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on Substance Use
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Alcohol Use in Canada

Updating Canada's Low-Risk Drinking Guidelines

Presentation to Alcohol Policy Conference presented by the U.S. Alcohol Policy Alliance

Catherine Paradis, PhD, Canadian on Substance use and Addiction & Peter Butt, MD,
University of Saskatchewan, on behalf of the Low-Risk Alcohol Drinking Guidelines
Scientific Expert Panels.

September 16, 2022

As required by the Alcohol Policy 19 Conference, I/we have signed a disclosure statement and note the following conflict(s) of interest:

I have to declare that my brother is the president and a shareholder of a microbrewery in Québec, Canada.

However, I certify that I am not and have never been involved in the business in question and that I or members of my immediate family have never received any benefit or remuneration from that business, whether directly or indirectly.

Furthermore, I certify that my brother or his company have never had any involvement, whether directly or indirectly, in my professional endeavors.

I have to declare that before joining CCSA, I was freelance worker with several clients and Educ'alcool was a recurring one.

Éduc'alcool is a non-profit funded by a levy taken by the Société des alcools du Québec (SAQ) whose board of directors has members from the scientific and business communities, as well as members representing alcoholic beverage industry associations.

Disclosure of Affiliations and Interests



Procedures for declaring interests and managing potential conflicts followed the Guidelines International Network: Principles for Disclosures of Interests and Management of Conflicts in guidelines

Physical Health Expert Panel

- Catherine Paradis, Canadian Centre on Substance Use and Addiction
- Peter Butt, College of Medicine, University of Saskatchewan
- Mark Asbridge, Dalhousie Medical School
- Danielle Buell, University of Toronto
- Samantha Cukier, Health Canada
- Francois Damphousse, Health Canada

Mental Health and Social Effects Expert Panel

- Jennifer Heatley, Public Health at Government of Nova Scotia
- Erin Hobin, Public Health Ontario
- Harold R. Johnson, Lawyer and Author
- Ryan McCarthy, Canadian Centre on Substance Use and Addiction (co-chair for the Knowledge Mobilization Scientific Expert Panel)
- Kate Morissette, Public Health Agency of Canada
- Chris Mushquash, Lakehead University
- Daniel Myran, Ottawa Hospital Research Institute

Knowledge Mobilization Expert Panel

Time to update

1. Significant developments in research knowledge about alcohol-related mortality and morbidity since 2011.
2. In Canada, more than 50% of alcohol-related cancer deaths occurred in individuals who no longer consumed alcohol or who complied with the LRDGs.
3. Countries such as France, the United Kingdom and Australia have recently updated their LRDGs.
4. Evolving research demonstrates that consuming alcohol contributes to social harms.



