

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 3: Be Smart, Don't Start presentation.

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).

Medicines can be helpful when used properly

Medicine can be obtained from a variety of sources: physicians, nurse practitioners, pharmacy and/or over-the-counter retail stores etc. For minors it may be that they get medicine from a trusted adult such as a parent, guardian, teacher etc. There are quite a few benefits that medication can provide such as helping to heal the body and make us feel better. Medication can be used to fight off germs such as bacteria, viruses, parasites etc. Supplements such as vitamins and minerals help to maintain and repair the body but a healthy diet can also provide these benefits as well. Medication has benefits even when someone is not acutely ill. Vaccines help to prevent many different illnesses. Typically, vaccines are given by needle but there are alternative routes that can be used.

It is important to understand that although medicine can be very beneficial and helpful; all prescription and over-the-counter medications can be dangerous if they are not used properly.

5 rules of taking medication

1. Take medication only from an adult you trust
2. Take only the amount of medicine your doctor or a grown-up says to take
3. Never share medication
4. Never take someone else's prescription medication e.g. inhaler
5. If you don't feel well after taking medication, tell a grown-up you trust right away

Nicotine

Nicotine is found naturally in the tobacco leaf. It is the chemical that makes tobacco products (e.g. cigarettes, cigars, and chewing tobacco) so addictive. Nicotine can also be found in electronic cigarettes. In Ontario, nicotine is a legal drug but you must be 19 years of age or older to purchase tobacco products or e-cigarettes.

Electronic cigarettes (e-cigarettes) use a battery, heating element and liquid containing cartridge (e-liquid or e-juice) to create an aerosol or vapour. Some of these cartridges contain nicotine and some claim not to. In fact, some cartridges that have been labeled as nicotine-free actually contain nicotine. In Canada, e-cigarettes without nicotine are considered legal but Health Canada warns that they have not been fully checked for safety or quality. E-cigarettes containing nicotine are still readily available in Canada and online. The cartridges can also come in different flavours which may appeal to youth.

When smoked, nicotine is absorbed through the lungs, into the bloodstream, and to other organs in the body. It can take as little as 10 seconds for nicotine to reach the brain after it is inhaled. Initially, nicotine may cause you to feel good or energized, or alert and calm. Nicotine causes blood vessels to constrict (narrow) which increases blood pressure. It also increases heart rate, decreases body temperature, alters brain waves and relaxes muscles. New smokers may experience coughing, dizziness and dry/irritated throat. They may also have nausea, weakness, stomach cramps and headache. These symptoms may decrease once a tolerance to nicotine is developed.

Chronic exposure to nicotine also affects brain development. This is particularly harmful during periods when the brain is developing rapidly such as in young people or during fetal development (pregnancy). These lasting changes can negatively affect a person's thinking, reasoning and/or behaviour, including memory and attention.

When some people go for more than a few hours without nicotine they may experience withdrawal symptoms. These symptoms may include dizziness, shakiness, headaches, anxiety and irritability, nervousness and restlessness, difficulty concentrating or sleeping, increase appetite, slight depression, cravings (for a cigarette). Many people continue to smoke to avoid these feelings.

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Alcohol

Alcohol is a legal drug in Canada for individuals 19 years of age and over. Alcohol is contained in drinks such as wine, beer, and liquor. Alcohol is classified as a depressant, which means it slows the body down. This includes slowing our breathing, and heart rate, and also alters the way someone can think, act or feel. Alcohol can have negative affects to our body, especially to our liver. Alcohol can also negatively affect athletic performance, and has been associated with poor grades. Sometimes, some people may get addicted to alcohol; this can result in damage to organs including the liver, pancreas, stomach and/or brain, also being addicted to alcohol can increase the risk for many chronic health conditions, such as cirrhosis of the liver, many cancers, and injuries (such as car crashes).

