MODULE E BACKGROUND INFORMATION

Background Information

Alcohol and Other Drugs

Scientifically, a drug is any substance, other than food, that is taken to change the way the body or the mind functions. In other words, a drug is any chemical that, when it enters the body, affects the way the body works. Alcohol, caffeine, nicotine, and medications are all drugs. A drug must be able to pass from the body into the brain. Drugs change the messages that brain cells send to each other and to the rest of the body. They do this by interfering with the brain's own
chemical signals: neurotransmitters.

There are two types of drugs:

- **Legal drugs** are known as over-the-counter (OTC) and prescription (Rx) drugs. Alcohol, nicotine, and caffeine are all legal drugs as well.
- **Illegal drugs** refer to drugs that are not prescribed by a licensed medical professional, and their use is unlawful under the *Controlled Drugs and Substances Act* (Department of Justice Canada).

Background Information

Legal Drugs

Legal drugs are considered permissible for use, and are either prescribed by a physician (prescription medications) or are available over the counter at a pharmacy or other outlet (non-prescription medication). They are intended for medical purposes, such as to ease pain symptoms and to treat health conditions.

OTC drugs or non-prescription medications are available to consumers without a prescription. There are many categories of OTC drugs, such as pain relievers, cold and flu medicines, allergy medications, acne products, and weight-control products. These drugs are usually safe when consumers follow the directions on the label and the directions from their health care professional. Each drug label must have information related to the medicinal and non-medicinal ingredients, use of the drug, applicable warnings or cautions, directions, and dosage.

As indicated by the Center for Drug Evaluation and Research (CDER),
"OTC drugs" generally have these characteristics:

- their benefits outweigh their risks
- the potential for misuse and abuse is low
- the consumer can use them for self-diagnosed conditions
- they can be adequately labelled
- health practitioners are not needed for the safe and effective use of the product (CDER, "Introduction")

Background Information

Prescription Drugs

There are many prescribed drugs that are frequently misused or abused by people.

- **Substance misuse** is classified as either intentional or unintentional use of a substance (including prescription medications, non-prescription medications, and alcohol) that causes a problem.
- **Substance abuse** is an intentional pattern of harmful use of any substance for mood-altering purposes.

Either substance misuse or abuse can result in repeated adverse social consequences related to drug use, such as failure to meet work, family, or school obligations, interpersonal conflicts, or legal problems.

A prescription drug must be prescribed by a physician or other qualified health professional. Prescriptions authorize a pharmacist to provide a specified amount of a particular medication for a specific patient, with instructions for its use. These drugs are regulated by Health Canada's Therapeutic Products Directorate (TPD).

Often people are unaware of the serious health risks involved in abusing prescription drugs. Because prescription drugs are "legal" and are known to be manufactured to meet quality and safety standards, many young people mistakenly believe that they are always safe to use. Safety can only be assumed if the drug is taken by the intended person as directed by the prescribing doctor. Increasingly, young adolescents are obtaining prescription drugs from classmates, friends, and family members or are stealing them from people for whom the drugs had been legitimately prescribed. As prescription drugs are readily available and can be obtained easily by teenagers, there is cause for concern.

Categories of Prescription Drugs

Three main categories of prescription drugs are of particular concern with regard to their potential for abuse. All the substances in these categories will alter a person's mood and/or behaviour, and are thus "psychoactive" (have an effect on the functioning of the brain). All three categories also represent substances that have serious potential to produce dependence or addiction.

These three categories of "psychoactive" prescription drugs are as follows:

- **Narcotic pain medications** (e.g., opioids) are prescribed to manage chronic or severe pain. Generic and brand names include morphine- and codeine-related drugs such as Demerol, OxyContin, Vicodin, and Dilaudid.
- **Central nervous system (CNS) depressants** (sedatives and tranquilizers) are prescribed to treat conditions such as anxiety and acute stress reaction, panic attacks, and sleep disorders. Generic and brand names include barbiturates such as Nembutal and benzodiazepines such as Valium (diazepam) and Xanax (alprazolam).

- **CNS stimulants** are prescribed to treat conditions such as attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD). Generic and brand names include amphetamines such as Ritalin.