Update the LRDGs and make recommendations for their knowledge mobilization

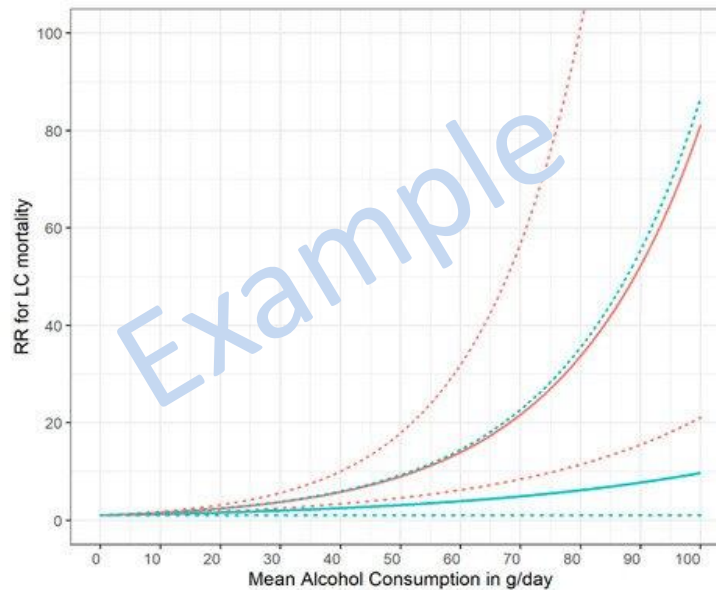


The construction of experts' recommendations

Development of Experts' Recommendations

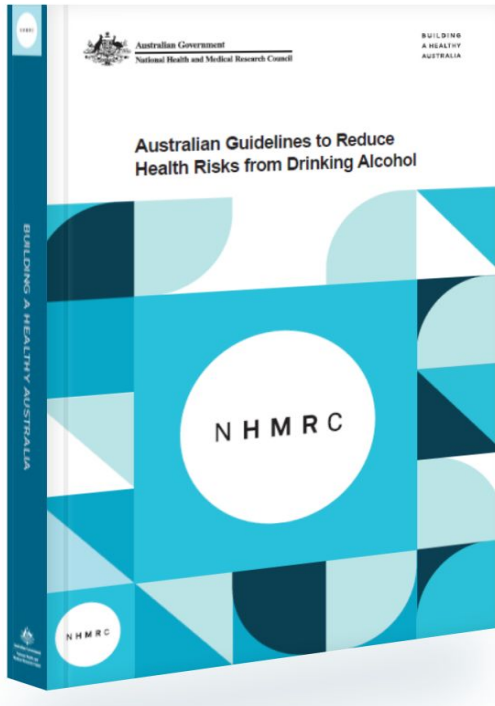
Lifetime risk of alcohol-related death and disability

1. What are the LONG-TERM risks and benefits?
2. What are the SHORT-TERM risks and benefits?
3. What are the risks for women who are pregnant or breastfeeding; for fetal, infant and child development?



Alcohol mortality **risk functions** for all disease or injuries categories causally related to alcohol consumption

Evidence Review: Effects of Alcohol on Health



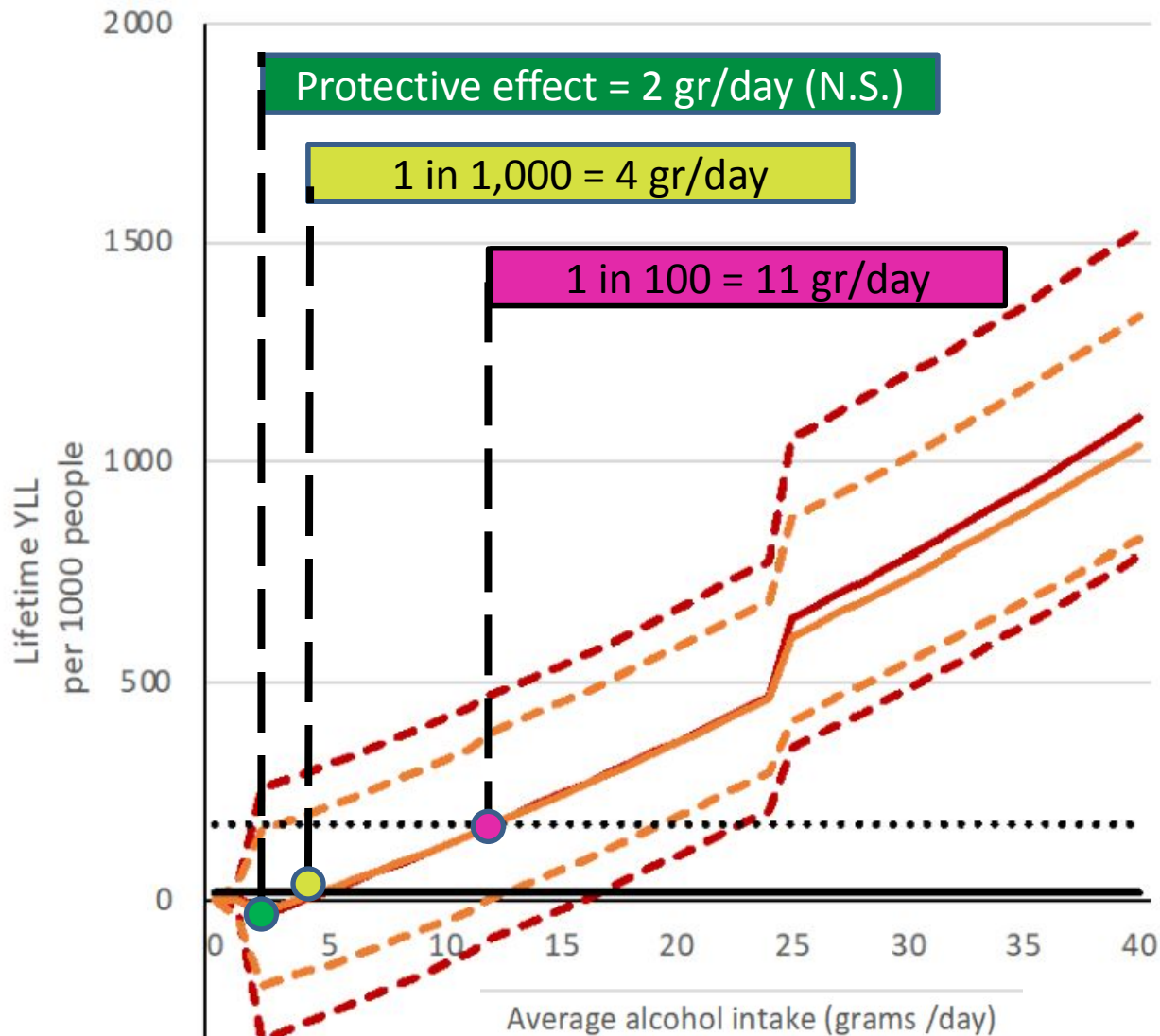
Australia's results of systematic searches on the impacts of alcohol use **can be adapted**.

