

# Alcohol and Drug Injuries

## LESSON OBJECTIVES

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- students will be able to investigate injuries that result from alcohol and other drug use
- students will be able to identify prevention of, and response to, injuries related to the use of alcohol and other drugs
- students will be able to communicate concerns about level of use, risk-taking behaviours and effects on major life areas that can result from alcohol and other drug use
- students will be able to increase awareness of community resources that promote health and well-being

## CONTENT AND TIME (80-MINUTE LESSON)

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- 3.1 Introduction (20 minutes)
- 3.2 Alcohol and Drug Injuries (20 minutes)
- 3.3 Activity: Seeking advice (30 minutes)
- 3.4 Closure: Key Messages (10 minutes)

## REQUIRED MATERIALS

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HANDOUT 3.1a: Substance Use Awareness

HANDOUT 3.1b: Substance Use Awareness Answer Key

HANDOUT 3.2: Alcohol and Pregnancy (OPTIONAL)

HANDOUT 3.3: Alcohol and Drug Injuries

HANDOUT 3.4: Alcohol Overdose

Journal books or loose-leaf paper

Injury, whether inflicted on purpose or unintentionally, happens more often to those who are under the influence of alcohol or other drugs. Furthermore, given the same traumatic circumstances, intoxicated people are likely to be hurt more seriously than they would have been if their reflexes were unimpaired by substance use. Even moderate drinking or drug use can interfere with judgment and reaction time. This lesson focuses on possible injuries that can happen as a result of alcohol or other drug use, and how to prevent and respond to these injuries (AADAC, n.d. h).

### 3.1 Introduction (20 minutes)

Ask students to complete HANDOUT 3.1a: Substance Use Awareness. Discuss answers, which are provided on HANDOUT 3.1b: Substance Use Awareness Answer Key.

The quiz includes questions about alcohol use during pregnancy, which is a topic you may wish to explore further with your class. HANDOUT 3.2: Alcohol and Pregnancy is attached to this lesson. It can be used to guide a class discussion about this topic or as an optional handout for your students. It provides important information about fetal alcohol spectrum disorder (FASD) and the effects that alcohol can have on a developing baby.

### 3.2 Alcohol and Drug Injuries (20 minutes)

During the last class, students created a framework of preventive strategies, potential problems and action plans for alcohol-related gatherings. This activity is an extension of that framework; it requires students to investigate physical consequences of alcohol and other drug use, and to describe specific ways of preventing or dealing with possible injuries.

In small groups, have students read through the scenarios on HANDOUT 3.3: Alcohol and Drug Injuries. Ask them to record injuries that could result from each example, and to develop one or more of their own scenarios where injuries take place.

As a class, discuss some of the scenarios provided and others generated by the groups. With each, ask students to consider preventive strategies and explain ways to avoid the situation altogether. Have them also describe a plan of action in response to each injury. Note recurring actions described for prevention (drinking lots of non-alcoholic beverages, being with familiar people in familiar places, taking away a friend's keys) and response (calling 911, monitoring breathing, trying to calm down a friend).

Distribute HANDOUT 3.4: Alcohol Overdose. It provides important information about symptoms, what to do and the recovery position when a person has consumed a dangerous amount of alcohol.

### 3.3 Activity: Seeking advice (30 minutes)

Give students 15 minutes to write a brief letter seeking guidance from a magazine advice columnist. The letter should describe concerns about a person's behaviour during a social gathering involving alcohol or other drugs. Emphasize that the person and the event are hypothetical; therefore, real names cannot be used. Students can use a scenario presented in this lesson, an alcohol-related event generated during the last class, or a situation that they create on their own. They can write their letters from any person or time perspective, for example;

- written from their own perspective, after the camping incident
- written by a boyfriend or girlfriend before attending a grad party
- written by a parent after the quad accident
- written by the host of a party about a fight that occurred.

The letters must include a realistic and straightforward request for advice. Encourage students to express concerns about the person's level of use, risk-taking behaviours and effects on major life areas. Inform students that their letters will be read to the class and used for a homework activity.

Collect the letters and distribute them randomly to students, ensuring that nobody receives the letter he or she wrote. Divide students into groups of four. Ask them to read through the letters and briefly discuss the guidance they would give each person. Include discussion of helpful agencies and other support that is available in the community.