Other prescription drugs that may be misused include anabolic steroids, which are often used in an attempt to build muscle mass, and cannabis-related prescription products (e.g., medical marijuana or the tablet form dronabinol/Marinol). There are several other classes of prescription drugs that have psychoactive properties (e.g., antipsychotics, anti-mania drugs, antidepressants), but do not tend to be abused for "recreational" purposes.

Naming of Drugs

Drug names originate from

- the structural formula (chemical composition) of the drug (**generic** name). This is the "common" name of a drug and does not require capitalization (e.g., acetaminophen is a common name of a popular pain medication).
- the name used by pharmaceutical companies to market the product (**brand** or **trade** name). The name usually has advertising value. Companies will register or copyright the brand or trade name (e.g., Tylenol is one brand name of acetaminophen). Because they are "proper" names, these brand and trade names are capitalized.

Background Information

Illegal Drugs

Illegal drugs are regulated or unlawful substances (e.g., cocaine, crystal methamphetamine [meth], anabolic steroids, heroin, cannabis), which are usually obtained by dishonest or prohibited means (e.g., through drug dealers).

Whether or not a drug is legalized is often influenced by political, cultural, and social concerns. For example, tobacco was considered illegal when it was first brought to England. It was legalized, however, when it was determined to be a revenue source for the government. Despite the fact that it is now known to be a health risk, tobacco remains a legal substance.

The dynamic of changing the legal status of drugs continues today, as is the case with marijuana. Debate continues about the therapeutic properties of marijuana and its legal status, as well as its potential as a source of revenue. There is still the concern that even if a drug is legal (e.g., alcohol is a legal drug), it isn't necessarily safe.

Numerous health problems (both physical and psychological) and social problems are associated with illegal drug use. For example, overdose and death can occur because users do not know the purity, quality, or strength of the drugs they are taking. People can become addicted to illegal drugs, as there is generally no counselling regarding their use. As with legal drugs, illegal drugs may have side effects that could be dangerous or life-threatening. In addition, some diseases can be contracted by activities associated with illegal drug use, including sharing needles, which can cause people to contract the human

immunodeficiency virus (HIV), hepatitis, and other infections. Obtaining illegal drugs requires associating with "drug dealers" and the illicit drug environment, which can create its own problems. For example, users may become involved in the legal system if they find themselves charged with drug possession or trafficking.

Illegal drugs are often classified based on the common effects they may have on the mind or on the body. The Addictions Foundation of Manitoba uses the following drug classifications and definitions:

- **Depressants** (e.g., alcohol, opiates, heroin, morphine) slow down the heart rate and cause body temperature and blood pressure to drop.
- **Stimulants** (e.g., cocaine, crystal meth) speed up the heart rate and cause body temperature and blood pressure to rise.
- **Hallucinogens** (e.g., acid, magic mushrooms, peyote) have some depressant qualities and some stimulant qualities. These drugs may cause people to hear or see things that are not really there.
- **Cannabis** (e.g., marijuana, hashish [hash], hash oil). See *Basic Fact Sheet on Marijuana* in the following reference.

More Info:

Addictions Foundation of Manitoba (AFM). "The Basics Series on Alcohol and Other Drug Information." *Learn More: Alcohol and Other Drugs*. 2005. <www.afm.mb.ca/Learn%20More/alcohol_drugs.htm#factsheets>.

Lesson 2: Stages of Substance Use and Addiction

Introduction In this lesson students explore the stages of substance use from non-involvement to dependent involvement. Students learn about the risks and consequences of substance use and addictive behaviour. Helping students to recognize the stages or levels of involvement in substance use, and addressing the facts and feelings associated with substance use, may promote behaviour change or healthy decision making

Background Information

Preventing Addiction

The Addictions Foundation of Manitoba (AFM) defines addiction as "an unhealthy relationship between a person and a mood-altering substance, experience, event or activity, which contributes to life problems and their reoccurrence" (*A Biopsychosocial Model of Addiction* 2). Preventing addiction and ensuring that students have the current information for making healthy decisions are primary goals in all drug education programs.

Teenagers often think they are invincible and that risk-taking behaviours will not harm them. Some young people cannot see where the long-term effects of experimentation with substances may lead. They think they will not become harmfully involved by using substances just for fun or just one time.