Update results to cover evidence published since January 2017

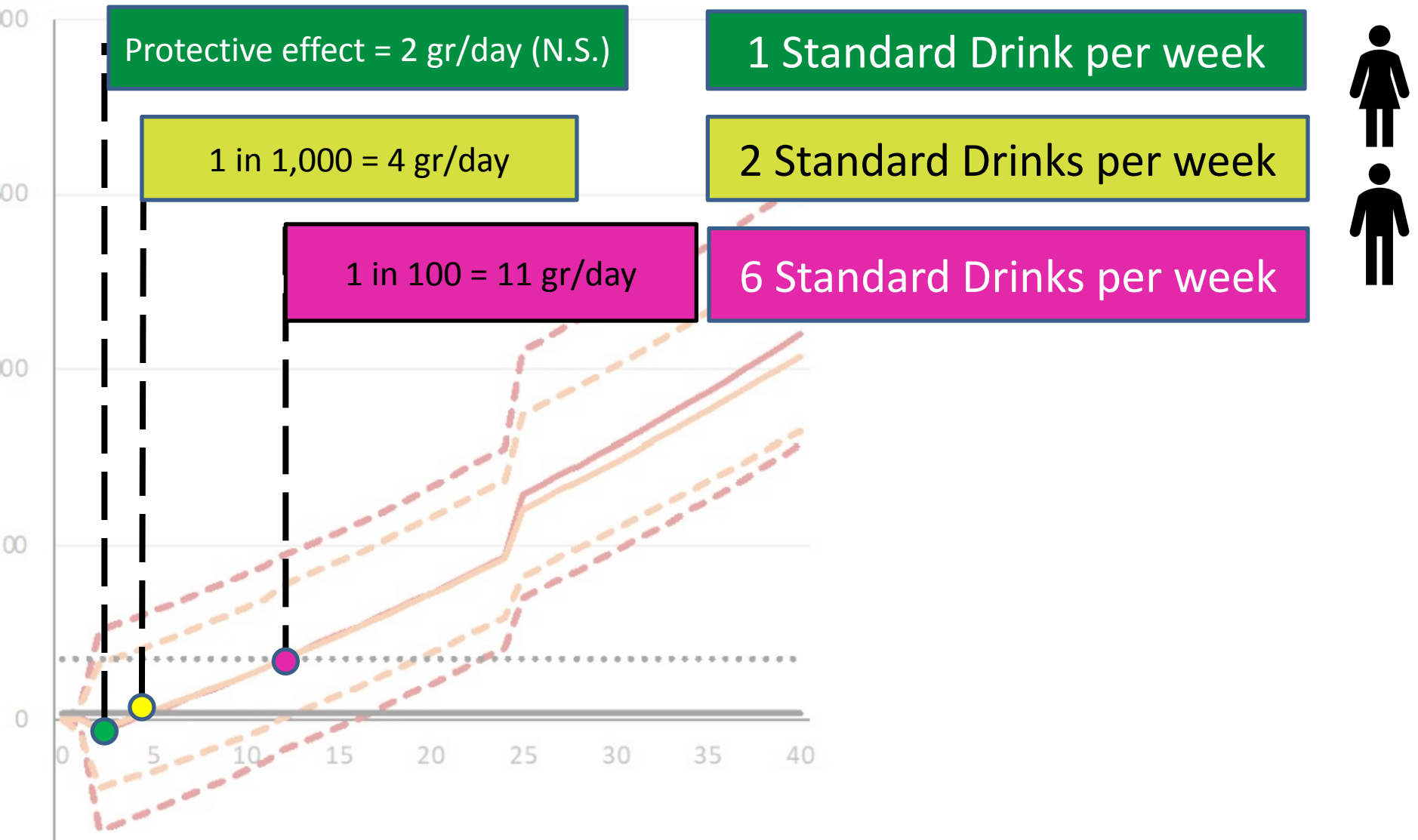
5,915 systematic reviews were retrieved

239 systematic reviews were screened for full-text eligibility

Lifetime Risk of Alcohol-Attributable Years of Life Lost by Sex



Lifetime Risk of Alcohol-Attributable Years of Life Lost by Sex



Values and Preferences of Canadians

