

Substance Abuse – How it Affects the Adolescent

Did you know that world-wide...

- Alcohol is responsible for 3.3 million deaths annually?
- Approximately 15.3 million persons are diagnosed with drug use disorders?
- Injected drug use has been reported in 148 countries?

Did you know that in Canada...

- 15.7 is the average age for when drug use begins?
- 20% of youth report using opioid pain relievers?
- 40% of youth drinkers become alcoholics?
- Youth have the highest rate of marijuana use in comparison to other countries?

What is Substance Abuse?

The World Health Organization (WHO) refers to substance abuse as “the harmful or hazardous use of psychoactive substances, including alcohol and other drugs.”

Psychoactive substance use can lead to dependence syndrome (a cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use.) They typically include a strong desire to take the drug, difficulties in controlling its use, continued use despite harmful consequences, prioritizing drug use before other activities and obligations, increased tolerance of the substance, and experiencing physical withdrawal symptoms when substance use is discontinued.



What are the most common Psychoactive Substances?

Drugs and alcohol go by many different names, but do you really know how it can affect you? Adolescents are at an even higher risk for complications due to substance abuse because of their still developing minds and bodies. Learn more about the most commonly used psychoactive substances:

ALCOHOL:

(AKA: Booze, Brewksi, Giggle Juice, Hooch, Poison)

Alcohol is a depressant that is absorbed through the stomach and small intestine, and into the blood stream which slows down the nervous system. Alcohol impairs brain function and also damages other important organs such as the heart and liver, and increases the risk of developing certain types of cancers. Too much alcohol can cause

alcohol poisoning which can result in vomiting, unconsciousness, difficulty breathing, low blood sugar, seizures and death. Among 12 to 16-year-olds, regular alcohol use has been significantly associated with Conduct Disorder. Alcohol use among adolescents has also been associated with considering, planning, attempting, and completing suicide.

STIMULANTS:

(AKA: Amp, Coke, Candy, Christina, Crack, Crystal, Speed)

Stimulants include such drugs as Cocaine, Amphetamines, and Methamphetamines. These drugs are very addictive, and prolonged use causes the feeling of pleasure and confidence to be inhibited. The stimulation from these drugs causes the heart to work overtime and can lead to irregular beating, and potentially stopping the heart completely. During adolescence, the brain is engaged in a significant amount of growth and rewiring. This is a dangerous time to abuse stimulants as they cause neurotransmitter production (like dopamine) to surge which can cause permanent changes in the way the brain processes dopamine in the future.

CLUB DRUGS / DESIGNER DRUGS:

(AKA: Molly, Ecstasy, XTC, Georgia Home Boy, Special K)

Club Drugs are also stimulants which include Ecstasy, MDMA, Ketamine, and Bath Salts. These drugs are addictive and can cause memory loss, distortion of sight, sound and perception, poor concentration, delirium, seizures, coma, high blood pressure, and problems with breathing. Generally, the effects of club drugs in adolescents can cause depression, antisocial behaviors, and psychological challenges that can lead to suicide and homicide. Adolescents who use these drugs frequently have difficulty in school, including declining grades and increased potential for dropping out of school. Additionally, these drugs can affect their physical appearance, friendships, and increases chances of unprotected sex and risk-taking behaviours.



INHALANTS:

(AKA: Whippets, Spray, Medusa, Hippie Crack, Buzz Bomb)

Inhalants are also stimulants, but are better known as Solvent Abuse. Teens will “sniff”, “huff”, and “bag” chemicals to get high. The most common chemicals used are gasoline, butane, air fresheners, and formalin. These chemicals are rapidly absorbed by the lungs and travel to the brain causing stimulation, disinhibition, and euphoria. These feelings are often followed by a depression including: trouble speaking, walking, concentration problems, drowsiness, low blood pressure, fainting, flushing, and respiratory arrest. Long term effects include permanent damage to the central nervous system, and it can cause the brain cells to become injured and shrink.

CANNABINOIDS:

(AKA: Pot, Weed, Hash, Ganja, Chronic, KGB, Mary Jane)

Cannabinoids are depressants which include Hash, Marijuana (Cannabis), and Hemp. They affect short and long-term memory, balance, coordination and movement control. It can also cause nervousness, anxiety, paranoia, hallucinations, and add stress on the heart by increasing the heart rate and



expanding the blood vessels. Cannabinoids affect the development of a teenager's brain, and has been linked to a greater risk for developing psychosis and schizophrenia later in life.

BENZODIAZEPINES:

(AKA: Roofies, Benzos, Tranx, Valley Girl, Downers, Stupefy)

Also known as "Pharming" these drugs are prescription drugs like Ativan, Valium, Ambien and Xanax which act like depressants. They are addictive and extremely dangerous when mixed with other drugs as they inhibit neurons in the brain from firing neurotransmitters. Taking an unprescribed dose of benzodiazepines can result in drowsiness, blurred vision, headaches, confusion, impaired coordination, low blood pressure, trembling, weakness, memory loss, convulsions and seizures. Teens who are already struggling with psychiatric disorders like bipolar disorder, depression or anxiety are especially vulnerable to the psychiatric side effects.

