# Women's health resource





## Intro

This resource was written by women for women, to provide useful information about alcohol and to help women make healthy and well-informed choices about alcohol use.

Drinking alcohol is a common social activity. In fact, approximately 75 percent of Canadian women report drinking in the past year [1]. While drinking is common, often women don't take into account the possible risks associated with alcohol. And many women don't know that alcohol affects women differently than men.

This guide looks at how alcohol affects women and the risks associated with drinking. All information is based on research to help women make informed choices about alcohol use. This resource will:

- Present low risk drinking guidelines as they apply to women;
- Describe factors influencing girls' and women's drinking;
- Highlight gender-specific health considerations with regard to drinking; and
- Discuss where to find support and more information for those who wish to learn more about drinking and women.



# Contents

- 1. Low Risk Drinking
- 2. Health Risks of Drinking
- 3. Individual Responses to Alcohol
- 4. Considerations for Women
- 5. Supporting Someone Close to You
- 6. Resources

### Low Risk Drinking for Women

Drinking guidelines have been developed in Canada to help women and men set safer drinking levels and to monitor their drinking. These guidelines can help reduce the health risks of drinking alcohol, by increasing awareness of:

- the amount of alcohol we consume
- how often we drink
- situations when drinking increases the risk of harm

These guidelines are adapted from *Canada's Low-Risk Alcohol Drinking Guidelines*, published by the Canadian Centre on Substance Abuse [2].

For the guidelines a standard drink means:



#### Low Risk Drinking Guidelines for Women

#### How much do you drink?

To reduce the risk of injury or harm:

- Avoid intoxication.
- Have no more than 3 standard drinks on any single occasion [4 for men].

#### How often do you drink?

To reduce the risk of long-term health problems:

- Keep at least one or two days of the week alcohol-free.
- Have no more than 10 standard drinks per week [15 for men].

#### When not to drink

Be aware of situations where drinking has increased risks for women. Don't drink when you are:

- Pregnant or when planning a pregnancy
- Using other drugs, including medications
- Driving or operating machinery
- Responsible for the safety of others





#### Some tips when deciding how much you will drink

People tend to overestimate the size of a standard drink. We also tend to underestimate how much we have had if our drink is "topped up" versus finishing one drink before having the next.

People tend to think that some kinds of alcohol are not as harmful as others. It is the *amount* of alcohol in a beverage not the *type* of drink (e.g., wine or cooler or liqueur) that is important to know.

The energy content of alcohol is 7.1 calories per gram. When considering how alcohol fits into your overall diet, consider both alcohol content as well as added sugars and flavorings in a drink. For example, a can of beer (12 fl. oz.) has 150 calories while a glass of wine (5 fl. oz.) has 125 calories. On the other hand, a smaller piña colada cocktail (4.5 fl. oz) has 245 calories [3]. When consumed in moderation, alcohol has not been found to be a major contributor to weight gain [4].

When applying the guideline about avoiding intoxication it is important to know yourself – you may become intoxicated after two instead of three drinks (as described in the low risk drinking guideline), so two may be your personal limit.

In addition to being mindful of the number of drinks you have on one occasion, it is important to consider the number of days that you drink in a week. It is easy to fall into a pattern of drinking every day, with no alcohol-free days.

If you feel that you are drinking more than the recommended amount, it's a good idea to talk to people who can give you advice and support. Speaking with a family physician, another health care provider or counsellor can help you assess and reduce your alcohol use. Some resources you might find helpful are listed at the end of this booklet.

#### Safer Drinking Tips

- Set limits for yourself and stick to them.
- Drink slowly. Have no more than 2 drinks in any 3 hours.
- For every drink of alcohol, have one non-alcoholic drink.
- Eat before and while you are drinking.

- Always consider your age, body weight and health problems that might suggest lower limits.
- While drinking may provide health benefits for certain groups, do not start to drink or increase your drinking for health benefits.

### Health Risks of Drinking

The low risk drinking guidelines offer a starting point by clarifying what is **not** low risk. Going over the amounts outlined in the guidelines can lead to dependence on alcohol and a wide range of long-term health problems. Women tend to be more susceptible than men to health problems caused by heavy drinking.