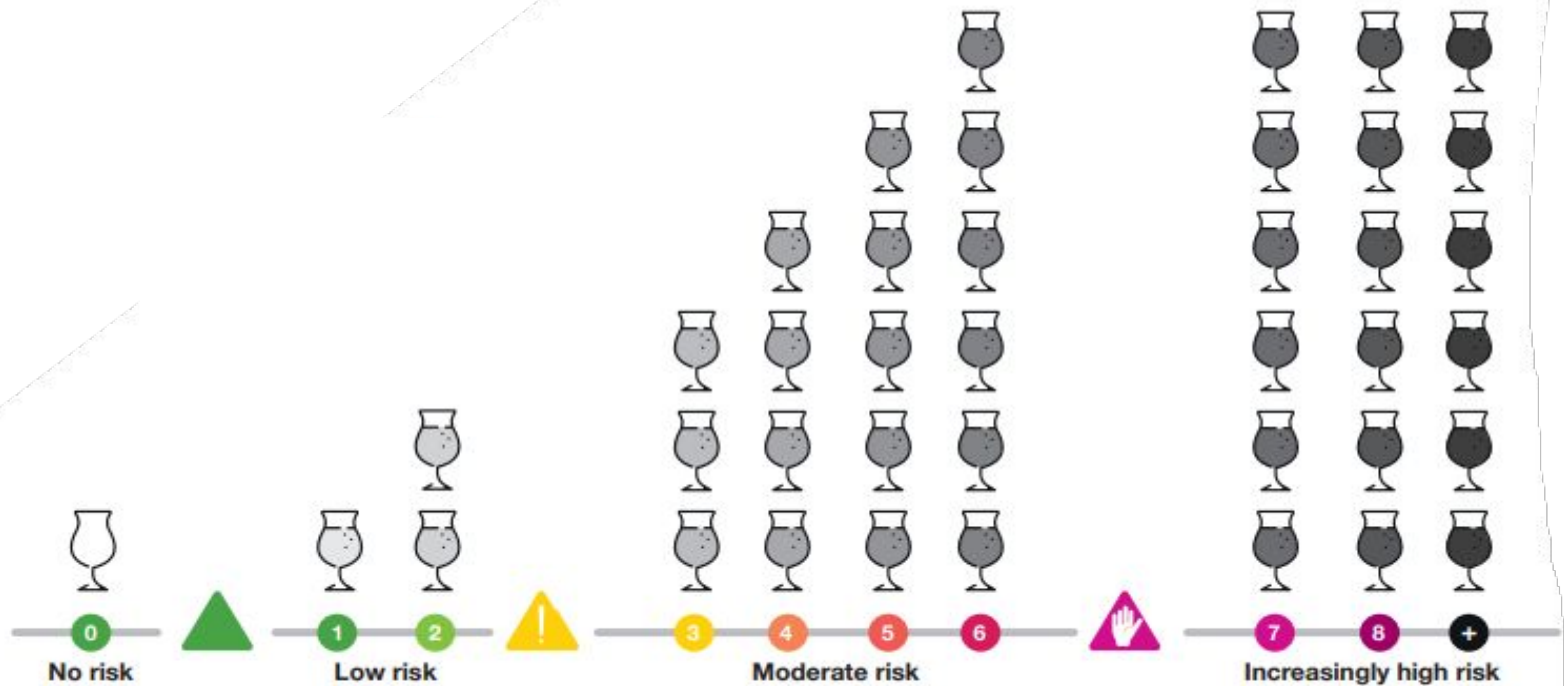
- ✓ Focus on the facts rather than strict rules or patronizing messages.
- ✓ Inform people about the existence of the guidelines and the reasons for their existence.
- ✓ Keep messages short, simple and clear.
- ✓ Meet people where they are at by providing them with actionable guidelines on alcohol.
- ✓ Provide standard drink measurements.



