

Canada's drinking problem: why alcohol is the new cigarette

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WENCY LEUNG HEALTH REPORTER
ERIN ANDERSSSEN

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Here's a drinking game: Uncork your favourite bottle – perhaps the one you're savouring right now as the only line in the sand between working at home and living at home – and pour some wine into a measuring cup, up to the five-ounce (or 142-millilitre) mark. Now transfer that amount to your wine glass.

Does this look like a “standard” serving of wine to you? Or, is your cup overflowing too many times on too many days?

The answer may sober you up: According to a growing body of evidence, many Canadians are probably drinking more than they think, and more than is safe.

As early as next year, Ottawa and the provinces are expected to adopt the advice of an expert scientific panel, and urge Canadians – even those who consider themselves moderate drinkers – to drink even less.

This may sound strange, given current conditions, where schools and offices, stores and restaurants can close, but liquor stores, deemed “essential,” remain open. But sadly we don't get a drink-free pass, not even for a pandemic. In a national survey during the first COVID-19 wave, 18 per cent of Canadians admitted that they were drinking more than they did before the lockdown – citing the lack of a regular schedule and boredom. Even with the bars shuttered, alcohol sales are up, abetted by home delivery. Mental-health professionals are already worrying

about the fallout of an anxious population stress-drinking behind closed doors.

Many of us are already exceeding Canada's current low-risk drinking guidelines, which recommend no more than 10 drinks a week for women, with a typical maximum of two drinks a day, and 15 drinks a week for men, with a three-drink daily limit. Those guidelines are now 10 years old and higher than the suggested limits in most other countries, including Ireland, France, Australia, Britain and the United States. They are overdue to be updated, to bring them in line with a decade of new research suggesting that the health benefits of alcohol have been overstated, and the risks underestimated – most alarmingly, for cancer, and especially for women. More and more studies are supporting the conclusion of a 2018 global health study published in *The Lancet*: “The safest level of drinking is none.”

Alcohol is an expensive and dangerous habit for society. Tally the cost of deaths, accidents, illness, lost productivity and criminal justice against the public dollars made selling alcohol, and, Canadian research shows, governments end up deep in the red. The heaviest drinkers cost the most, as individuals. But an overwhelming chunk of that cost comes from the much larger group of moderate drinkers – people having a couple vodka sodas each night after work, the parents regularly sneaking Baileys into their coffee mugs at the park. Adam Sherk, a postdoctoral fellow at the Canadian Institute for Substance Use Research at the University of Victoria, crunched the numbers and found that Canadian provinces and territories were running a national alcohol deficit of \$3.7-billion a year.

The vast damage alcohol does to our society, ranging from its health effects to sexual violence to its impact on families and relationships, is hidden in plain sight, says Peter Butt, co-chair of the Canadian low-risk drinking guidelines review and update.

“We just kind of accepted it in the fabric of our day-to-day lives without thinking about it,” he said.

It’s not known what Canada’s new guidelines will say exactly, but as of last year, Australia recommends, for both men and women, a max of only seven Canadian-standard sized drinks a week. The guidelines in the Netherlands recommend cancelling happy hour altogether: Zero is best, they basically say, but if you choose to drink, stop after one. (Factoring in Canadian drink size standards, that translates to: Stop after three-quarters.)

The new limits may come as a shock in an alcohol-saturated country where governments sell the very substance they are telling their citizens not to buy too often; 80 per cent of adults older than 15 drink, and tallboys and cocktails are de rigeur at social gatherings, office events and Friday nights (when we had them).

A report by the Canadian Centre on Substance Use and Addiction estimated that nearly a third of Canadian drinkers already consume more than the current weekly recommendations. Even by international standards, Canada falls on the boozy side. According to the World Health Organization, Canadians drink 8.9 litres of pure alcohol (about nine bags of milk worth) per capita each year – well above the global average of 6.2 litres. In the 2019 Global Drug Survey, which compared 35 countries, Canadian drinkers reported being drunk an average of 48 times in the past 12 months, in third place behind Britain and the United States. For the record, less than 20 per cent, according to the study, said they regretted it.

Alcohol is what gets the party started, and keeps it going. It is the cap on a fine night. It is tradition. But a growing stack of research shows that it may also be the new cigarette – savoured by many, socially accepted and cancer-causing. Will we stick with our boozy ways, even if it kills us?

Alcohol has a long history of being touted as the cure for all kinds of aches and pains. At one point, a pint or two was believed to prevent liver disease. A mom-to-be who enjoyed a cocktail, other research proposed, would improve their child's development. Alcohol could defeat both asthma and the common cold. Not only have all these theories been debunked, but modern science has shown that consuming too much

alcohol does just the opposite in every case: It trashes our livers, it causes fetal alcohol syndrome and it weakens our immune system.