### What kinds of health problems are caused by heavy drinking?

- For women, alcohol use increases the risk of breast cancer [5].
- In fact many serious illnesses and chronic health conditions are linked to drinking, even at low levels. Long-term alcohol use can increase the risk of at least eight types of cancer (mouth, pharynx, larynx, esophagus, liver, breast, colon, rectum) and numerous other serious conditions (e.g. epilepsy, stroke, pancreatitis, dysrythmias, and hypertension) [6].
- Small amounts of alcohol have been shown to reduce the risk of certain types of stroke and other cardiovascular diseases. However, heavier drinking increases blood pressure as well as the risk of stroke and heart disease. Most health care providers will suggest options other than drinking alcohol for reducing your risk of these diseases.

If you believe that small amounts of alcohol might have health benefits for you, talk to your health care provider about your overall health and to explore the possible benefits and harms [7].

- Alcohol induced brain damage is another risk [8].
- Breast cancer, heart disease and brain damage risks are further complicated if you smoke or use other substances and if you are exposed to environmental toxins (eg.moulds, pesticides) [9].
- Alcoholic hepatitis and cirrhosis of the liver risk are linked to heavy drinking, and women develop these alcohol-related health problems after a shorter length of heavy drinking [10].
- Drinking has particular risks for women who are pregnant or are planning to become pregnant. See the section on *Considerations for Women*.

While the Low Risk Drinking Guidelines overall suggest that women consume no more than 10 drinks a week and no more than two drinks a day most days in order to reduce long-term risks for multiple chronic illnesses, women who are specifically interested in reducing their risk of developing cancer should drink less than one drink a day.

*Cancer and Alcohol*, Canadian Centre on Substance Abuse, 2014

Research indicates that prolonged heavy drinking can result in serious health problems for women such as:

- Breast and other forms of cancer
- Heart disease and stroke
- Brain damage
- Liver disease
- Addiction or alcohol dependence



### Individual Responses to Alcohol

The effects of alcohol vary greatly from one person to the next. There are several factors that affect your response to alcohol.

#### Being a woman

Women are more vulnerable than men to alcohol's effects. This means that even after drinking smaller amounts, women generally feel greater effects for a longer period of time. Three key factors help explain the reasons women's and men's bodies break down alcohol differently.

- Women have less water in their bodies to help dilute the alcohol in their blood streams.
- Women's bodies absorb alcohol at a slower rate.
- Women have lower levels of a particular enzyme that breaks down alcohol in their bodies [11].

These reasons are why drinking guidelines for women are lower than those for men.

#### Physical responses to alcohol

The effects of alcohol vary according to physical size. Women who are smaller and/or weigh less will often have a more intense reaction to alcohol. Some women quickly feel the effects of alcohol with only a couple of drinks. These women should drink less than the recommended low risk drinking guidelines. Regardless of whether women have a quick or a slow response to alcohol, it is important that women 'listen' to their bodies and adjust their consumption levels accordingly.

#### Age

Young women who drink may be particularly vulnerable to the effects of alcohol. And as we age, the kidneys, liver, cardiovascular system and brain all change. These changes make the elimination of alcohol less efficient and can make us more sensitive to the effects of alcohol. It takes less alcohol for older women to experience the effects of alcohol, so this becomes another factor when deciding how much to drink [12].

#### Medication use

Mixing medication and alcohol can change the way the alcohol or the medication reacts in the body and can create health risks or injuries. In particular, women should be aware of the risks of using tranquillizers with alcohol. Tranquilizers, such as benzodiazepines, are prescribed more often to women than men and can amplify the depressant effects of alcohol.

#### Hunger and fatigue

Both hunger and feeling tired will increase the effects of alcohol. Hunger increases the rate at which alcohol is absorbed into the bloodstream. With fatigue, the liver is slower at metabolizing alcohol. The depressant nature of alcohol will make feelings of tiredness or stress more intense.



Women need to listen to their bodies and adjust their drinking levels accordingly.

### Considerations for Women



#### Special Considerations

- Pregnancy
- Breastfeeding
- Life Stressors
- Safety

Several other important factors can also influence the effects of alcohol and the circumstances where women should avoid drinking alcohol.

#### Pregnancy

Drinking is a critical issue for women who are pregnant. Drinking alcohol during pregnancy may lead to:

- Having a baby with Fetal Alcohol Spectrum Disorder (FASD):
- Having a miscarriage or stillbirth;
- Having a baby who has low birth weight or is born prematurely [13].

Fetal Alcohol Spectrum Disorder describes a range of harms related to alcohol exposure in utero. These harms can include brain damage, vision and hearing problems, slow growth, and birth defects such as bones that are not properly formed or heart problems [13]. The brain damage may cause the child to have lifelong learning disabilities and problems with memory, reasoning and judgment.