Experts' Recommendations

Takeaway 1

Continuum of Risk



Takeaway 2: Per occasion drinking

Per Occasion
Drinking

Alcohol &
Violence

On any occasion, the risk of acute outcomes begins to increase with any consumption and, with more than 2 drinks, most individuals will have an increased risk of injuries or other acute problems.

Takeaway 3 : Alcohol and Women

Alcohol and Women

At low levels of consumption, the physiological differences between WOMEN and MEN have only a small impact on lifetime risk of harm, but above low levels, the risks increase more steeply for WOMEN than for men.

Takeaway 4: Alcohol and Men

Alcohol &
Violence

Disproportionately more injuries, violence and deaths result from MEN's drinking.

Takeaway 5 & 6 : Reproductive Health

Alcohol and Women

It is safest to not drink while pregnant
and during the
pre-conception period.

For women who are breastfeeding, it is
safest not to use alcohol

Takeaway 7: Less is Better

LESS IS BETTER

Carcinogen

At least 7
types of
cancer

Neither
decreases
nor increases
the risk of
heart
diseases

Injuries

Road crashes

Violence

It is OK not to drink alcohol

Guidance on Alcohol and Health



CANADA'S LOW-RISK ALCOHOL DRINKING GUIDELINES

Drinking is a personal choice.
If you choose to drink, these guidelines can help you decide when, where, why and how.



CANADA'S GUIDANCE ON ALCOHOL AND HEALTH

Experts' Recommendations for Next Steps

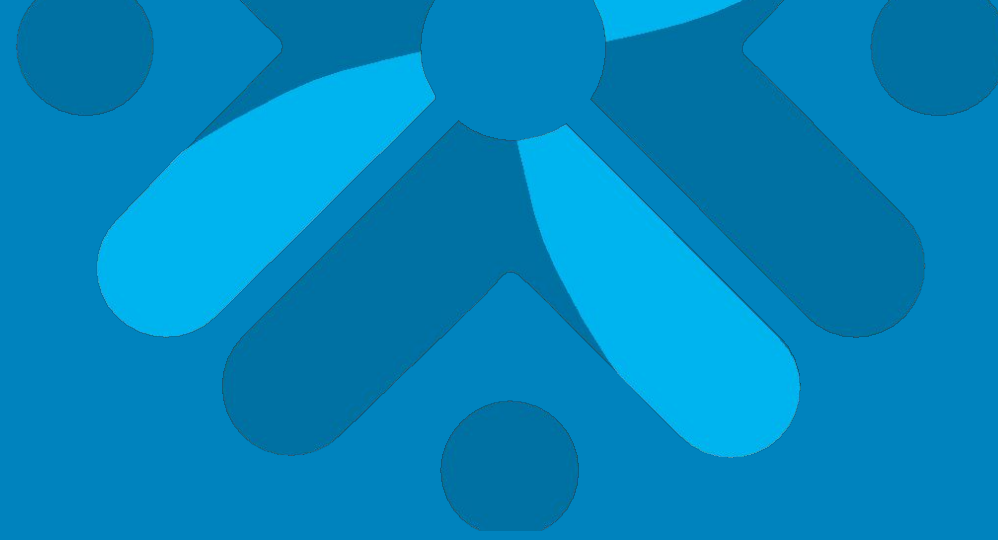
Developing Targeted Campaigns

Nudging

Standard Drink
Labelling

Warning
and
Nutrition
Labels

Cost-Eff
ective
Policies



Clinical Implications

Clinical Implementation



Nudging through:

1. Public knowledge mobilization
2. Targeted professional development to **individualize risk**
3. A re-vision of screening and brief intervention
4. Increased knowledge and comfort treating alcohol use disorder

How do we best help clinicians engage in a discussion about alcohol use?

Table 1. Increased risk of diseases and injuries for females based on average daily alcohol use

Disease or injury	Deaths per 100,000 people per year	Premature deaths per 100,000 people per year	Average alcohol intake (g/day)									
			5	10	15	20	25	30	35	40	45	50
Ischemic heart disease	72.1	16.7	-5.0%	-5.0%	-5.0%	-5.0%	4.0%	4.0%	4.0%	4.0%	7.0%	7.0%
Breast cancer	28.3	17.3	4.7%	9.5%	14.7%	20.0%	25.6%	31.5%	37.6%	44.0%	50.7%	57.7%
Other unintentional injuries	22.6	4.3	4.0%	8.1%	12.4%	16.8%	21.4%	26.3%	31.3%	36.5%	41.9%	47.5%
Lower respiratory infections	22.3	3.7	2.4%	4.9%	7.4%	10.0%	12.7%	15.4%	18.2%	21.0%	23.9%	26.9%
Colorectal cancer	21.0	9.2	3.4%	7.0%	10.7%	14.5%	18.4%	22.5%	26.7%	31.1%	35.6%	40.3%
Diabetes Mellitus	12.6	4.7	-21.6%	-26.9%	-30.0%	-31.9%	-33.2%	-34.0%	-34.4%	-34.6%	-34.6%	-34.4%
Hypertension	11.3	1.9	3.0%	6.0%	8.9%	11.8%	14.9%	18.0%	21.4%	24.8%	28.4%	32.0%
Atrial fibrillation and flutter	10.4	0.6	3.3%	6.6%	10.1%	13.7%	17.4%	21.2%	25.2%	29.2%	33.5%	37.8%
Intracerebral hemorrhage	8.6	2.4	-8.0%	-8.0%	-1.0%	-1.0%	25.0%	25.0%	25.0%	25.0%	25.0%	67.0%
Liver cirrhosis	6.9	5.5	109.5%	182.1%	254.9%	330.8%	411.2%	496.7%	588.0%	685.5%	789.6%	900.9%
Ischemic stroke	6.5	1.1	-10.0%	-10.0%	-8.0%	-8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	14.0%
Liver cancer	6.0	3.2	2.0%	4.0%	6.1%	8.2%	10.3%	12.5%	14.7%	17.0%	19.3%	21.7%
Intentional injuries	5.8	5.9	13.3%	28.3%	45.4%	64.7%	86.6%	111.4%	139.4%	171.2%	207.3%	248.1%
Road injuries	2.8	2.5	4.9%	10.1%	15.5%	21.2%	27.1%	33.4%	39.9%	46.8%	54.0%	61.6%
Esophagus cancer	2.6	1.5	6.8%	14.1%	21.9%	30.2%	39.0%	48.4%	58.5%	69.1%	80.5%	92.5%
Subarachnoid hemorrhage	2.4	1.7	21.0%	21.0%	11.0%	11.0%	39.0%	39.0%	39.0%	39.0%	39.0%	82.0%
Oral cavity and pharynx cancer	2.2	1.2	13.1%	27.6%	43.6%	61.4%	81.0%	102.6%	126.3%	152.3%	180.8%	211.7%
Pancreatitis	1.2	0.5	-12.7%	-22.7%	-28.3%	-28.4%	-23.9%	-15.0%	-2.0%	14.8%	34.9%	58.4%
Epilepsy	0.7	0.4	7.0%	13.8%	21.0%	28.6%	36.8%	45.5%	54.7%	64.5%	74.9%	86.0%
Larynx cancer	0.3	0.2	7.5%	15.5%	24.0%	32.9%	42.3%	52.3%	62.8%	73.8%	85.4%	97.6%
Tuberculosis	0.2	0.1	9.4%	19.7%	30.9%	43.2%	56.7%	71.4%	87.6%	105.2%	124.5%	145.6%