Background Information

Levels of Involvement (LOI) Framework

Substance use and abuse is a complex phenomenon that includes diverse drugs, different levels of involvement, and various causes. In 1997, AFM developed a *Levels of Involvement Framework* to describe the various levels of involvement in gambling, alcohol, or other drugs. The AFM framework emphasizes the importance of biological, psychological, and sociological factors in determining an individual's level of involvement with substances or gambling. Other types of models or continua may be available to help students identify usage patterns, but for the purpose of this curriculum, the discussion to follow focuses on the AFM framework.

The levels of involvement identified in the AFM framework range from no involvement to dependent involvement or addiction, as outlined in the following chart.

Levels of Involvement in Substance Use*	
Level/Stage of Involvement	Definition of Behaviours/ Consequences of Involvement
Non-involvement (Non-use)	▪ Never used alcohol or other drugs ▪ Have chosen a non-using lifestyle following some involvement in the past
Irregular Involvement	▪ Random or infrequent (including experimental) use of alcohol or other drugs ▪ Little or no evidence of any problems caused by use
Regular Involvement	▪ Using alcohol or other drugs regularly, with some pattern (e.g., daily, weekly, monthly) ▪ Some minor or isolated problems may be caused by use ▪ Actively seeking involvement
Harmful Involvement	▪ Using alcohol or other drugs causes problems in one or more areas of life
Dependent Involvement	▪ Despite use of alcohol or other drugs causing problems in life areas, use is continued, plus — there are failed attempts to cut down/quit — a lot of time is spent using or thinking about using — strong urges to use are experienced — there are uncomfortable feelings when abstaining — more of the substance is needed to get the same high
Transitional Abstinence	▪ Choosing to quit use of alcohol and other drugs after harmful or dependent involvement and struggling with how this feels
Stabilized Abstinence/Recovery	▪ Abstaining from alcohol and other drugs after harmful or dependent involvement and feeling confident and comfortable with this

* Source: Addictions Foundation of Manitoba. *Levels of Involvement Framework.* Winnipeg, MB: Addictions Foundation of Manitoba, 1998. Available online at <www.afm.mb.ca/Learn%20More/Levels%20Invol.pdf>. Adapted with permission.

RM 9–SU: Sam's Story: Alternate Assignment
Walnut Creek Teen's Road from Meth*

(see teacher for question sheet)

San Francisco Chronicle
Christopher Heredia, *Chronicle* Staff Writer
Tuesday, May 6, 2003

When Sam first tried crystal meth with her Walnut Creek high school friends last year, she was scared. But she liked it. She did it again. And again.

Sam had always hated her body, and now she was losing weight. She finally belonged. She'd been depressed, and the meth was holding that at bay.

Yet not much later, she started fighting with her parents and her friends. Sometimes she spent days on end in her room, fearful that the police were about to knock at her door. She was sure they were coming to get her. She couldn't sleep. She weighed only 100 pounds—down from 145. She saw a skeleton in the mirror. Her hair was falling out. She felt alone.

She was anything but.

Just as meth has become an epidemic in gay communities across the nation, so it has infected the country's suburban teens in alarming proportions. National health studies show that use of methamphetamine is growing faster among American teenagers than any other drug. Only marijuana is used more than meth.

National health experts say meth gets an ironclad grip on suburban teens like Sam because they are bored, troubled, ready to travel. They're loaded with emotional baggage, looking for a way out. Often they're depressed, stressed beyond their limits. Maybe an attention deficit disorder or learning disability was never discovered.

"Meth will . . . kill you," Sam says. "It f- up my life."

Sam's life so far is 17 years long. She lives at home in Walnut Creek with her parents and younger sister. The family is comfortably middle class. The house is four-bedroom, three-bath. Their drive is private. They own a truck and an SUV, two boats, a large-screen TV.

But from January to September of 2002, their life was a living hell. Sam was disturbed and using meth. Her father drank heavily. Her mother was already exhausted from muscular dystrophy.

During the nine months of turmoil, Sam never had any problems getting meth. It was cheap—the going rate for one night's worth for two was $40—if she had to pay at all. Sam says friends at Northgate High School often just gave it to her.

"It's everywhere," she says. "You can't escape from it."