Choosing not to drink any alcohol while pregnant or planning to become pregnant is the safest option [2]. Often women drink before they are aware they are pregnant but it is important to know that it is never too late to stop drinking alcohol during pregnancy. Quitting alcohol as soon as possible and looking after your health are the best ways to lower the risk of harm to you and the fetus.

#### Breastfeeding

Alcohol passes into a woman's bloodstream and into her breast milk at similar levels. The concentration of alcohol in a mother's blood and breast milk peaks at about 30-60 minutes after drinking. Alcohol does not stay in a mother's milk over time and is cleared out of milk in the same way that alcohol is cleared out of her bloodstream. Having an occasional drink has not been shown to be harmful to a breastfed infant. Ideally it is best to avoid breastfeeding for about 2 hours after drinking one alcoholic beverage [14]. Alternatively, women can consider pumping and storing breast milk before having a drink so their babies can continue to receive breast milk [14].

There is no known safe amount of alcohol, at any stage of pregnancy, that will completely prevent the risk of having a child with FASD.

#### Life Stressors

Heavy drinking can be a reaction to stressful events in women's lives. Women often report using substances to deal with negative feelings or problems and to raise their confidence. Women's use of alcohol and other substances is commonly linked to:

- Partner violence [15]
- Trauma and abuse experienced as a child [16]
- Sexual assault [17]

Women's drinking levels are often influenced by their partner's drinking patterns as well as stress in the relationship.

Social expectations and judgments about parenting can add shame and fear for women with alcohol problems. As a result, women may:

- Not get help as soon as they need to
- Get help for problems other than alcohol use
- Not get referred to alcohol treatment

As women try to balance several different roles and responsibilities, they can experience a great deal of stress. While a small amount of alcohol may relieve stress in the short term, drinking to reduce stress may increase anxiety levels and lead to alcohol dependence.

#### Safety

Drinking heavily in some social situations, such as at bars, parties, and on dates, can make women more vulnerable to having an unwanted sexual experience [18]. Having an unwanted sexual experience is never the fault of a women, no matter how much she had to drink, what she was wearing, what she was doing, or her sexual history.

There are some things that women can do to keep themselves and their friends safer. For example, if women are going out drinking, they can make decisions in advance with their friends about how much they want to drink and then support each other in those decisions. Women can also help out other women who may be in an unsafe situation by asking if they need any help or calling a friend to support them.



### Supporting Someone Close to You

### If you feel that someone close to you may have a problem with alcohol, there are a number of ways that you can offer support:

- Start by asking if she would like to talk about it and find out what she feels would be most helpful.
- Don't judge her or move too quickly to solutions.
- Offer support in very practical ways such as engaging in activities that do not involve alcohol, caring for her children so that she can have some time out, or attending an appointment with her.
- Remember, ultimately it's her change to make and it is important to respect her autonomy.

All change takes time, and it is common to stop and start a number of times before making a sustained change. Knowing this, it is important to recognize small successes and offer reassurance that your support will be ongoing. By highlighting strengths and successes, family and friends can help to increase confidence and the sense that change is possible.



### Resources

If you would like to know more about alcohol use, for yourself or someone close to you, information and support is available:

#### Phone support and referral

#### HealthLink BC

www.healthlinkbc.ca Call 8-1-1 to speak with a nurse any time of the day or night; with a dietician on weekdays; and with a pharmacist at night.

#### Motherisk

Alcohol and substance use in pregnancy helpline 1-877-327-4636 www.Motherisk.org

#### Alcohol and Drug Information and Referral Service

www.bc211.ca/adirs2.html Vancouver 604-660-9382 Toll-free in BC 1-800-663-1441

#### Community support on women's health

Your local public health unit www.health.gov.bc.ca/socsec/

#### Women's centres in BC

www.casac.ca/content/womens-centresbritish-columbia

#### Support on violence issues

BC Society of Transition Houses www.bcysth.ca

Ending Violence Association of BC www.endingviolence.org

#### Websites

British Columbia Centre of Excellence for Women's Health www.bccewh.bc.ca/publicationsresources/

Canada's Low-Risk Drinking Guidelines www.ccsa.ca

Healthy Families BC www.healthyfamiliesbc.ca

**Here to Help** www.heretohelp.bc.ca Self-help resources in multiple languages.

Best Start Resource Centre, Mixing Alcohol and Breastfeeding: Resource for mothers and partners about drinking alcohol while breastfeeding

www.beststart.org/resources/alc\_reduction/ breastfeed\_and\_alcohol\_bro\_A21E.pdf