Dark red > 50%; light red 20% to 50%; yellow 10% to < 20%; green < 10%

Bolded percentages indicate significant estimates

Table 2. Increased risk of diseases and injuries for males based on average daily alcohol use

Disease or injury	Deaths per 100,000 people per year	Premature deaths per 100,000 people per year	Average alcohol intake (g/day)									
			5	10	15	20	25	30	35	40	45	50
Ischemic heart disease	104.1	47.5	-5.0%	-5.0%	-5.0%	-5.0%	4.0%	4.0%	4.0%	4.0%	7.0%	7.0%
Colorectal cancer	25.6	13.9	3.4%	7.0%	10.7%	14.5%	18.4%	22.5%	26.7%	31.1%	35.6%	40.3%
Other unintentional injuries	23.2	9.8	4.0%	8.1%	12.4%	16.8%	21.4%	26.3%	31.3%	36.5%	41.9%	47.5%
Lower respiratory infections	19.3	5.1	2.4%	4.9%	7.4%	10.0%	12.7%	15.4%	18.2%	21.0%	23.9%	26.9%
Intentional injuries	18.0	17.9	13.3%	28.3%	45.4%	64.7%	86.6%	111.4%	139.4%	171.2%	207.3%	248.1%
Diabetes Mellitus	16.8	9.0	0.0%	0.2%	0.4%	0.6%	1.0%	1.4%	1.9%	2.4%	3.0%	3.6%
Liver cirrhosis	12.2	10.3	15.5%	32.9%	52.8%	75.7%	102.0%	132.3%	167.1%	207.1%	253.2%	306.1%
Liver cancer	11.1	7.5	2.0%	4.0%	6.1%	8.2%	10.3%	12.5%	14.7%	17.0%	19.3%	21.7%
Esophagus cancer	9.0	6.2	6.8%	14.1%	21.9%	30.2%	39.0%	48.4%	58.5%	69.1%	80.5%	92.5%
Hypertension	8.4	3.4	7.2%	15.0%	19.0%	23.2%	27.5%	32.0%	34.0%	35.9%	38.0%	40.0%
Intracerebral hemorrhage	8.2	3.3	-8.0%	-8.0%	-1.0%	-1.0%	25.0%	25.0%	25.0%	25.0%	25.0%	67.0%
Atrial fibrillation and flutter	6.6	1.0	3.3%	6.6%	10.1%	13.7%	17.4%	21.2%	25.2%	29.2%	33.5%	37.8%
Road injuries	6.0	5.6	7.6%	15.9%	24.7%	34.2%	44.5%	55.5%	67.4%	80.2%	93.9%	108.7%
Ischemic stroke	5.7	1.9	-8.0%	-8.0%	-8.0%	-8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	14.0%
Oral cavity and pharynx cancer	5.2	3.6	13.1%	27.6%	43.6%	61.4%	81.0%	102.6%	126.3%	152.3%	180.8%	211.7%
Larynx cancer	1.8	1.1	7.5%	15.5%	24.0%	32.9%	42.3%	52.3%	62.8%	73.8%	85.4%	97.6%
Subarachnoid hemorrhage	1.6	1.2	21.0%	21.0%	11.0%	11.0%	39.0%	39.0%	39.0%	39.0%	39.0%	82.0%
Pancreatitis	1.5	0.9	9.1%	18.9%	29.7%	41.5%	54.3%	68.3%	83.5%	100.1%	118.3%	138.0%
Epilepsy	0.7	0.6	7.0%	13.8%	21.0%	28.6%	36.8%	45.5%	54.7%	64.5%	74.9%	86.0%
Tuberculosis	0.3	0.2	9.4%	19.7%	30.9%	43.2%	56.7%	71.4%	87.6%	105.2%	124.5%	145.6%

Dark red > 50%; light red 20% to 50%; yellow 10% to < 20%; green < 10

Bolded percentages indicate significant estimates

Individualizing Risk



In addition to prompting reflection on the risk from alcohol use alone, people with a personal or family history of an alcohol-attributable condition should be encouraged to reduce their level of consumption even further or consider abstinence.