OPIOIDS:

(AKA: Dope, Oxy, The OC, Percs, Smack, Hillbilly Heroin)

Opioids are depressants that affect the central nervous system and include drugs such as Codeine, Oxycodone, Morphine, Methadone, Heroin and Percocet. Opioids attach to specific receptors in the brain and block pain messages in the body, but can also depress the respiratory system and cause death. Side effects for adolescents mimic benzodiazepines.

HALLUCINOGENS:

(AKA: Acid, Boomers, Dots, Cid, Zen, Superman, Purple Heart)

Hallucinogens can be stimulants or depressants depending on how the body metabolizes them. They include such items as Psychedelic Mushrooms, LSD Salvia, and PCP. Hallucinogens destroy pathways in the brain and cause permanent damage as neurons, message sending chemicals, are rerouted to incorrect places.

NICOTINE:

(AKA: Butt, Ciggy, Lung Dart, Smoke, Cookie, Coffin Nail)

Cigarettes and other forms of tobacco contain nicotine which stimulates the adrenal glands to release the hormone epinephrine (adrenaline.) This stimulates the central nervous system, and increases blood pressure, respiration, and heart rate. Similar to cocaine and heroin, nicotine increases the levels of the dopamine which affects the brain's reward and pleasure centre. Nicotine, the main psychoactive ingredient in cigarettes, exerts neurotoxic effects on the developing brain. The adolescent brain is more vulnerable to the effects of nicotine than the adult brain. Adolescents progress faster to nicotine dependence than adults, find nicotine more rewarding, underestimate the risks of smoking, and are more influenced by smoking behavior in their social circle. This may explain why 1 of 5 adolescents smokes regularly and up to 70% of adolescents have experimented with smoking.

CAFFEINE:

(AKA: Joe, Cuppa, Brain Juice, Go-Go Juice, Rocket Fuel)

Caffeine has become a mainstay in our fast-paced culture helping us keep up with the frantic pace of modern life. The use of this central nervous system stimulant isn't limited to adults; teenagers are consuming caffeine in sodas, energy drinks and coffee beverages. Too much caffeine can prevent teens from getting the sleep and nutrients they need for healthy physical development. Although small amounts of caffeine can sharpen mental focus, too much of this drug can have the opposite effect, making you jittery and scattered. Additionally, many "Energy Drinks" marketed to adolescents have almost twice the amount of caffeine as in a cup of coffee or a soft drink.

Dangers of combining alcohol and drugs:

Effects of depressants are heightened when combined with other depressants, and increases the risk of respiratory and cardiac arrest. When using stimulants it increases stress on the heart and other organs. The combination of a depressant and stimulant increases your risk of overdosing because the effect of the depressant is increased and the effect of the stimulant is reduced.



You can never know for certain how two substances will react with one another which is why it is so dangerous to mix substances.

Recognizing the Signs of Substance Use:

- Bloodshot eyes
- Dilated or pinpoint pupils
- Wearing sunglasses inside or in the dark
- Lethargic
- Food cravings or loss of appetite
- Staring off / Zoning out
- Loss of interest in former hobbies
- Loss of libido
- Decrease ability to perform at school
- Excessive sleeping
- Lack of personal hygiene
- Rotting teeth
- Sores
- Premature aging
- Laughing at inappropriate times

What You Can Do as A Parent or Caregiver?

- Communicate with your child. Talk to your child every day and ask open ended questions about how their day went or what their favorite part of the day was. Listen

to what your child has to say and remain non-judgmental about concerns they may ask or tell you about.

- Get involved in your child's life by doing something small with them every day. Show your support by attending extracurricular activities and being there for them whenever they need it.
- Establish clear boundaries and rules and enforce them. Make sure consequences have been established beforehand.
- Educate yourself on alcohol and substances. Set time aside to talk to your child about alcohol and substances and explain how they can affect their body, their life and their future.

Local Resources:

KAIROS

www.youthdiversion.org

613-542-6559

Tri-County Addiction Services

www.tricas.on.ca

613-283-7723 or 613-345-7453

The Centre for Abuse and Trauma Therapy

www.centrefortherapy.ca

613-507-2288

Lennox & Addington Addiction and Community Mental Health

www.laacmhs.ca

613-354-7388 Crisis Line (24hrs)

613-354-7521

Frontenac Community Mental Health and Addiction Services

www.fcmhas.ca

613-544-4229 Crisis Line (24hrs)

613-544-1356

Online Resources:

- www.camh.ca
- www.drugabuse.ca
- www.drugcocktails.ca
- www.teenchallenge.ca
- www.teens.drugabuse.gov/drug-facts
- www.kidsmentalhealth.ca/parents/substance_abuse.php