

Public Health Updates for Halton Physicians: **FOCUS ON ALCOHOL**

Understanding the clinical implications of the new alcohol guidance and how reducing alcohol intake reduces the risk of disease

March 8, 2023
7-8 p.m.



The webinar will begin at 7 p.m.

If you run into technical difficulties, please email Javier.Rincon@halton.ca



Indigenous Land acknowledgement

Boozhoo, She:kon , Tanshi, Greetings!

Halton Region acknowledges the Treaty Lands of the Mississaugas of the Credit First Nation as well as the Traditional Territory of the Haudenosaunee, Huron-Wendat and Anishinabek on which we gather.

In stewardship with Mother Earth and the enduring Indigenous presence connected to these lands we acknowledge the Indigenous Nations of the past, present and future.

In the spirit of ally-ship and mutual respect, we will take the path of Truth and Reconciliation to create change, awareness and equity as we strive to elevate the collective consciousness of society.

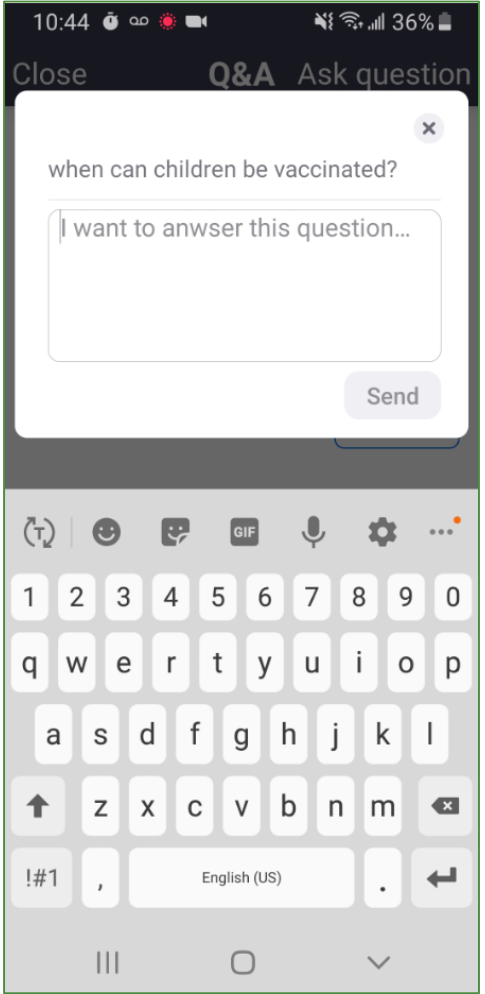
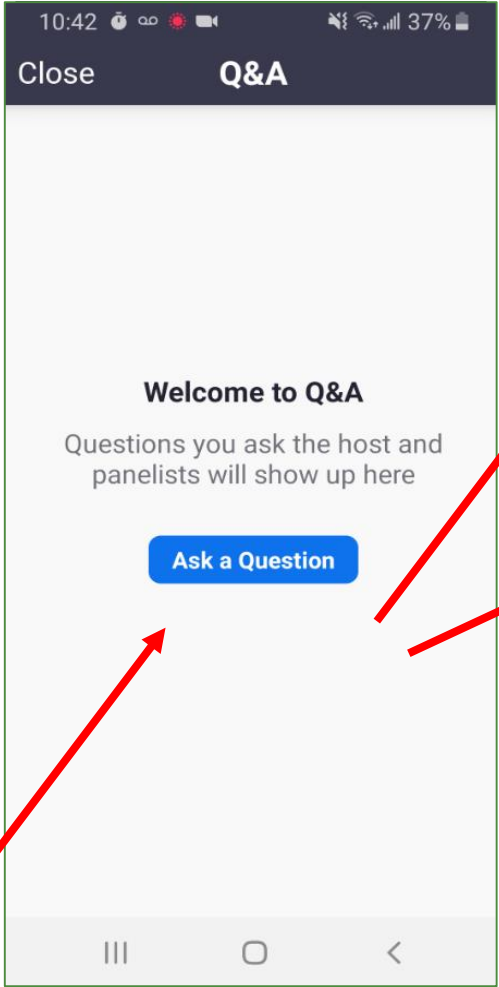
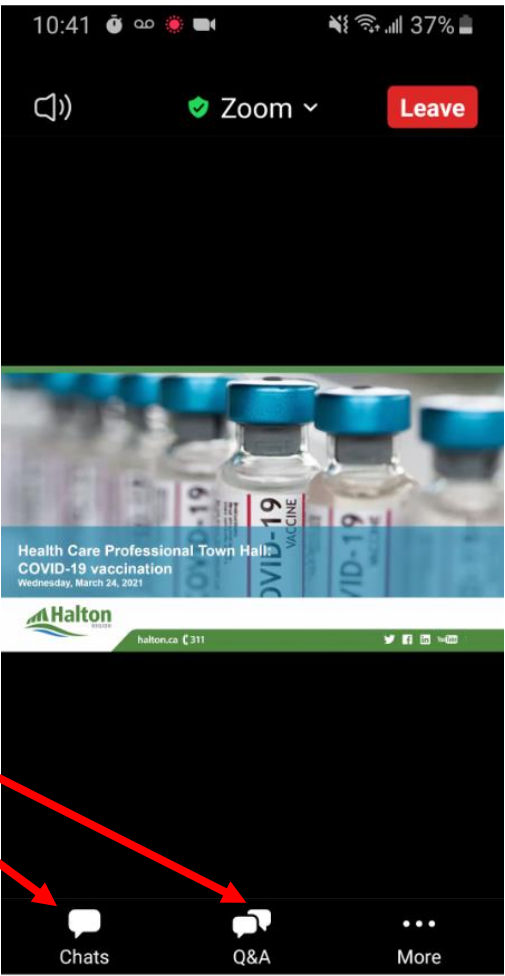
Miigwetch, Nia:wen, Marsi, Thank you

