



# NEW INSIGHT INTO ALCOHOL AND CANCER

Albertans,  
communities and  
healthcare working  
together

Photo: Romilly Lockyer

**ALBERTA  
PREVENTS  
CANCER**



Photo: Kirsty Begg

# THE LINK BETWEEN ALCOHOL AND CANCER

Raising a glass to the holidays. Having a cold one after work. Popping a cork to toast friends and family.

Alcohol is part of how we socialize, celebrate and relax. It's widely used: nearly 75 per cent of Albertans drink alcohol.

Many of the risks of drinking are well known: drinking and driving don't mix, neither does alcohol and pregnancy. More recently, research has linked

moderate and even light drinking to colorectal, breast, oral, esophageal, liver and laryngeal (voice box) cancer.

This series is produced by the Alberta Cancer Prevention Legacy Fund (ACPLF), an Alberta Health Services program, and features real stories about reducing the risk of cancer in our province. This edition largely focuses on at the links between alcohol and cancer. To have

no risk of alcohol-related cancer, it's best not to drink at all. We also look at two clinics that help cancer patients get better faster, and avoid getting cancer again through intensive risk-reduction and screening programs.

In Alberta, about 45 per cent of cancer is preventable. That means every year in this province we could avoid 6,700 new cases of cancer by working together on

the factors we can change. This includes finding ways to support all Albertans to drink less alcohol, live tobacco-free, limit exposure to ultraviolet rays, get screened for cancer, prevent HPV infections, eat healthy foods, move more and keep a healthy weight.

If you'd like to learn more about preventing cancer, visit [albertapreventscancer.ca](http://albertapreventscancer.ca).

Meanwhile, here's an alcohol-free toast to our health. | a

Learn more at [albertapreventscancer.ca](http://albertapreventscancer.ca)



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Alberta Prevents Cancer is part of the Alberta Cancer Prevention Legacy Fund (ACPLF) and supported by Alberta Health. Through the ACPLF, Alberta Health Services is working with Albertans in their communities, workplaces and health system to transform cancer prevention and screening. Our vision is an Alberta where most cancer is prevented.



# UNDERSTANDING THE RISKS

Dr. Laura McDougall is a physician in public health and preventative medicine. She's also the medical and scientific director of the Alberta Cancer Prevention Legacy Fund for Alberta Health Services. Part of her job is letting Albertans know that alcohol is an important—and preventable—risk factor for cancer

WRITTEN BY VALERIE BERENYI

PHOTOGRAPHED BY DARREN ROBERTS

**Q: How is new research changing what we know about cancer and alcohol?**

A: We've known for a long time that alcohol is a carcinogen, meaning that it causes cancer. In fact, it causes several types of cancer including: colorectal, breast, oral, esophageal, liver and laryngeal (voice box). What we've learned more recently is that even small amounts of alcohol increase the risk of cancer.

**Q: What are you doing with the findings?**

A: There's a gap in knowledge, and we want to get that information to Albertans so they can better understand the link between alcohol and cancer. Most often, people associate cancer with heavy drinking.

**Q: How much alcohol is safe to drink?**

A: There is no safe limit of alcohol consumption when it comes to preventing cancer. The best way to lower your risk of alcohol-related cancer is to not drink at all.

**Q: Breast cancer is the most common cancer among women in Alberta. How does alcohol affect it?**

A: Having just one drink a day can increase a woman's chance of developing breast cancer. In fact, the risk of breast cancer increases steadily with each extra drink per day. Women who drink three or more drinks per day are 50 per cent more likely to develop breast cancer. We need to work as hard at preventing cancer as we do at curing cancer.

**Q: What is Alberta Prevents Cancer doing to reduce the role alcohol has in causing cancer?**

A: We think it's time for all of us to "rethink our drink." Cancer prevention involves everyone—the healthcare system, businesses, communities and people working together. We could prevent up to 617 cases of cancer in Alberta each year if we all supported each other to cut back on alcohol consumption or stop drinking completely. | [a](#)

To learn more, visit [albertapreventscancer.ca](http://albertapreventscancer.ca).



Lorelee Marin is co-chair of YYL My Home, a Lloydminster committee working on alcohol bylaws to reduce harm and health risks in the community.

# MAKING AN ALCOHOL GAME PLAN FOR LLOYDMINSTER

The city straddling the Alberta-Saskatchewan border is changing local bylaws to reduce the risks of alcohol consumption

WRITTEN BY VALERIE BERENYI  
PHOTOGRAPHED BY JESSIE MANN

Communities play a vital role in shaping the health of people—and by extension reducing the risk of preventable cancer—and Lloydminster is an inspiring role model.

In June 2016, the city passed a tobacco licensing bylaw to help reduce smoking rates. Businesses selling tobacco products have to pay up to \$1,100 a year in licensing fees—the highest in Canada. Those fees go to local tobacco-reduction efforts.