## 3.4 Closure: Key Messages

(10 minutes)

As a homework assignment, have students write a brief response to the letter they have been assigned. And as part of this assignment, ask them to look in the phone book or on the Internet and to record a list of services and contact information that applies. This list should include any organization that provides help to people suffering from dependency problems and offers support to family members as well. Examples are Alberta Health Services, public health centres, community youth workers, school counsellors and 12-step programs (Alcoholics Anonymous, Al-Anon, Alateen, Gambler's Anonymous, Gam-Anon, Narcotics Anonymous and Nar-Anon). Students can also include community resources and support systems that relate specifically to any one of the major life areas (family support services, sport and leisure centres, churches, etc.). Explain that during the next class, students will need to describe how the items on their list promote health and well-being for self and others.

### Journal writing assignment

In your journal, describe the qualities a person needs to be able to handle an emergency situation. How many of these qualities do you possess? How are these qualities affected by alcohol or other drug use? Do people put themselves at greater risk of injury when using alcohol or other drugs?

# Substance Use Awareness

Rate the level of risk in each of the situations below. Some risks may have positive outcomes, and others negative. Rate the risks according to your personal comfort level.

1. People who use cannabis (marijuana) heavily for a long time can experience what side effect?  
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2. What is the definition of gambling?  
\_\_\_\_\_
3. What proportion of Alberta youth (gr 7–12) report having ever tried a cigarette?  
a. 20%            b. 52%  
c. 67%            d. 40%
4. Is psilocybin (magic mushrooms) a stimulant or depressant?  
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5. Why is second-hand smoke harmful?
  - a. more than half of the smoke from a burning cigarette is inhaled by everyone around it
  - b. the smoke from a burning cigarette has twice as much nicotine and tar as the smoke inhaled by the smoker
  - c. people exposed to second-smoke are at risk for developing lung cancer, heart disease and breathing problems
  - d. all of the above
6. What are the two drugs most commonly used by Alberta youth?  
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7. Which of the following has the strongest influence in protecting youth from becoming harmfully involved with alcohol, tobacco, other drugs and gambling?
- a. parental monitoring/supervision
  - b. positive adults in the community
  - c. family conflict
  - d. peer influence on decision-making
8. How much alcohol can a pregnant woman safely drink?
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9. What drug has been involved in deaths resulting from overheating?
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10. Methamphetamine (sometimes called crystal meth) is a highly addictive drug that can cause permanent changes in the brain and other parts of the body. True or false? T F
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11. Identify two signs that indicate a person may be experiencing a gambling problem.
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12. Many factors influence the effect that alcohol can have on a developing fetus. Name one such factor.
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13. Which of the following effects may be caused by ecstasy use?
- a. being irritable, paranoid or depressed and having flashbacks
  - b. having persistent chemical changes in the brain that result in mood swings and disrupted sleep patterns
  - c. getting better effects with higher doses
  - d. answers a and b
14. Driving while under the influence of cannabis is impaired driving. True or false? T F
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# Substance Use Awareness

## – Answer Key

1. People who use cannabis (marijuana) heavily for a long time can experience what side effect?

Long-term, heavy cannabis use may cause short-term memory loss and difficulties with concentration. Smoking cannabis also damages the lungs ([Drugsafe.ca/cannabis](http://Drugsafe.ca/cannabis)).

2. What is the definition of gambling?

Gambling is the act of risking money, property or something of value on an activity with an uncertain outcome (AADAC, 2003h). Licensed gambling includes lotteries, video lottery terminals (VLTs), casinos, bingos and raffles; and it is illegal for people under 18. Many young people gamble informally with family and friends, which includes wagering on a sports game, betting on a card, online gaming, board or video game, playing for keeps and flipping coins.

3. What proportion of Alberta youth (gr 7–12) report having ever tried a cigarette?

The Canadian Student Tobacco, Alcohol and Drugs Survey, 2016–17 results showed that 20% of Alberta youth in grades 7–12 report having ever tried a cigarette, even just a few puffs.

4. Is psilocybin (magic mushrooms) a stimulant or depressant?

Psilocybin (magic mushrooms) are a stimulant. Effects can include increased blood pressure and heartbeat, dizziness, light-headedness, upset stomach, numbness of the tongue and mouth, nausea, anxiety, and shivering.

They also belong to a class of drugs called hallucinogens. Psilocybin can change the way you see, smell, hear, taste and touch (AADAC, 2003a).

5. Why is second-hand smoke harmful?

All of the reasons listed are correct. Research clearly shows that smoking poses a health threat to non-smokers who are exposed to second-hand smoke. A 1992 study reported that in a one-year period, the children of smoking parents inhaled the same amount of nicotine as if they themselves had smoked 60 to 150 cigarettes (AADAC, 2002f).