Children may see a trusted adult that they know, ingesting alcoholic beverages. It is important for a child to be knowledgeable regarding adults drinking responsibly. By the time a person is 19 years of age, the law states that they are legally allowed to drink alcohol. At this time, your body has developed enough to process the alcoholic content, and you are aware of guidelines to drink responsibly. These guidelines can include, knowing how much alcohol to drink (decreasing risk for injury and harm), knowledgeable on not drinking when driving a vehicle, using any type of machinery, making important decisions, when pregnant etc., and drinking slowly and responsibly by setting limits for themselves. It is important that trusted adults are able to drink responsibly to support a healthy lifestyle, and make a positive influence on others.

Caffeine

Caffeine is a stimulant that speeds up your central nervous system. It is the world's most popular drug. Caffeine occurs naturally in products such as coffee, tea, chocolate and soft drinks. It is also added to a variety of prescription and over-the-counter medications, including cough, cold and pain remedies. Energy drinks may contain both naturally occurring and added caffeine.

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Caffeine stimulates the brain, elevates the mood and postpones fatigue. If you consume caffeine before bedtime, you will likely take longer to get to sleep, sleep for a shorter time and sleep less deeply.

Too much caffeine can give you a headache, upset your stomach, make you nervous and jittery and leave you unable to sleep. It can also cause flushed face, increased urination, muscle twitching and agitation. Some people feel these effects even with a very small amount (in some people as little as 250 mg, or two cups of coffee a day). Larger doses of caffeine, especially when consumed by people who don't usually take caffeine, can cause rapid heartbeat, convulsions and even delirium.

Energy drinks containing caffeine should not be confused with sports drinks. When used during periods of intense physical activity, sports drinks can help to quench thirst, while energy drinks can cause dehydration.

Small amounts of caffeine have a greater effect on children because their bodies are smaller and their brains are still developing. Regular consumption of caffeine can lead to physical dependence. That means that if you abruptly stop using caffeine-containing products, you may feel edgy and tired and have a bad headache.

Addiction

The term addiction can be described by the presence of the cravings, loss of control, and compulsion to use despite consequences. Often the urge is so powerful that despite the risk, people continue to use the drug(s). People never start using drugs with the intention of becoming addicted. However, the changes that occur in the brain make it challenging to quit using the drug. The best way to avoid becoming addicted to a drug is to not start using the drug.

Refusal skills

- Say “no”. Be assertive and clear.
- Walk away
- Broken record – You may be asked several times, but keep repeating “no”.

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- Give an excuse or explanation if you want. For example, “I don't want to use drugs because I don't want to become addicted.” Or “I don't know if I should take that medication, I need to ask my parents first”
 - Offer an alternative activity. For example, “I don't want to smoke pot; how about we go to the mall?” or if offered alcohol ask “do you have pop/water?”
 - Reverse the pressure. For example, “Why are you pressuring me?”

Where to get help

- Kids Help Phone (1-800-668-6868)
- [Mental Health Helpline \(1-866-531-2600\)](tel:18665312600)
- [Community Addictions Services of Niagara \(CASON\) \(905\) 684-1183](tel:9056841183)
- Pathstone Mental Health – Crisis Services (1-800-263-4944)
- Al-Anon/Alateen (if you are bothered by someone else's drinking) 905-328-1677 or 1-888-425-2666
 - Parents
 - Teacher/Principal/VP
 - 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](#)

Resources

[Centre for Addiction and Mental Health \(CAMH\) – Information for Children and Youth](#)

[Community Addictions Services of Niagara Region](#)

[Pathstone Mental Health](#)

[Mind Your Mind](#)

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References

[Canadian Public Health Association](#)

[Canadian Mental Health Association \(CMHA\)](#)

[Canadian Centre on Substance Abuse](#)

[Drug Free Kids](#)

[Eating Disorders and Substance Abuse - Canadian Centre on Substance Abuse](#)

[Government of Canada](#)

[Lung Association](#)

[National Institute of Drug Abuse](#)