More recently, alcohol – in moderate amounts – has enjoyed a reputation as being good, not only for our spirits, but also for a longer life, and a healthier heart. As evidence, advocates pointed to the French Paradox: How did people in France wash down their rich diet with red wine, and still have lower rates of heart disease than other countries did? Hadn't the heart-healthy Mediterranean diet traditionally come with hearty servings of wine?

“I honestly wish it was true,” said Tim Stockwell, scientist at the Canadian Institute for Substance Use Research. “I love a drink. But unfortunately...”

Unfortunately, the science was never as strong as the headlines – or the cheery narrative amplified by the alcohol industry, and our own wishful thinking. Some studies found a benefit, others found no evidence. Further analysis of the French data suggested that the country's population was not, in fact, less likely to suffer from heart problems, but that hospital codes had obscured true rates of the problem. As a Norwegian [paper](#), published in 2013, pointed out, the case for many of the benefits was missing both a biological explanation and a dose-response relationship: If a small dose of alcohol helped people live longer, why did a bigger dose kill them earlier?

But one of the main issues with that earlier research was what was called the “abstainer bias.” People who abstain, as a population group, tend to be more unhealthy than average because many choose to not drink for health reasons, and those who give up drinking often do so because of health problems as well. When studies compared them, moderate drinkers had an automatic advantage – giving “an illusion of protective effects,” as Dr. Stockwell puts it. Moderate drinkers also, as a group, are healthier in general than non-drinkers or heavy drinkers. They tend to eat better diets, exercise more and be wealthier, making it hard to untangle correlation from causation: Perhaps moderate drinking was just an indicator of healthy living, and not the reason for longevity. Gene research, for instance, has found that people with a genetic predisposition to drink less also had a lower risk of cardiovascular disease no matter how much they drank.

The heart and longevity studies also focused on senior populations, which meant they didn’t include younger drinkers, including moderate ones, who may have already died from alcohol-related illness. In many cases, when researchers [accounted](#) for sample bias, the benefits diminished or even disappeared. Even so, the drinking seniors found to be living longer were often consuming small amounts of alcohol, well below even low-risk guidelines.

Meanwhile, the caution flags around drinking alcohol for its benefits have been increasing over the past decade. For instance, it’s not resolved yet in science whether a small amount of alcohol helps or harms cognitive health, says Kevin Shield, an independent scientist at the Centre for Addiction and Mental Health’s Institute for Mental Health Policy Research. But when it comes to higher levels of drinking, the picture is clearer. A nationwide [French study]([https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(18\)30022-7/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(18)30022-7/fulltext)), published in *The Lancet Public Health* in 2018, found that more than half of early onset dementia cases comprised people with alcohol-related brain damage or alcohol use disorders.

While in the short term alcohol may feel like a stress reliever, research has found that alcohol consumption worsens depression and anxiety. (In the same way, while it seems to help people fall asleep initially, it actually interferes with deep sleep later in the night.) Self-medicating a mental illness or trauma with alcohol often exacerbates symptoms or leads to addiction. In July, 2019, the Canadian Medical Association Journal published a large-scale study, analyzing survey data from nearly 10,400 participants from Hong Kong and the United States, which found the healthiest amount of alcohol consumption for one's mental well-being may be none at all.

Even studies that find a benefit come with their own caveat, usually warning people not to start drinking for health reasons. A 2017 [study](#) published in The BMJ found that moderate drinkers, followed over time, presented with lower incidents of certain heart conditions compared with abstainers and heavy drinkers. Even so, the authors warned that the study found benefits and risks varied between conditions, and it would be unwise to encourage individuals to take up drinking “because there are arguably safer and more effective ways” to improve heart health. What's more, individual risk factors in other areas may wipe out any benefit.

As Nicole Lee, a professor at the National Drug Research Institute in Australia says, new research, over all, suggests the previously reported health benefits of low levels of consumption “were at best overstated, and more likely non-existent.”

Meanwhile, as the health benefits for alcohol were unravelling, the understanding of the risks – even for moderate drinkers – was only growing.

In Canada, alcohol was responsible for more than 18,300 deaths, 700,000 emergency room visits and 105,000 hospital stays in 2017, according to the Canadian Substance Use Costs and Harms project. That

project, co-led by the Canadian Centre on Substance Use and Addiction, calculated the total cost of alcohol to society, including health, lost productivity and criminal justice costs, amounted to \$16.6-billion that same year.

Alcohol's risks are dose-related: The more you drink, the more damage it does. But even though the heaviest drinkers are the most costly individual patients, Canada's big population of moderate drinkers run up their own hefty tab.