6. What are the two drugs most commonly used by Alberta youth?

Alcohol and cannabis are the most commonly used drugs by Alberta youth. According to the Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS), 2016–17, 47% of Alberta youth from grades 7 to 12 report using alcohol and 21% report using cannabis at least once in the previous year. The prevalence of harmful use of alcohol (binge drinking) was 15%.

7. Which of the following has the strongest influence in protecting youth from becoming harmfully involved with alcohol, tobacco, other drugs and gambling?

Parental monitoring/supervision. This means that parents know what their children are doing, where they are and with whom (AADAC, 2003d, p. 14). According to TAYES 2002, important influences that protect youth from harmful involvement with ATODG include parental monitoring, good social skills, availability of and participation in pro-social activities, good school grades and school connection (AADAC, 2003e, p. 31).

8. How much alcohol can a pregnant woman safely drink?

No alcohol at all during pregnancy or while breast-feeding is safest. Fetal alcohol spectrum disorder (FASD) is a term used to describe the range of symptoms seen in some children born to women who drank alcohol during pregnancy. Babies with FASD may:

- be small for their age
- have a small head
- have facial abnormalities
- have problems with their heart or other vital organs
- be restless and have difficulty sleeping. (AADAC, 2003b)

9. What drug has been involved in deaths resulting from overheating?

Ecstasy causes increased sweating, and interferes with regulation of body temperature. People who take ecstasy feel like they have the energy to dance all night. They may not stop to drink the water the body needs to cool down. Dehydration and physical exertion both contribute to increased body temperature. Most of the deaths associated with ecstasy have been related to overheating. Hyperthermia (overheating) leads to problems with the heart, kidney, and liver (AADAC, n.d. c).

10. Methamphetamine (sometimes called crystal meth) is a highly addictive drug that can cause permanent changes in the brain and other parts of the body. True or false?

True. Methamphetamine use can cause permanent changes to the brain and lead to serious long-term health issues, including damage to the heart, high blood pressure, mental health conditions, and tooth decay and gum disease (Drugsafe.ca).



11. Identify two signs that indicate a person may be experiencing a gambling problem.

These are some of the many signs of problem gambling:

- spending more time or money on gambling than you intend
- trying to win back money that you lost
- feeling badly about the way you gamble or about what happens when you gamble
- exaggerating or lying about your wins
- wanting to quit gambling
- hiding your gambling from friends or family
- skipping school or work to gamble
- borrowing or stealing money for gambling (AADAC, 2003h)

12. Many factors influence the effect that alcohol can have on a developing fetus. Name one such factor.

How much a developing fetus is affected depends on:

- how much alcohol is consumed at once
- when alcohol is consumed during the pregnancy
- how often the fetus is exposed to alcohol
- other factors, such as the mother's stress level, nutrition and tobacco or other drug use

13. Which of the following effects may be caused by ecstasy use?

Both a and b are correct. Ecstasy can also cause panic attacks, blurred vision, vomiting, poor concentration, forgetfulness and exhaustion. Repeated use can result in liver damage. Generally, higher doses of ecstasy do not enhance the desired effects (AADAC, n.d. c).

14. Driving while under the influence of cannabis is impaired driving. True or false?

True. Even smoking a small amount of cannabis can slow reactions enough to make driving dangerous. Alertness, physical coordination and performance of visual tasks are all affected by using cannabis, which results in delayed reaction to sights and sounds that drivers need to notice (AADAC, 2001b, p. 26).

# Alcohol and Pregnancy

Women who are pregnant or trying to get pregnant need to know that alcohol can harm their developing baby. There is no safe time to drink during pregnancy, as the baby's brain and other organs develop throughout pregnancy. There is also no safe amount to drink. Children born to women who drink during pregnancy may experience any of a wide range of symptoms; these symptoms constitute fetal alcohol spectrum disorder (FASD).

## What is fetal alcohol spectrum disorder (FASD)?

Fetal alcohol spectrum disorder (FASD) is a term used to describe the range of symptoms seen in some children born to women who drank alcohol during pregnancy. Babies with FASD may:

- be small for their age
- have a small head
- have facial abnormalities
- have problems with their heart or other vital organs
- be restless and have difficulty sleeping.

People with FASD have brain damage that is permanent. Some of the problems they may experience include:

- problems with hearing and vision
- high activity levels
- problems learning in school
- difficulty with speech
- difficulty adjusting to changes in routine social problems
- eating and sleeping problems
- difficulty following directions
- poor memory
- poor coordination.