Continued

Note: Review this RM before using it with students to check for suitability and appropriateness.

RM 9–SU: Sam's Story:
Walnut Creek Teen's Road from Meth *(Continued)*

But escape it she did. And she and her family hope now that by sharing their experience—everything but their last name—they will help others escape, too.

This is Sam's story.

The First Time

Growing up, Sam never cared for Britney Spears. Or dieting. Or athletics. Instead, she drew and wrote poetry. She downloaded music from the Internet. Her favourite band was Sublime, whose lead guitarist, Bradley Nowell, an idol of Sam's, died of a heroin overdose in 1996.

Sam wore jeans and a sweatshirt most of the time. She lined her eyelids with a dark pencil, but left the rest of her makeup subtle.

Sam was not part of any clique at school. Her younger sister, Jessica, was always the goal-oriented one. Jessica, 15, got straight A's in school and was a varsity cheerleader with a brilliant smile.

Sam's family lived a typical suburban life. Her mother, Stephanie, did volunteer work, and her father, Mike, was a telecommunications manager. Sam liked to just hang at Sunvalley Mall in Concord and strum her guitar with her friends in the park.

In the summer of 2001, Sam tried alcohol. She was 16. Her drink of choice was beer—MGD was her favourite brand. She also smoked weed. Then in January 2002, she did some cocaine.

She knew nothing about meth. A couple of weeks after doing the coke, a friend offered her some meth.

Because she was at her friend's house, and her girlfriend was doing it, it seemed OK. Sam swallowed her fears. All told, there were four girls. They each snorted some.

And then they snorted more.

Sam and her friends liked to call meth "tweak."

Soon enough, Sam was snorting or smoking tweak every day. It made her happy.

It made her talkative. It made her energetic. And she lost lots of weight.

These were the good times. They didn't last.

Continued

RM 9–SU: Sam's Story:
Walnut Creek Teen's Road from Meth *(Continued)*

Signs of Trouble

A schoolmate of Sam's called Stephanie in late February. She [Sam] hadn't been showing up for class. She was constantly stoned, the friend said. Her parents were infuriated. They sat Sam down and confronted her. She lied to them. She told them she'd been getting high on weed—marijuana, that was all.

When she owned up to her parents days later, told them she was doing speed, they were shocked. Then worried.

"It's the worst s- you can do," they told her.

They grounded her for a week. Sam thought the punishment was unfair, but she knew she could wait them out.

She started sneaking off through her first-floor bedroom window and making up stories about whom she was seeing. All the while, she was smoking pot, but not meth. Her friends didn't have tweak. She did this from January until the end of August. Then one Wednesday night, she did some cocaine a friend had. The next day, her friend got some tweak. She was back on it again.

She hung with school friends who sold drugs on the side. Two male friends would give her the drug for free, or at least dirt cheap.

She isolated herself from friends who didn't do drugs so they wouldn't find out about her habit. She was ashamed. She was "cracked out"—irritated, agitated, paranoid. She thought people were watching her every move. She started to hallucinate.

One time, she went to the mall with her sister. She used her dad's credit card to take $20 from a cash machine, to buy drugs. Her dad found out. Jessica told on her big sister. Her dad exploded, gave Sam a verbal lashing.

That night, Sam ran away. She was leaving for good. She went to a friend's house in Walnut Creek.

She smoked pipe after pipe of speed, until 7 a.m. the next day. Her parents, meanwhile, frantically searched all night. They finally found her by calling friend after friend. They brought her home.

Continued

RM 9–SU: Sam's Story:

Walnut Creek Teen's Road from Meth *(Continued)*

On her mom's birthday in August, she was so high she didn't want to join the family celebration at a restaurant in Lafayette. She was exhausted and fell asleep in the car. Her family forced her to go inside. All Sam could think about was how much she hated being there.

She wondered whether her parents would notice how large her pupils were. She didn't eat a thing.

For four weeks, throughout August, Sam smoked meth every day. After she ran away, her dad sat her down and asked her if she wanted help. She said yes.

In early September, she began a drug rehabilitation program at New Bridge Foundation, a private outpatient clinic in Walnut Creek. Her parents' insurance covered most of the cost.