Harm Reduction



- ✓ Reduce short-term risk by avoiding intoxication
- ✓ Drink no more than 1 SD per hour, 2 per occasion

Tips to reduce your drinking

- Stick to the limits you've set for yourself.
- Choose drinks with a lower percentage of alcohol.
- Drink slowly in small sips.
- Always have a pitcher of water on hand.
- For every drink of alcohol, have one non-alcoholic drink.
- Try some alcohol-free cocktail recipes.

Safest not to drink alcohol when:

- ✓ Pregnant and during the pre-conception period
- ✓ Breastfeeding
- ✓ Living with cancer or alcohol use disorder
- ✓ Driving or operating equipment
- ✓ Caring for others
- ✓ Making important decisions

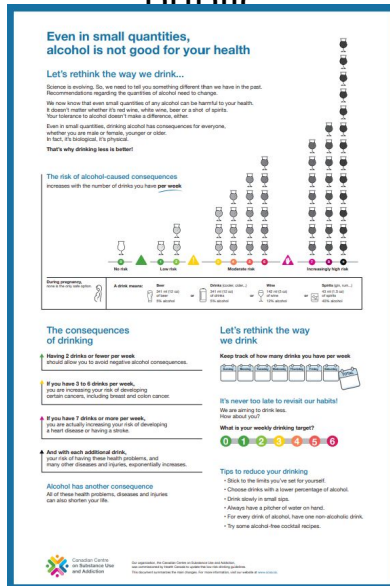


Next Steps

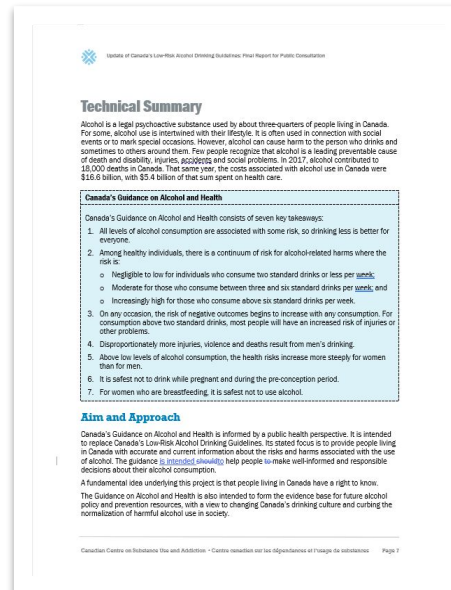
Next Steps

✓ August 29 – September 23, 2022: Open Consultation

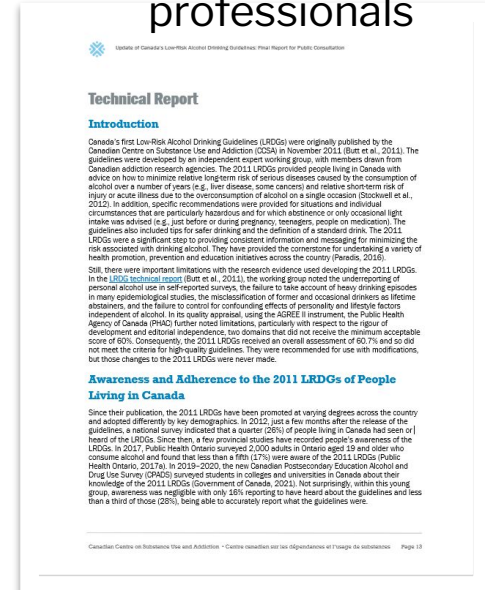
Public Summary
for the general
public



Technical Summary
for health organizations,
health professionals



Technical Report
for alcohol scientists, policy
makers and healthcare
professionals



✓ November 15, 2022: Launch of Guidance on Alcohol and Health

Discussion



Thank you