**Community Support Groups** www.canadiandrugrehabcentres.com Listing of current support groups in BC

Alcoholics Anonymous www.bcyukonaa.org/

### References

- Health Canada. (2011). Canadian Alcohol and Drug Monitoring Survey: Summary of Results for 2011. Ottawa, ON. Retrieved February 17, 2014, from http://www.hc-sc.gc.ca/hc-ps/drugs-drogues/ stat/\_2011/summary-sommaire-eng.php#a9.
- Canadian Centre on Substance Abuse. (2012). Canada's Low Risk Drinking Guidelines. Retrieved February 15, 2014, from http://www.ccsa.ca/Eng/ Priorities/Alcohol/Canada-Low-Risk-Alcohol-Drinking-Guidelines/Pages/default.aspx
- 3. U.S. Department of Agriculture, Agricultural Research Service. (2013). USDA National Nutrient Database for Standard Reference, Release 26. Retrieved February 16, 2014 from http://www.ars.usda.gov/ba/bhnrc/ndl.
- Sayon-Orea, C., Martinez-Gonzalez, M. A. and Bes-Rastrollo, M. (2011). Alcohol consumption and body weight: a systematic review. *Nutrition Reviews*, 69: 419–431. doi: 10.1111/j.1753-4887.2011.00403.x
- Chen, W.Y., et al. (2011). Moderate alcohol consumption during adult life, drinking patterns, and breast cancer risk. *Journal of the American Medical Association*, 306(17): 1884-90.
- Babor, T. F., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., et al. (2010). Alcohol: No Ordinary Commodity - Research and public policy (2nd ed.) New York: Oxford University Press.
- Ronksley, P.E., Brien, S.E., Turner, B.J., Mukamal, K.J. and Ghali, W.A. (2011). Association of alcohol consumption with selected cardiovascular disease outcomes: a systematic review and meta-analysis. *BMJ*, 342: d671.
- Alfonso-Loeches, S., Pascual, M., & Guerri, C. (2013). Gender differences in alcohol-induced neurotoxicity and brain damage. *Toxicology*, 311(1/2): 27-34.
- Mancinelli, R., R. Binetti, and Ceccanti, M. (2007). Woman, alcohol and environment: Emerging risks for health. *Neuroscience & Biobehavioral Reviews*, 31(2): 246-253.

- Shimizu, I., Kamochi, M., Yoshikawa, H. and Nakayama, Y. (2012). Chapter 2. Gender Difference in Alcoholic Liver Disease. In *Trends in Alcoholic Liver Disease Research - Clinical and Scientific Aspects*, Ichiro Shimizu (Ed.). DOI: 10.5772/27178.
- Brady, K. T., Back, S. E., & Greenfield, S. F. (2009). Women and Addiction: A Comprehensive Handbook. New York, NY US: Guilford Press.
- Epstein, E. E., Fischer-Elber, K., Al-Otaiba, A. (2007). Women, Aging and Alcohol Use Disorders. *Journal of Women and Aging*, 19(1-2): 31-48.
- Day, S.M. (2012). Alcohol consumption during pregnancy: The growing evidence. *Developmental Medicine & Child Neurology*, 54(3): 200.
- Bowen, A. and Tumback, L. (2010). Alcohol and breastfeeding. Nursing for Women's Health, 14(6): 454-461.
- Mason, R., Toner, B., with, Arrango, P., Ball, J., Bonisteel, M., et al. (2012). *Making Connections: When Domestic Violence, Mental Health and Substance Use Problems Co-Occur*. Toronto, ON: Women's College Hospital.
- 16. Lown, E. A., Nayak, M. B., Korcha, R. A., & Greenfield, T. K. (2011). Child physical and sexual abuse: a comprehensive look at alcohol consumption patterns, consequences, and dependence from the National Alcohol Survey. *Alcoholism, Clinical and Experimental Research*, 35(2): 317-325.
- Logan T, Walker R, Cole J, Leukefeld C. (2002). Victimization and substance abuse among women: Contributing factors, interventions and implications. *Review of General Psychology*, 6(4): 325-97.
- Testa, M., C. VanZile-Tamsen, and Livingston, J.A. (2007). Prospective prediction of women's sexual victimization by intimate and non-intimate male perpetrators. *Journal of Consulting and Clinical Psychology*, 75(1): 52-60.

#### Credits:

This guide was updated in 2014 by researchers at the BC Centre of Excellence for Women's Health. The original booklet was created by a collaboration of researchers, health service providers, FASD community advocates, and women with children affected by FASD with financial support from the BC Ministry of Health.