Sam had to make a pact with herself and her family. She signed a home contract that said, in part, "Today is my last day using speed." The contract required her to list the friends she vowed not to see, to submit to two urine tests a week to check for drugs.

Sam was on the road to recovery.

A Shocking Revelation

Weeks after signing the home contract, Sam attended a family treatment meeting with her parents at New Bridge Foundation. Teens around the room were sharing their stories.

Sam had been telling her parents that she hadn't used meth since beginning treatment—and they'd believed her. But at this meeting, Sam piped right up. She looked at Stephanie and Mike and said: "Mom and Dad, I used."

Stephanie's heart went to her stomach. She began to sob. "I thought you were through with it, Sam." Stephanie couldn't stop crying.

Sam would relapse two more times.

Setting Goals

By November 2002, Sam had been clean for 45 days—the relapses were a thing of the past.

Sam agreed with everyone that she needed some goals to help her stay drug free. She filled out a form from the New Bridge Foundation that included warning signs to watch out for: "lack of meetings, isolation, anger/saddness (sic), hanging out with using friends, going to partys (sic)."

Continued

RM 9–SU: Sam's Story:
Walnut Creek Teen's Road from Meth *(Continued)*

She also listed issues to work on: "dealing with my anger, keeping busy, working out my feelings, staying clean."

At about the same time, Sam began seeing a therapist, Dr. Alex Stalcup of Lafayette, who diagnosed Sam as being depressed and started treating her for attention deficit disorder.

Despite Sam's progress, Stalcup was concerned. His patient's recovery was very fragile.

Day 64 of Being Clean

On a December day in Walnut Creek Sam's mother is still adjusting to the ordeal of her daughter's meth addiction.

"I'm the pushover mommy," Stephanie says, sitting at the family's kitchen table. She has changed her parenting techniques. "It took awhile to sink in that things aren't right and I have to be stern. I also don't want to get in her face. I'm trying to let her work through things. We're taking it from day to day."

Stephanie and Mike took away Sam's driving privileges indefinitely. They forced her to come home immediately after school or any meeting of Narcotics Anonymous. Her mom drove her to the meetings.

Stephanie and Mike had other issues to deal with. Sam couldn't stand the thought of being in the house because she resented the temptation of Mike's wine and beer in the refrigerator. After a family discussion about Mike's drinking, all alcohol was removed from the house.

Stephanie and Mike went to a meeting of Al-Anon, a program for friends and families of alcoholics and addicts. At the meeting, they learned that addiction is a disease. It's not somebody's choice. It's not under their control.

That helped.

Ups and Downs

On Day 94 of being clean—early January—Sam was moody. She slept until midafternoon. The doctor had her on a new antidepressant.

Stephanie had gone into Sam's room days earlier and was certain she'd smelled the stench of alcohol.

Continued

RM 9–SU: Sam's Story:
Walnut Creek Teen's Road from Meth *(Continued)*

"She's just not a happy person," Stephanie says. "I think it goes back to her ADD and depression. I'm very worried. It's just scary. As a mom, you want to fix things, and I can't fix this.

"She doesn't want to be around the family. She wants to avoid responsibility issues. Her schoolwork is still sitting there."

Sam's father also believes that the family and its problems contributed to Sam's escape to drugs. But he says adolescent experimentation and Sam's isolation took their toll.

"Kids, as they grow up—we as parents have our ideas—you try to teach them," Mike says. "Sometimes yelling and screaming happens in every family. That probably contributed as well. When they don't do well at school, you put pressure on them, and they try to escape from pressures.

"Speed is rampant out here, as I'm sure it is everywhere. We're proud of her for being able to beat it, stay off it. Not a lot of people can do that."

Stephanie is afraid every time Sam leaves the house that Sam may not come home—ever. "Hopefully she'll stay in aftercare. We're going to use all the resources we have."

Stephanie might worry less if she could hear her own daughter's stories.

Like the story where Sam handles a New Year's phone call from one of her old using friends.

"She told me she hadn't slept for a couple of days," Sam says. "She's dating a drug dealer. Those people don't appeal to me. She was saying, 'Let's hang out. I haven't seen you.' I didn't want to talk to her anymore.

"This is the best I've ever been. No more lies, no more hiding, no more chaos. Instead of dealing with problems in bad ways, we work it out. I thought meth was fun. In reality, it was not fun."