Now, YYL My Home, the same community group behind the tobacco bylaw, is tackling alcohol bylaws in the city that straddles the Alberta-Saskatchewan border. It started by talking to youth and adults about alcohol.

“We listened to over 2,000 stories about alcohol-related harm,” says Lorelee Marin, co-chair of YYL My Home, part of the Lloydminster and Area Drug Strategy. The committee heard about more than how alcohol affects the

risk of preventable cancer. People also talked about binge drinking leading to alcohol poisoning, loss of life to alcohol-related collisions, drinking to escape from the current economic downturn and drinking to self-medicate for many reasons.

“There’s a sense that drinking is everywhere,” Marin says. “Both youth and adults want to see fewer liquor stores and more alcohol-free activities.”

In August, YYL My

Home outlined a policy to Lloydminster city council calling for it to reduce liquor store “density” and control the distance between liquor outlets and public areas. It also recommended embracing a policy adopted by the City of Wetaskiwin: in 2010 it limited liquor store hours to 10 a.m. to 10 p.m.

“Prior to our alcohol policy brief, there were no bylaws governing the location of liquor stores,” Marin says. Now, a new bylaw requires

liquor stores to be more than 100 metres from parks, schools and community or recreation facilities.

The good news is that communities can make real changes through policies and collective efforts

She says YYL My Home was unable to convince council to restrict the number of liquor outlets, but that reducing liquor store hours “is still up for negotiation.”

“We’ve made a commitment to the community to continue to

engage in conversations related to reducing alcohol-related harms and promoting a culture of moderation,” says Marin, who works as a health promotion facilitator in Addiction and Mental Health at Alberta Health Services and is a member of the Provincial Advisory Council on Cancer.

YLL My Home has several other initiatives underway, including a Snakes and Ladders-type board game to help families discuss alcohol use and misuse. It’s also working with Lakeland College on Prethink Your Drink, a program to educate students about the risks of binge drinking.

Dr. Laura McDougall, scientific and medical director of the Alberta Cancer Prevention Legacy Fund at AHS, applauds the work of community organizations such as YYL My Home.

“People working together on issues that matter to them is exactly what we need to build healthy communities that support all of us to reduce our risk.” | a

## COMMUNITIES CAN TAKE ACTION AGAINST ALCOHOL

Reducing the many risks of alcohol—cancer, impaired driving, violence and injury, to name a few—isn’t something people can do entirely on their own.

Our overall health is greatly influenced by where we live and the attitudes around us. The good news is that communities can make real changes through policies and collective efforts, says Dr. Laura McDougall, the medical and scientific director of the Alberta Cancer Prevention Legacy Fund.

In his 2015 report on alcohol consumption in Canada, Dr. Gregory Taylor, the country’s chief public health officer, noted that communities can:

- Restrict the number of alcohol outlets and the days/hours of sales
- Enforce minimum-age drinking laws
- Increase public awareness about the risks of alcohol on health.

The Community Preventive Services Task Force, part of the U.S. Centers for Disease Control and Prevention, also recommends:

- Increasing taxes on alcohol
- Holding bars and restaurants liable for injuries or deaths caused by their impaired patrons.

## PILOT PROJECT RAISES AWARENESS, LOWERS RISK

In a new six-month pilot project, every patient on the Medical Ward of the 21st Century (W21C), Unit 36 at Foothills Medical Centre in Calgary is asked about their alcohol use, educated about low-risk drinking and, if needed, offered help to reduce their drinking.

The pilot is part of Every Opportunity for Prevention and Screening, a three-year project funded by the Alberta Cancer Prevention Legacy Fund.

“The ultimate goal is to reduce alcohol-related cancers and promote responsible drinking habits,” says Nancy Clayden, a research associate with the W21C Research and Innovation Centre, part of the University of Calgary’s O’Brien Institute for Public Health. W21C also works closely with Alberta Health Services to improve healthcare.



Photo: Portra

# A CONVERSATION THAT NEEDS TO HAPPEN

Alcohol affects the body in many ways and can cause several cancers

Cancer has many causes, including one that's little known: alcohol. Healthcare professionals say it's time for the cancer risks of drinking to be better understood.

"People tend to focus on quitting tobacco as being the main thing they must do when it comes to reducing their risk of cancer," says Dr. Matthew Parliament, senior medical director of CancerControl Alberta and a professor of radiation oncology at the University of Alberta. "There's also an important conversation that needs to happen around the risks of alcohol."

It helps to understand how alcohol damages the body and can cause colorectal, breast, oral, esophageal, liver and laryngeal (voice box) cancer.

"We know that alcohol is directly toxic to cells," Parliament says. When our bodies break down alcohol, it creates a chemical (called acetaldehyde) that poisons the DNA in cells. "That can create long-lasting DNA damage over time which, if not repaired, can evolve into cancer."