### **How much can a pregnant woman drink?**

No one knows for sure how much alcohol is safe for a pregnant woman to drink. Most doctors and researchers say that it is safest not to drink if a woman is pregnant, thinking about becoming pregnant or breastfeeding (since alcohol is passed to the baby through breast milk).

### **How is the fetus affected by alcohol?**

How a developing fetus is affected by alcohol depends on many things:

- how much alcohol is consumed at once
- when alcohol is consumed during the pregnancy
- how often the fetus is exposed to alcohol
- other factors, such as the mother's stress level, nutrition and tobacco or other drug use

What we do know is that alcohol can harm the fetus. What we do not know is how much alcohol it takes to cause the harm. So, no alcohol is safest when a woman is pregnant, thinking about becoming pregnant or breastfeeding.

### **Is drinking at certain times during pregnancy safer than at other times?**

There is no known safe time to drink during pregnancy. Since the fetus is growing all through the pregnancy, alcohol might cause harm at any time. A baby can also be affected by alcohol passed through breast milk.

### **What can a woman do if she is pregnant and thinks that she may have a drinking problem?**

It is never too late to stop drinking at any time during pregnancy. If a woman stops drinking altogether or cuts back on how much or how often she drinks, she may prevent or reduce harm to her baby. If a woman needs support to stop drinking, help is available by calling the Addiction Helpline at 1-866-332-2322 or visiting an addiction and mental health office. A woman may also want to talk to her doctor or community health nurse about alcohol and pregnancy.

(AADAC, 2003b)

# Alcohol and Drug Injuries

Using alcohol and other drugs can impair your judgment, your vision, and your general physical coordination, so it is not surprising to learn that people who use substances are more likely to get hurt than people who don't (AADAC, n.d. i).

Finish each of the following scenarios by recording an injury that takes place. Explain how the injury happened.

1. You and five other friends are tenting by a lake. It's dark outside and three of your friends have had a few beers. As a group, you decide to go swimming...
2. You are at a rave party with a friend who has taken ecstasy. Your friend has been dancing for about an hour, without taking any breaks. The club is hot and stuffy...
3. It's the weekend. You get together with three friends who have been smoking cannabis. One of your friends has a quad and he offers to take everyone for a ride...
4. Your friend meets you on Friday night to go to a party and tells you about taking crystal meth before coming to your place. At the party, you notice your friend acting alert and energetic (doing handstands on a chair), boasting about feeling powerful and superior (challenging others to arm wrestle), and becoming hostile and aggressive (shouting, starting a fight)...



# Alcohol Overdose

Using alcohol and other drugs can impair your judgment, your vision, and your general physical coordination, so it is not surprising to learn that people who use substances are more likely to get hurt than people who don't (AADAC, n.d. i).

## Symptoms of alcohol overdose

- severe vomiting, vomiting while "sleeping," or being passed out and not waking up after vomiting
- not responding to being talked to, shouted at, pinched, shaken, or poked
- not responding to efforts to be awoken
- being unable to stand
- slow and laboured breathing
- turning a purplish colour or having cold, clammy skin
- rapid pulse rate

***DON'T TAKE CHANCES WHEN A LIFE IS AT STAKE. If you see any of these symptoms in someone who has been drinking, get medical help as soon as possible.***

## What to do

1. Call 911 and ask for an ambulance.
2. Roll the person on his or her side in the recovery position so he or she will not choke if vomiting occurs.
3. Do not leave the person alone. Stay with him or her and monitor breathing until medical help arrives.

***If you are not sure what to do, it's always better to be safe than sorry. GET HELP if you suspect an alcohol overdose, even if the person is under the legal drinking age.***

**The recovery position**

When people pass out from drinking too much, you can help by positioning them in the recovery position so they won't choke if they vomit. You may not think they have had too much to drink, but they may have combined alcohol with other drugs or may have a medical condition unknown to you.

**Follow these steps**

1. Raise the person's closest arm above his or her head. Prepare the person to roll toward you.
2. Gently roll the person's entire body toward you. Guard the person's head while you roll him or her.
3. Tilt the person's head to maintain an open airway. Tuck the person's nearest hand under his or her cheek to help maintain the head's tilt.
4. Do not leave the person alone. Stay with him or her until medical help arrives.

***The exact positioning of the person is less important than the purpose of the recovery position, which is to keep the airway open so fluids (vomit) can drain from the mouth.***