Agenda

- Dr. Hamidah Meghani, Medical Officer of Health, Halton Region Public Health
 - Related health risks of alcohol consumption
 - Epidemiology of alcohol misuse in Halton and Ontario
 - Local support and resources
- Keynote speaker – Dr Peter R. Butt, Co-chair for the 2023 Canadian Guidance on Alcohol and Health, Canadian Centre on Substance Use and Addiction (CCSA)
 - Changes to Canada’s Guidance on Alcohol and Health
 - Clinical implications of guidance
- Question and answer session



Housekeeping



Use the Q&A function to ask, vote or comment on a question



Learning Objectives

Overall series learning objective:

- By attending the Public Health Updates for Halton Physicians series, participants will be able to identify and discuss relevant and recent information about approaches to the prevention, diagnosis and management of key public health issues impacting their family medicine practice in both rural and urban settings.

By the end of this session, participants will be able to:

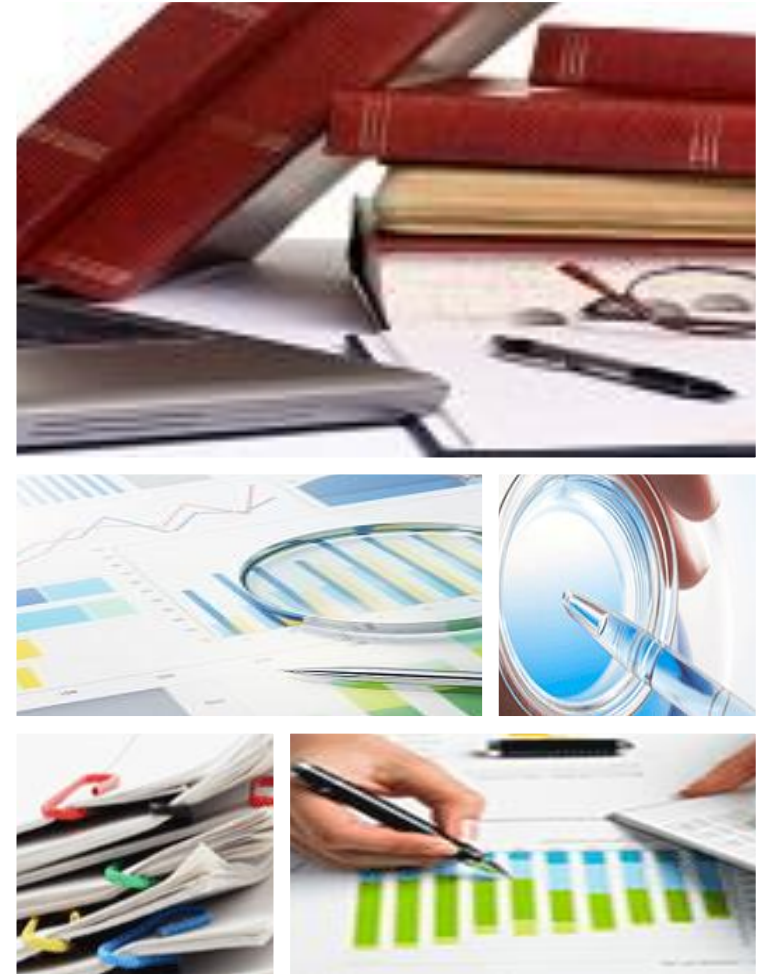
1. Discuss how alcohol use contributes to health risks for various diseases, including cancer and heart disease.
2. Understand the epidemiology of alcohol misuse in Halton and Ontario
3. Describe the changes to Canada's Guidance on Alcohol and Health
4. Outline the clinical implications of the guidance, including identifying opportunities during various patient interactions for discussing alcohol consumption and related health risks.



Mitigating Potential Bias

All data, resources and recommendations presented are based on current scientific literature and data.

While some treatments may be referred to by their pharmaceutical name, there is no relationship between us and the pharmaceutical companies referenced in this presentation.



Dr. Hamidah Meghani
Medical Officer of Health
Halton Region Public Health



Disclosure of Financial Support

- This program is hosted and organized by Halton Region Public Health.
- I am a paid employee with Halton Region Public Health.
- **Potential for conflict(s) of interest:**
 - Halton Region Public Health receives funding from the Province of Ontario who also provides funding for public health research, programs and resources that may be discussed today.

**Research
=
updated guidance**



Canada's Guidance on Alcohol and Health

Canada's Guidance on Alcohol and Health



Limits vs continuum of risk

OLD

NEW

Canada's Low-Risk Alcohol Drinking Guidelines (LRADG)

no more than



2 drinks per day.
Maximum of
10x 
per week.

no more than



3 drinks per day.
Maximum of
15x 
per week.



0 drinks per week

Not drinking has benefits, such as better health, and better sleep.

No risk



1 to 2 standard drinks per week

You will likely avoid alcohol-related consequences for yourself and others.

Low risk



3 to 6 standard drinks per week

Your risk of developing several different types of cancer, including breast and colon cancer, increases.

Moderate risk



7 or more standard drinks per week

Your risk of heart disease or stroke increases.

Increasingly high risk



Health risks associated with alcohol consumption

- One of the top five risk factors for death and disease in the world (WHO)
- Causal factor in over 200 disease and injury conditions, including:
 - At least 7 cancers (e.g. breast, colorectal, liver, oral, pharyngeal, oesophageal, laryngeal);
 - Cardiovascular disease;
 - Cirrhosis of the liver;
 - Fetal alcohol spectrum disorder;
 - Some mental health illnesses; and
 - Alcohol poisoning, impaired driving, violence, among others

Binge drinking

A standard drink means:



Beer

341 ml (12 oz) of beer
5% alcohol

or



Cooler, cider, ready-to-drink

341 ml (12 oz) of drinks
5% alcohol

or



Wine

142 ml (5 oz) of wine
12% alcohol

or



Spirits

(whisky, vodka, gin, etc.)
43 ml (1.5 oz) of spirits
40% alcohol

- Binge drinking
 - 5+ standard drinks for men in one sitting
 - 4+ standard drinks for women in one sitting
- 1 bottle wine = 750 mL
 - Little over 5 standard drinks of wine/bottle

Drinking less is better

Burden of alcohol use in Ontario

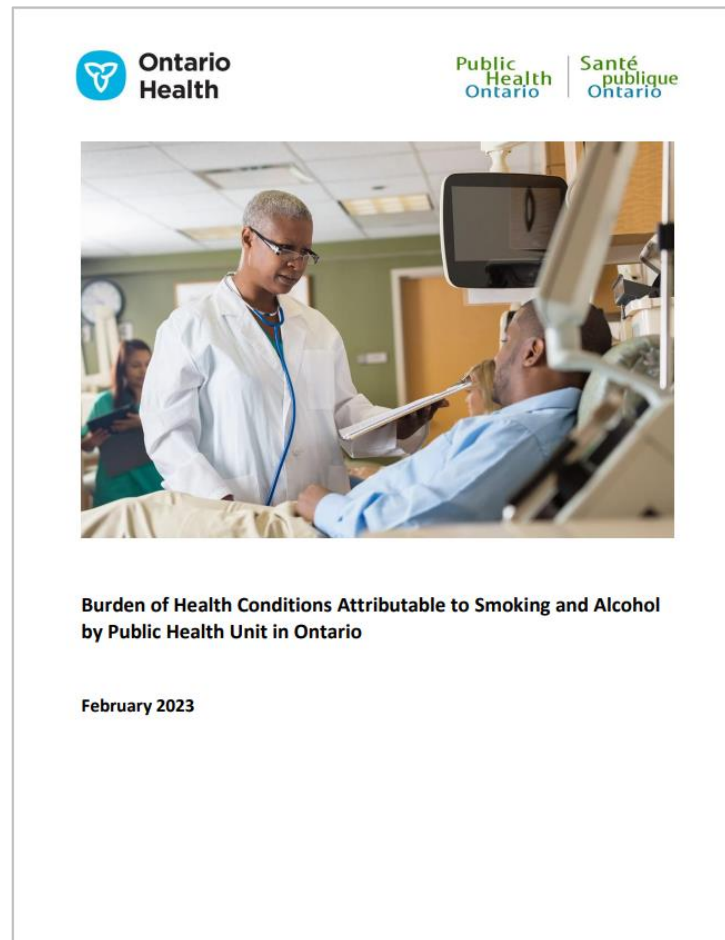


It is estimated that the total direct healthcare costs and indirect costs of alcohol use in Ontario are **\$4.5 billion**

A recent report by Public Health Ontario summarized the estimated burden of health conditions attributable to alcohol in the province.

Table 5: Estimates of average annual deaths, hospitalizations and emergency department visits from health conditions attributable to alcohol in people age 15 and older, Ontario

	Total alcohol attributable health conditions	Cancer	Cardiovascular diseases	Communicable diseases	Digestive conditions	Endocrine conditions	Neuro-psychiatric conditions	Intentional injuries	Motor vehicle collisions	Unintentional injuries
Deaths	4,330	1,204	934	126	865	-67	329	306	87	545
Hospitalizations	22,009	2,071	-2,263	1,282	4,709	-285	8,379	1,250	672	6,194
Emergency department visits	194,692	613	2,528	5,559	5,435	-927	57,536	9,112	9,391	105,446



COVID-19 and alcohol in Halton

Table 1: Number of hospitalizations and deaths due to COVID-19, Halton, March 1, 2020 to February 22, 2023 and estimated number of deaths attributable alcohol in a three period, Halton residents

	COVID-19 (March 1, 2020-February 22, 2023) ¹	Alcohol (3 year estimate) ²
Number of hospitalizations	1,765	2,184
Number of deaths	412	375

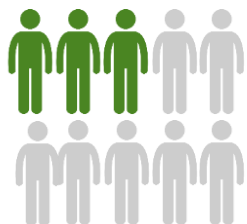
1. Halton Region COVID-19 dashboard, includes all ages
2. [PHO report](#), includes aged 15+
3. [PHO report](#), includes ages 35+

Alcohol use in Halton



Historically, alcohol consumption has been one of the few health indicators where Halton rates have been less favourable than the provincial average, however the gap has decreased in recent years.