This includes injuries and accidents. It also includes cancer. Last year, a Canadian study published in the *Journal of Studies on Alcohol and Drugs* found that 50 per cent of alcohol-related cancer deaths happened to people who reported drinking within the weekly guidelines – that is, a moderate amount.

For decades, scientists have known that alcohol causes cancer. The World Health Organization's International Agency for Research on Cancer has considered ethanol, the type of alcohol we drink, as a Group 1 carcinogen, meaning it has the strongest level of evidence of carcinogenicity. But until recently, it was thought a person needed to drink a lot to affect their cancer risk. In the past 10 years, more literature suggests that risk of certain common cancers, such as breast cancer and colon cancer, starts to increase at even low levels of drinking. This finding factored into the new lower recommended limits released last year in Australia. "It was clear from the cancer evidence that we needed to encourage people to reduce what they drink," said Kate Conigrave, chair of the alcohol working committee of Australia's National Health and Medical Research Council.

Regardless of whether we consume wine, beer or spirits, ethanol gets into our bodies and gets broken down into a compound called acetaldehyde, when breaks down again into a compound called acetate.

It's these compounds that cause cancer in humans, either by damaging DNA or stopping the body from repairing damaged DNA.

For women, the risk of cancer is even higher because of the link between alcohol and breast cancer. A 2011 JAMA study, that followed 105,000 women from 1980 to 2008, found that women who drank only three to six glasses a week had a small but significant increase in the risk of breast cancer, about 15 per cent higher than those who didn't drink. For women who consumed at least two drinks a day, the risk was 50 per cent higher than for non-drinkers. The risk was found to increase with lifetime exposure, and binge drinking.

The Canadian Cancer Society already recommends lower amounts of alcohol than the national low-risk drinking guidelines – less than one drink a day for women and less than two drinks a day for men. A study, funded by the Canadian Cancer Society, estimated 3,300 new cancer cases diagnosed in 2015 were due to drinking alcohol. It also estimated the number of new cancer cases attributable to alcohol would triple, increasing to 10,100, by 2042.

“The less you drink, the more you reduce your risk, so zero would be the goal,” said Elizabeth Holmes, senior manager of policy and surveillance at the Canadian Cancer Society.

This is especially true, researchers suggest, for anyone with added risks factors for cancer, such as family history.

To put the risk in perspective, a 2019 study published in BMC Public Health sought to answer this question: How many cigarettes are there in a bottle of wine? Drinking three bottles of wine a week – or half a bottle a day – was found to increase the lifetime risk of cancer in men by 1.9 per cent; and women by 3.6 per cent, mainly because of the added risk of breast cancer. (This means, for instance that if 1,000 women drink three bottles of wine a week, 36 will get cancer as a result.)

The authors concluded that drinking one bottle of wine a week is equal to five cigarettes a week for men and 10 cigarettes a week for women. Drinking three bottles a week carries the same risk as smoking eight weekly cigarettes for men and 23 for women – about one pack a week.

To be clear, the authors were not saying that drinking moderately is equal to smoking. Their study also looked at a population sample – and not individual risk, which would vary widely. But they did point out that social drinkers also tend to smoke more than abstainers – further elevating their cancer risk.

Dr. Stockwell says he also worries that alcohol may turn out to be like tobacco in another way – where more science continues to raise the level of cancer risk. He points to emerging, though still uncertain, new work that suggests alcohol may be a factor in more types of cancers than previously identified.

“There is a duty of care to find answers to these questions,” Dr. Stockwell said. “Even if doesn’t change behaviour, consumers have a right to know.”

Ottawa graphic designer Julia Albert decided to cut way back on her drinking last summer, when she found that at the end of her at-home workday, her happy hour drink was stretching into a full bottle of wine. With Google’s help, she had to admit that she was no longer a moderate drinker. She was holding everything together, she says, but it wasn’t sustainable. “People think that in order to have negative health effects, you have [to] be destroying your relationships and not be able to hold onto a job.”

This is a significant challenge facing any new guidelines: getting traction with a happy clan of moderate drinkers who would rather just not know. A stricter set of recommendations is one step; the hurdle is the social pressure to drink.

When Ms. Albert started to think seriously about not drinking, the panic set in: Alcohol was part of her friend group, cribbage with her husband, holidays, a relaxing evening. “No one is going to want to hang out with me,” she thought. “I am not going to be fun.” The first time she went to a small outdoor gathering, and didn’t drink, she says, “I felt naked.”

