

Alcohol and Health

Low-Risk Drinking



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Introduction

Canada's Low-Risk Alcohol Drinking Guidelines (LRDG) provide consistent information across the country to help Canadians reduce immediate and long-term alcohol-related harm. The guidelines are informed by recent scientific evidence and are primarily intended for adults aged 25 to 65 years who choose to drink. It is important to recognize that these are low-risk, not no-risk, guidelines and the guidelines set limits, not targets, for alcohol consumption.

Many people do not drink at all, for their health or for personal, spiritual or cultural reasons. The guidelines support this choice, acknowledging that any amount of alcohol can increase risk and that the widely advertised benefits of drinking alcohol are only relevant for one segment of the population.

The purpose of this resource is to inform health practitioners about the LRDG so that they can help Albertans to consider what changes, if any, they might need to make in their own alcohol consumption in order to reduce health risks associated with alcohol.



Low-Risk Drinking

The LRDG identify three distinct types of risk from drinking:

1. Long-Term Health Risks: risk of developing serious diseases (e.g., liver disease, some cancers) resulting from the consumption of alcohol over a number of years
2. Short-Term Risk of Injury or Acute Illness: risk of injury or acute illness due to the overconsumption of alcohol on a single occasion
3. Situational or Individual Risk: circumstances under which abstinence is advised (e.g., women who are pregnant or planning to become pregnant) or only occasional light intake is advised (e.g., young people)

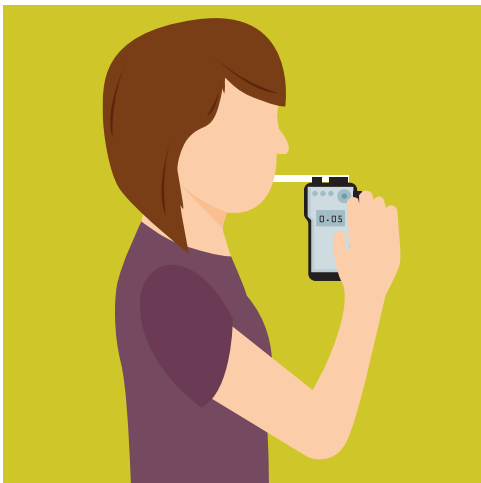
The Risk Is Different for Men and Women

Women are generally more vulnerable to the effects of alcohol use for several reasons.

Women usually weigh less than men and, given similar rates and amounts of alcohol consumption, smaller people reach higher blood-alcohol levels than larger people.

Even if a woman and a man weigh the same, a woman's blood alcohol concentration is likely to be higher, as women usually have less water in their bodies to dilute alcohol. Women also have lower levels of the enzymes that break down alcohol, so their blood alcohol concentration stays higher for longer.

Alcohol also puts women at greater risk than men for certain alcohol-related illnesses, including breast cancer, stroke and alcohol-related heart disease. For example, women's risk of stroke is at least double the risk for men when they exceed the limits set in the LRDG.



Blood alcohol concentration (BAC) is the amount of alcohol present in a person's blood. For example, a BAC of 0.05% means 0.05 g (or 50 milligrams) of alcohol in 100 millilitres of blood. While the amount of alcohol consumed is the most important influence on BAC, other factors such as a person's weight, rate of drinking and presence of food in the stomach also affect blood alcohol levels.

What Is a Standard Drink?

The LRDG are based on the standard drink. Studies show that many of us underestimate the amount we drink because we do not know what constitutes a standard drink. To follow the guidelines and drink reasonably, we need to know what a standard drink is in every form (beer, wine, cider, spirits and pre-mixed drinks such as coolers).

We must also pay attention to how big a drink we pour and how much others pour for us. It is also necessary to read labels carefully for alcohol content and adjust intake accordingly.

A standard drink is:

Beer/ Cider/Cooler



341 ml (12 oz.) glass of 5% alcohol content (beer, cider or cooler)

Wine



142 ml (5 oz.) glass of wine with 12% alcohol content

Distilled Alcohol



43 ml (1.5 oz.) serving of 40% distilled alcohol content (rye, gin, rum, etc.)