Sam came to realize that boredom played a role in her getting hooked on meth: "Everyone has lots of money. Parents give kids money. There's nothing to do in Walnut Creek. Meth puts excitement into your world. It was my favourite drug to do. It's also the worst. It's so dirty."

Continued

RM 9–SU: Sam's Story:
Walnut Creek Teen's Road from Meth *(Continued)*

A Big Day

"Way to go, Sam!" says teacher Amy Bush, handing Sam a letter. "Done!" Sam says. "I'm going to hang it on my wall. Yahoo!"

Sam has just completed her course requirements at Nueva Vista Continuation High School.

"At times, it was like pulling teeth out with pliers," chimes in Nueva Vista Principal Julie Hernandez.

Sam's final project, handed in on Jan. 31, was several poems and a paper about her battle with meth addiction.

Sam turns 18 on June 4. She will receive her diploma June 8, then plans to continue her studies at Diablo Valley College in the fall and look for a job. Her dad has promised her a Jeep and a cell phone.

"I have goals and plans and deadlines and clean days to keep track of," she says. "I can't use. I could die. Things will be the same if I use again. It used to solve problems when I was high. Now I deal with problems."

The Future

As of today, Sam has been clean for 220 days.

It hasn't been easy.

"I'll still be here to do anything I can to help her," Stephanie says. "You can't give up on these kids. You love them and want them to get through it. They can't do it without a strong family."

For her part, Sam has never been happier—or felt stronger.

"I don't want to go back," she says. "Things are really good now. I've got my house, my dad is buying me a Jeep, I got my cell and my parents' trust.

"Adulthood means I've got to be responsible now, do stuff for me my parents can't."

RISK PERCEPTION, CONSEQUENCES, & THE RISK CONTINUUM

There are various types of consequences for risk taking. These include physical risks,social risks, emotional risks, and legal risks . Health-related behaviours can have both short- and long-term consequences. Some risks are health promoting, others are health prohibiting. With drug use, for example, the physical risks may include increased anxiety, sleepiness, abnormal vital signs, and irritability, which would be classified as long-term physical risks. Social risks may include social alienation and loss of friends. Emotional risks may include fighting with parents or friends about drug use. Legal risks may include problems associated with theft or trafficking.

Risk can vary, depending on whether the behaviour occurs only once or whether it is habitual. For example, does binge drinking lead to the negative health consequences associated with long-term bingeing? Is smoking occasionally a risk factor for respiratory problems?

Risk Continuum Examples			
Alcohol use	Abstainer	↔	Binge drinking
Tobacco use	Abstainer	↔	Frequent smoker
Prescription drug use	Abstainer	↔	Abuser/addict
Illegal drug use	Abstainer	↔	Addict/criminal
Violence	Conflict resolution	↔	Abusive behaviour
Consumer health	Listening to a health educator	↔	TV talk show

Risk and Protective Factors Related to Substance Misuse

The following factors can be either risk or protective factors:

- individual personality
- family
- peers
- school
- community / environmenta

Background Information

General Signs of Alcohol or Other Drug Use*

Teachers need to be aware of the behaviours that may be apparent in a young person who is using and/or abusing alcohol or other drugs. It may also be valuable to encourage students to watch for these signs among their friends and to seek ways to help and support them.

The following are some common signs and symptoms to watch for in individuals who may be using substances:

- general loss of energy and motivation
- declining grades, dropping classes
- skipping or being late for class
- preoccupation with "using" activities
- not seeing former "non-using" friends
- poor concentration and memory
- mood swings, increased irritability
- a general change in personality or mood
- involvement in harmful activity
- staying out late, not coming home
- arriving at home or school under the influence
- physical changes—in weight and hygiene
- presence of alcohol/drug paraphernalia, such as rolling papers, pipes, or bottles
- self-destructive behaviour, such as slashing skin
- putting self at risk, such as driving impaired
- personal or family belongings missing
- secretiveness about new friends and activities
- spending more time alone

* Source: Addictions Foundation of Manitoba. *Signs and Symptoms of Drug Use: A Guide for Parents and Teachers.* Winnipeg, MB: AFM, 2006. Adapted with permission.