do something about it.

Solve problems as they come up. What can you do and what are the possible outcomes? Would that be better or worse than doing nothing? Remember, sometimes solving a problem means doing the best you can, even if it is not perfect, or asking for help. Once you have decided on a solution, divide the steps into manageable pieces and work on one piece at a time.

Talk about your problems. Sometimes it is helpful to talk about your stress. Family members or friends may be able to help by just listening (simply expressing your feelings can help a lot) or they may have ideas to help you solve or deal with your problems. If you need to talk with someone outside your own circle of loved ones, your school or family doctor may be able to refer you to a counselor.

Simplify your life. Stress can come up when there are too many things going on. Learning to say no is a real skill that takes practice. Try to look for ways to make your to-do list more manageable.

Learn helpful thinking strategies. The way you think about situations affects the way you respond to them. Having unhelpful thoughts, such as believing that everything must be perfect or expecting the worst possible outcome, can make problems seem bigger than they really are.

Learn about stress management. There are many useful books, websites, and courses to help you cope with stress. There are also counselors who specialize in stress.

Start on the inside. Practices like yoga, meditation, mindfulness, prayer, or breathing exercises can help you quiet your mind and look at problems from a calmer, more balanced point of view. With time, these practices can help you manage your response to stressful situations as they come up.

Get active. Physical activity can be a great way to reduce stress and improve your mood. Do something you enjoy. Making time for hobbies, sports, or activities that you find fun or

Teaching Tool

Substance Use – Grade 8

make you laugh can temporarily give you a break from problems. Listen to music, read, go for a walk, see a friend, watch your favourite movie, or do whatever makes you feel good.

Resources

[Drug Free Kids Canada](http://www.drugfreekidscanada.org) (www.drugfreekidscanada.org)

[Community Addictions Services of Niagara Region](http://www.cason.ca) (www.cason.ca)

[Pathstone Mental Health](http://www.pathstonementalhealth.ca) (www.pathstonementalhealth.ca)

[Mind Your Mind](https://mindyourmind.ca) (https://mindyourmind.ca)

References

[Canada's Lower-Risk Cannabis Use Guidelines \(2017\)](#)

[Cannabis in Canada - Get the Facts!](#)

(<https://www.canada.ca/en/services/health/campaigns/cannabis.html>)

[Current Cannabis Laws - Government of Canada](#)

(<http://www.justice.gc.ca/eng/cj-jp/marijuana/law-loi.html>)

[National Institute of Drug Abuse](#)

(<https://www.drugabuse.gov>)

[Drug Free Kids](#)

(<http://www.drugfree.org/resources/top-8-reasons-why-teens-try-alcohol-and-drugs/>)

[Canadian Public Health Association](#)

(www.cpha.ca)

[Canadian Centre on Substance Abuse](#)

(<http://www.ccsa.ca/Resource%20Library/CCSA-Canadian-Drug-Summary-Prescription-Stimulants-2016-en.pdf>)