For many Canadians, alcohol is soaked into the social fabric of daily life – the wine mom jokes on Facebook, the virtual book club nights, the way Olivia in *Scandal* treated a glass of wine like her roommate at the end of a hard day. For Christine Rhode, a Saskatchewan mother of three, who cut back after realizing she was drinking too much, going sober last summer meant regular grilling’s from well-meaning friends: “That is what you do – you come to someone’s house, you have a drink. You order water or juice, and they think you’re crazy. You come of age, you drink, that is what we are programmed to do.”

And let’s state the obvious – alcohol is fun, otherwise it wouldn’t have such a storied history with humanity. “Everyone knows it’s poison, for the most part,” said Karen Scutt, the general manager of an event planning company in Toronto. “But, you know, there is something really lovely about drinking a good glass of wine.”

Dan Malleck, a Brock University professor who specializes in alcohol policy, also highlights the role alcohol plays in fostering social connections and the exchange of ideas. “The only way we can talk about it now is as a problem,” he says. “But when I am sitting down with my friends at the pub, I am not engaging in a problem.”

Next month, Canadians will have a chance to weigh in on the subject when the committee developing the new guidelines distributes a survey seeking public opinion. It will also be an opportunity for the alcohol industry to offer their view.

Jan Westcott, president and chief executive officer of Spirits Canada, said the guidelines will need to be anchored in science and be realistic. “If you put forward things that the public won’t accept or doesn’t believe, it’s like bad laws – people don’t obey them,” he said.

Meanwhile, Luke Chapman, interim president of Beer Canada, said it is “a lost opportunity” that his organization is not involved in the review process. In general, he said, governments should look for opportunities to promote growth in the sale of lower alcohol products, such as beer, which could play a role in reducing total alcohol consumption.

Despite this message of openness, Dr. Sherk of the Canadian Institute for Substance Use Research says the alcohol industry has a long track record of minimizing cancer research that’s been documented in academic journals and media reports. “It’s kind of like where tobacco was in the fifties,” he says. “The industry is very entrenched in influencing people not to understand that alcohol causes cancer.” Most recently, the Yukon government backed off using cancer warning labels on alcohol in a study conducted in liquor stores after fierce objections from the industry.

Even without an influential, multibillion-dollar industry scrutinizing from the sidelines, crafting guidelines is a scientific challenge, subject to a weighing of the risks, and assessment of harm. Go too strict, and who will follow them? Too easy, and you’ve done a public-health disservice.

Around the world, guidelines vary widely because countries reach them in different ways. (How countries define standard drinks also widely differs, with Canada leaning toward the supersize side.) When Australia lowered its guidelines last year, for instance, the potential for health benefits was factored into the calculations, even though many scientists are skeptical about them. Instead of the previous 14 weekly drinks, the country’s new guidelines now recommend 10 (or seven, by Canadian standards) for both men and women. Not accounting for any possible

benefit would have likely brought the guidelines closer to the Netherlands' near-abstinence recommendation. (On top of weekly or daily limits, many countries also recommend at least two alcohol-free days a week.)

Lower guidelines, experts say, need to be part of a larger strategy that includes minimum pricing, restricting availability and limiting marketing – a set of guidelines won't change a country's drinking habits on their own.

As well as limits on the number of drinks, the scientists working on the guidelines are also exploring how to give the public a clearer understanding of serving sizes.

Right now, even if you can recite the current guidelines, following them isn't easy. Unlike other food and beverages, alcohol isn't clearly labelled by serving size, nor are products required to have any nutritional labelling once they contain more than 0.5 per cent alcohol.

That means to really know how much you are pouring, you need to do the math yourself, which isn't simple. Alcohol content can vary widely, which changes the size of a standard drink. In Canada, for example, a 12-ounce can – or 341 ml – of 5-per-cent beer is equal to one standard serving. But many craft beers come in a larger can with higher alcohol content. While a standard glass of 12-per-cent-alcohol wine is five ounces, restaurants often serve six- or even nine-ounce glasses, and you may have to ask for the bottle to know the alcohol content.

“The problem is,” Dr. Sherk says, “no Canadian knows what a standard drink is.”

Too often, doctors have patients fill out the “alcohol consumption” box at their annual physical, but then don't follow up with information about cancer risk, or how to cut back, such as taking days off drinking, says

Jennifer Wyman, an addictions specialist at Women's College Hospital. A cultural shift is necessary, she suggests, to see abstaining not as strange or uptight, but as a healthy choice, such as cutting back on fatty food or not smoking.

But when it comes to weighing the risks, Dr. Wyman admits to some self-justification on her own part. "I can believe any amount probably increases my risk of cancer," she said. "But I don't see myself forgoing ever having another drink because of that."

Perhaps new guidelines are arriving at the right moment, says Ms. Albert, who is now comfortable with not drinking. "I think a lot of people are thinking about this right now and we are on the precipice of a shift around alcohol."