Alcohol also lowers the body's ability to absorb several B vitamins from food, says Dr. Laura McDougall, a public health physician and the medical and scientific director of the Alberta Cancer Prevention Legacy Fund for Alberta Health Services. Low folate is linked to an increased risk of breast and colorectal cancers.

McDougall adds that alcohol also boosts estrogen levels, and estrogen can

increase a woman's risk of breast cancer.

The risk of cancer multiplies when people use both alcohol and tobacco, McDougall says. "It's thought that alcohol might act as a 'gate' that allows harmful chemicals from tobacco smoke to enter cells."

In his 2015 report on alcohol consumption in Canada, Dr. Gregory Taylor, the country's chief public health officer, wrote that drinking is ingrained in Canadian culture and reflected in Canadians' health. "At least 3.1 million Canadians drink enough to be at risk for immediate injury and harm, with at least 4.4 million at risk for chronic health effects, such as liver cirrhosis and various forms of cancer."

Taylor, McDougall and Parliament all point to recent research that says there is no safe limit of alcohol consumption when it comes to cancer.

"These findings shock many people, but they also create an opportunity for us to work with Albertans to make positive changes and reduce preventable cancers in our province." | a



Dr. Matthew Parliament is the senior medical director of CancerControl Alberta and a professor of radiation oncology at the University of Alberta.

To learn more about cancer and its preventable risks, visit [albertapreventscancer.ca](http://albertapreventscancer.ca).

# WELLNESS CLINICS GIVE CANCER PATIENTS BEST CHANCE OF RECOVERY

Making quitting tobacco part of a patient's overall treatment plan

WRITTEN BY VALERIE BERENYI

PHOTOGRAPHED BY BRIAN BRADY

It's hard to think about cancer prevention while going through cancer treatment, but two new clinics are helping patients take steps to get better faster, stay healthy and avoid getting cancer again.

The Cancer Wellness Clinics at Edmonton's Cross Cancer Institute and Calgary's Holy Cross Centre offer intensive risk-reduction and screening programs to cancer patients and their families. The cancer centres have partnered with the Alberta Cancer Prevention Legacy Fund (ACPLF) to establish wellness clinics.

Growing evidence shows certain lifestyle factors—living tobacco-free, drinking

less alcohol and being active—reduce the risk of getting cancer in the first place. They also ease recovery for people undergoing treatment and decrease the chance of a second cancer.

Take tobacco use, the single largest preventable cause of cancer in Alberta.

"My job is to make quitting tobacco part of a patient's overall cancer treatment plan," says Marlee MacDonald, a nurse practitioner and clinical lead at the Edmonton Cancer Wellness Clinic.

She points to a 2014 U.S. Surgeon General's report that found smoking undermines cancer treatment. Cancer patients



Romeo Felix, a research nurse, and Marlee MacDonald, a nurse practitioner and clinical lead, of the Edmonton Cancer Wellness Clinic.

who smoke often feel sicker because tobacco increases the toxic effects of chemotherapy and radiation. Their surgical incisions take longer to heal and are more likely to get infected. They also have more complications and a greater risk of their cancer returning or a second one starting.

At every opportunity, MacDonald talks about stopping tobacco use with patients, their families (who can also sign up for tobacco cessation) and other health professionals.

"A big part of our clinic's role is engaging front-line staff," she says. "It's important that they also ask patients, 'Do you smoke?' and then

refer them to us or other community supports."

Michelle Nummi, integration lead for acute care with the ACPLF, says the clinics will expand soon to tackle other lifestyle factors.

"Being active, drinking less alcohol and healthy eating also improve cancer outcomes," Nummi says. She adds, for example, that physical activity can reduce fatigue, stress and the other side effects of cancer treatment.

"We want to make risk reduction and wellness part of routine care so that cancer patients and their families have the best possible outcomes and long-term health." | a

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# TIPS FOR LIMITING DRINKING



## What you can do

- The less alcohol you drink, the lower your risk of cancer. For women, a single drink a day can increase the chance of developing breast cancer. Three or more drinks a day increase the risk of breast cancer by 50 per cent.
- Plan ahead: make several days every week alcohol-free, and limit your consumption.
- Avoid happy hour “bargains,” and opt for the smallest size drink available.

- Evidence shows that moderate drinking barely benefits heart health. To really help your heart, the Canadian Heart and Stroke Foundation recommends eating healthy foods, quitting smoking and being more active.
- Find other ways than alcohol to cope with stress. A walk, a bath, reading a book, listening to music or talking with a friend can all help you relax.

## What groups and communities can do

- Increasing the minimum prices and taxes on alcohol is a proven approach to reducing alcohol consumption.
- Enforcing minimum age laws for drinking and buying alcohol reduces drinking in underage youth.
- Responsible drinking and the risks of drinking can be promoted through awareness and education campaigns. | a

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## NEXT ISSUE

Learn how healthy eating and active living can lower the risk of colorectal cancer.