Tips for safer alcohol consumption

- Set limits and stick to them.
- Drink slowly. Have no more than two drinks in any three-hour period.
- Alternate with non-alcoholic drinks.
- Eat before and while drinking.
- Plan to drink in safe environments.
- Know local laws.

Recommended Number of Drinks: 0 • 1 • 2 • 3 • 4



0 - 2

Women who want to drink moderately and avoid associated long-term health risks should have no more than 10 drinks a week, with no more than two drinks a day most days.



0 - 3

Men who want to drink moderately and avoid associated long-term health risks should have no more than 15 drinks a week, with no more than three drinks a day most days.



3

To avoid intoxication and reduce the risk of short-term injury or acute illness, women should have no more than three drinks on a single occasion.



4

To avoid intoxication and reduce the risk of short-term injury or acute illness, men should have no more than four drinks on a single occasion.



0

To avoid any kind of habituation or dependency, it is recommended that everyone—men and women—choose not to drink at all at least one or two days a week.



0

If pregnant, planning to become pregnant, or about to breastfeed, the safest choice is to drink no alcohol at all.



0

It is inappropriate to drink alcohol under certain circumstances such as when one

- has important decisions to make
- is engaged in dangerous physical activity
- is operating a motor vehicle, machinery, or mechanical or electrical equipment
- is responsible for the safety of others
- is taking medication that is affected by alcohol
- has mental or physical health problems
- has a problem with alcohol dependence
- is pregnant or planning to become pregnant



Individual Vulnerability

The recommendations in the LRDG are for the general population. However, these guidelines do not define low-risk, moderate drinking for everyone. The effects of alcohol can vary greatly from one person to the next. Genetic heritage, weight and age are among the important factors that must be considered when people are deciding what moderate drinking means for them.

Genetics

Some genes play an important role in determining how much alcohol it takes for a person to feel the effects. Studies show that as much as 50% of the risk of alcohol dependence is determined by genetic factors. Further, it is not uncommon for alcohol dependence to run in biological families.

Slow response to alcohol

People who need to consume a large quantity of alcohol in order to feel the effects of alcohol are at greater risk of developing alcohol dependence than

people who do not. Men and women who tend not to feel the effects of alcohol should pay closer attention and refrain from excessive drinking.

Quick response to alcohol

Some people have to be careful for the opposite reason. These are the drinkers who feel the effects of alcohol sooner than the average person.

Body Weight and Composition

The recommendations in this publication are intended for men and women of average weight and height. For those below these averages, it is advisable to consume below the maximum limits.

Low body weight

A person who has below-average body weight will also have lower-than-average water content. This means that, all other things being equal, the person will have a higher blood alcohol level than a person of average weight who drinks the same amount.

High body fat

The same warning applies for those with a higher-than-average body fat percentage. Given two people who weigh the same, the one with more body fat will feel the effects of alcohol more. This is because a body with less fat has more water—and water is what dilutes alcohol.

Age

People who fall above or below the target range of the LRDG (25 to 65) are at greater risk of short-term and acute harm (i.e., injury, intoxication, and overdose) from alcohol use. Special considerations apply to these age groups.

Young people

Because children, adolescents and young adults are still developing physically and mentally, it is best that young people do not drink at all. It is recommended that youth at least wait to reach the legal drinking age (18 in Alberta) before drinking.

If youth choose to drink, they should do so at low levels (once or twice a week, one or two standard drinks per occasion), in a safe environment and under parental supervision.

From the ages of 18 to 24 years, low-risk drinking for women means never more than two drinks a day; for men, no more than three in a day.

For more details about alcohol and young people, please refer to the resource in this series titled *Alcohol and Adolescents*.

