Teens, and even older children, may use legal substances like tobacco, alcohol, glue, gasoline, diet pills, over-the-counter cold remedies, or prescription pain killers like OxyContin® or other opioids. Some may then go on to use illicit drugs like marijuana, LSD, cocaine/crack, heroin, PCP, crystal meth, speed, or ecstasy. Increasingly, though, opioids and Fentanyl are being used by young people, with escalating death rates from overdose the result.

A substance use disorder refers to the use of such drugs or other chemicals (like glue), which, if mild, doesn’t interfere with daily life. Substance use is considered to be a severe disorder when a person continues to use drugs even when it leads to serious personal consequences like family problems, losing friends, getting expelled from school, losing a job, or getting into legal trouble.

Experimentation with drugs can also lead teens to use an extremely addictive drug called “crystal meth”, or methamphetamine (a drug similar to amphetamine). While amphetamine is a prescribed medication that is used legitimately to treat ADHD or other conditions, crystal meth is “cooked up” using paint thinner, drain cleaner, or the lithium from batteries. When smoked or inhaled, it can lead to irregular heartbeat, damage to brain blood vessels that can cause strokes, severe depression, or symptoms of Parkinson’s Disease. Young parents with substance use disorders may neglect or abuse their children, or use drugs during pregnancy, putting their unborn children at risk for poor development or malformations.

Even though it may not seem as toxic as other drugs, cannabis can lead to serious effects requiring long-term treatment in some people. In Canada, pending legalization of cannabis will likely increase its use. This is of concern because the drug can cause some vulnerable teenagers to see things that aren’t there, or to hear things others don’t, have trouble thinking clearly, or have thoughts that don’t make sense to other people. These are symptoms of a psychotic disorder.

Alcohol and tobacco, both legal substances, can cause even greater harm to physical health and social development than many illegal substances. Cigarette smoking is a major cause of death from heart disease, stroke, cancer, and lung disease in adults. Early, continued use is associated with depression and anxiety during adolescence and with poor school and relationship problems as they become adults. Nicotine is a highly addictive substance and quitting is very difficult.

Teens who binge drink (have more than 5 drinks one after another) are more likely than teens who don’t binge to do poorly in school, be a victim of dating violence, attempt suicide, or do other things that put their health at risk, like having unprotected sex.

Substance abuse affects not only involved individuals but society as a whole, causing lowered productivity, increased crime rates, and increasing numbers of homeless people on the streets.

How common are substance use disorders?

According to a national survey, about 10% of Canadian teens between 15 and 19 report using cannabis, while use of other drugs all fall below 1%, each. It is important to remember, though, that alcohol is the most used and misused substance, and has significant harmful effects, like serious liver disease, motor vehicle accidents, and suicide.

How long do they last?

Some older children and teens try illicit drugs only once or, at most, a few times. A smaller group may become chronic users of cocaine, heroin, tobacco, or alcohol, and need long-term treatment. Substance abuse that begins in late childhood or early adolescence tends to persist, and is more severe in adulthood. Adults who started using tobacco as teenagers are also more likely to have depression, poor physical health, and reduced income compared to their non-smoking peers. They also tend to have achieved fewer years of education.

It appears that drug use usually falls off in the mid-twenties, so that teens between 15 to 19 are three times more likely than adults to use illicit drugs, and are four times more likely to report harm from their use.
What causes substance use disorder?
The use of drugs triggers the reward system in the brain, often so powerfully that drugs are more important to the drug user than anything else in life.

Children and adolescents with ADHD, Oppositional Defiance Disorder, or Conduct Disorder are more likely to use drugs or sniff gasoline or glue. Teens using substances may have depression or fear social situations. Some have post-traumatic stress disorder - a type of anxiety related to early history or current experience of physical or sexual abuse. Substance use is also frequently seen in adolescents with bulimia or with schizophrenia.

Drug use and mental health problems seem to go together, but no one knows which comes first. Some kids who are anxious or depressed use drugs to try to make themselves feel better. On the other hand, it is possible that using the drugs makes teens experience those feelings. When teens feel bad about themselves or feel they don’t fit in anywhere, they may find a like-minded group of friends who use drugs. Not knowing how to resist peer pressure, or choosing not to resist it, increases the likelihood of substance abuse.

Teens who had difficulties making friends in middle childhood also seem to be more likely to abuse drugs or other substances during adolescence. Teens are at risk if they are exposed to drinking and drugs or domestic violence in the home, or if their parents have mental health problems. Growing up in a poor or crime-ridden neighbourhoods also contributes to substance use in children and teens.

What’s normal and what’s not?
It’s not unusual for a teenager to try alcohol, tobacco, or other drugs, occasionally. However, if the drug use is chronic and causes personal or family problems, it can be a sign of something more serious, like a mental health problem.

What treatments are effective?
Prevention is the best way to deal with problematic substance use. However, treatment programs that include all or some of the following components seem to work best in young people who are ready to change:

- Cognitive behavioural therapy (CBT) that address underlying mental health problems, and family therapy can help to reduce family conflict.
- Maintenance therapy, in which safe, prescribed medications such as methadone and suboxone are taken, prevent extremely unpleasant withdrawal symptoms and make quitting permanently more likely, as they also eliminate cravings for opioids. Naltrexone and acamprosate are likewise used for alcohol withdrawal.

Long-term follow up of any treatment is recommended because substance use is a chronic disorder. Testing teenagers for drug use at home or in the schools is not recommended because it can falsely identify a teen as a drug user when, in fact, the test is unreliable.

Testing without the teen’s knowledge is a betrayal of trust and could harm his/her relationship with the parent. Screening should be used only if there are good programs and treatment facilities available. It should not be used to punish teens already harmed by their drug use.

OTHER RESOURCES:
More resources are available at offordcentre.com.

Please visit offordcentre.com/research/knowledge/resources for websites and books on this topic.