Older Albertans

As people age, their bodies process alcohol more slowly. Their sensitivity to the effects of alcohol increases, which means that the risks of accidents

and health issues resulting from alcohol use are higher than they are for younger people. The risk for older people is further increased by the higher probability that they are taking prescription drugs that interact with alcohol.

Taking the above into consideration, the LRDG advise that people older than 65 never exceed the upper levels established in Guideline 2:

- Women should have no more than 10 drinks a week, with no more than two drinks a day most days
- Men should have no more than 15 drinks a week, with no more than 3 drinks most days

For more information about alcohol and older Albertans, please refer to the resource in this series titled *Alcohol and Seniors*.

Circumstantial Vulnerability

Some circumstances make drinking riskier; to keep risk low, people need to drink less than the maximum recommended by the guidelines, or not at all in certain situations.

Medication

Many medications interact with alcohol: combining alcohol and medications can result in serious harm or even death. This is true of both prescription and over-the-counter medications. People who are taking medications should check with their doctor or pharmacist to see if

use of alcohol is contraindicated with the medication they take.

Physical and emotional state

There are some physical and emotional states where the effect of alcohol will be more enhanced.

A hungry person has an empty stomach and alcohol is therefore absorbed by the blood much more quickly. The person will feel the effects of alcohol sooner and more intensely.

The same warning applies when a person is very tired. Fatigue is a sign that energy supplies are low, which means the liver will not eliminate alcohol as efficiently. The blood alcohol level of a tired person will be higher than that of a well-rested person who drinks the same amount. Many symptoms of fatigue are similar to those of intoxication, and drinking can enhance them.

Since alcohol is a depressant, its negative effects will be felt more intensely by people who are stressed or depressed.

Health Benefits?

Given that there are some health benefits related to alcohol, should people drink to the limits each week?

The Canadian Centre on Substance Abuse (CCSA) answers this in its brochure “Canada’s Low-Risk Alcohol Drinking Guidelines: Frequently Asked Questions.”

Even moderate alcohol consumption, CCSA reports, only protects against some diseases, such as heart disease and diabetes. This protective amount is about one drink per day, and the benefits have only been shown for people over the age of 45. Moderate drinking actually increases the risk of other serious illnesses.

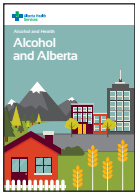
Drinking over the limits recommended by the LRDG “cancels any health benefits.” Furthermore, “as the amount of alcohol consumed in a day increases, so too does the risk of a wide range of physical and mental illnesses, including a number of cancers, liver disease and depression.”

Conclusion

Albertans who choose to drink moderately by following the LRDG reduce both their long-term and short-term risk of alcohol-related harm. The first step is to ensure that Albertans are aware of this information.

Alberta Health Services offers a wide range of services for individuals looking for help for someone they care about, or for themselves. For more information, and to find an addictions services office near you, call the Addiction Helpline at 1-866-332-2322. It’s free, confidential and available 24 hours a day.

Alberta Health Services' (AHS) Alcohol and Health series



Alcohol and Alberta



Alcohol and Sleep



Alcohol and Adolescents



Low-Risk Drinking



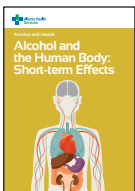
Alcohol Combinations



Talk to Your Children About Alcohol



Alcohol Hangover



Alcohol and the Human Body: Short-Term Effects



Alcohol and Mental Illness



Alcohol and Seniors

More information means informed decisions

Well-informed people will be more conscious of the harmful effects of excessive drinking, and will be aware that if they choose to drink alcohol, drinking in moderation is a healthier choice.

For copies:

AHS staff and allied health professionals can download digital copies from under the "Resources" tab at: www.albertahealthservices.ca/amhresources. Allied health professionals should contact their local Addiction and Mental Health office to access hard copies.

Thank you

AHS would like to thank our allied health professionals at Éduc'alcool for their contribution to this series.

Alberta Health Services offers a wide range of
addiction and mental health services.

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or for themselves the Addiction Helpline and the
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