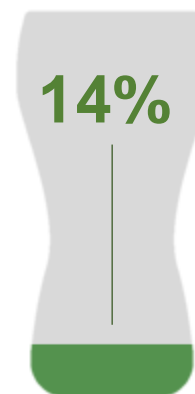
In 2021, 13% of Halton adults surveyed reported increasing their alcohol consumption during the pandemic. The same percentage (13%) reported that their alcohol consumption decreased during the pandemic (RRFSS)



In 2019/20, approximately

3 in 10

Halton adults aged 19+ reported consuming more than 2 standard alcoholic drinks in the past week (CCHS)



In 2019/20, 14% of Halton residents aged 12+ reported drinking heavily in the past year (CCHS)



Alcohol Sales

Pandemic¹ 2020/2021

- **9.7** standard alcoholic beverages per week per Canadian of legal drinking age sold
- **\$25.5** billion in sales (inflation up 2.1%)

Pandemic Recovery² 2021/2022

- **9.5** standard alcoholic beverages per week per Canadian of legal drinking age sold
- **\$26.1** billion sales (inflation up 2.8%)

1 Statistics Canada, 2022

2 Statistics Canada, 2023

Dr. Peter R. Butt

University of Saskatchewan
Co-Chair 2023 Canadian Guidance
on Alcohol and Health (Canadian
Centre on Substance Use and
Addiction)





Canadian Centre
on **Substance Use**
and **Addiction**

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Centre canadien sur
les dépendances et
l'usage de substances

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Canada's new Guidance on Alcohol and Health: Clinical Implications

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

Halton Region Public Health

March 8, 2023

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**

- 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
- 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
- Tim Naimi, Canadian Institute for Substance Use Research, University of Victoria
- Nancy Poole, Centre of Excellence for Women's Health
- Justin Presseau, Ottawa Hospital Research Institute
- Adam Sherk, Canadian Institute for Substance Use Research, University of Victoria
- Kevin D. Shield, Institute for Mental Health Policy Research, Centre for Addiction and Mental Health
- Tim Stockwell, Canadian Institute for Substance Use Research, University of Victoria
- Sharon Straus, University of Toronto
- Kara Thompson, St. Francis Xavier University
- Samantha Wells, Institute for Mental Health Policy Research, Centre for Addiction and Mental Health
- Matthew Young, Gambling Research Exchange Ontario, Carleton University, and the Canadian Centre on Substance Use and Addiction

23 experts, 16 organizations

Faculty Disclosure

Dr. Peter Butt

No industry sponsors or other conflicts of interest.

Affiliations:

*Contracted Clinical Associate Professor, College of Medicine,
University of Saskatchewan*

*Contracted research and knowledge mobilization associate, Canadian
Centre on Substance Use and Addiction*

Financial Support:

*This project was funded by a Health Canada grant and managed by
the Canadian Centre on Substance Use & Addiction*

Objectives



- Understand the methodology and evidence behind the changes to Canada's Guidance on Alcohol and Health
- Learn how alcohol use contributes to health risks for various diseases, including cancer and heart disease.
- Outline the clinical implications of the guidance, including opportunities during various patient interactions for discussing alcohol consumption and related health risks.

Time to update



- ✓ Significant developments in knowledge about alcohol-related mortality and morbidity.
- ✓ Evolving research on alcohol and social harms.
- ✓ Other countries had recently updated their LRDGs.

Update the LRDGs to help people make informed decisions about alcohol use

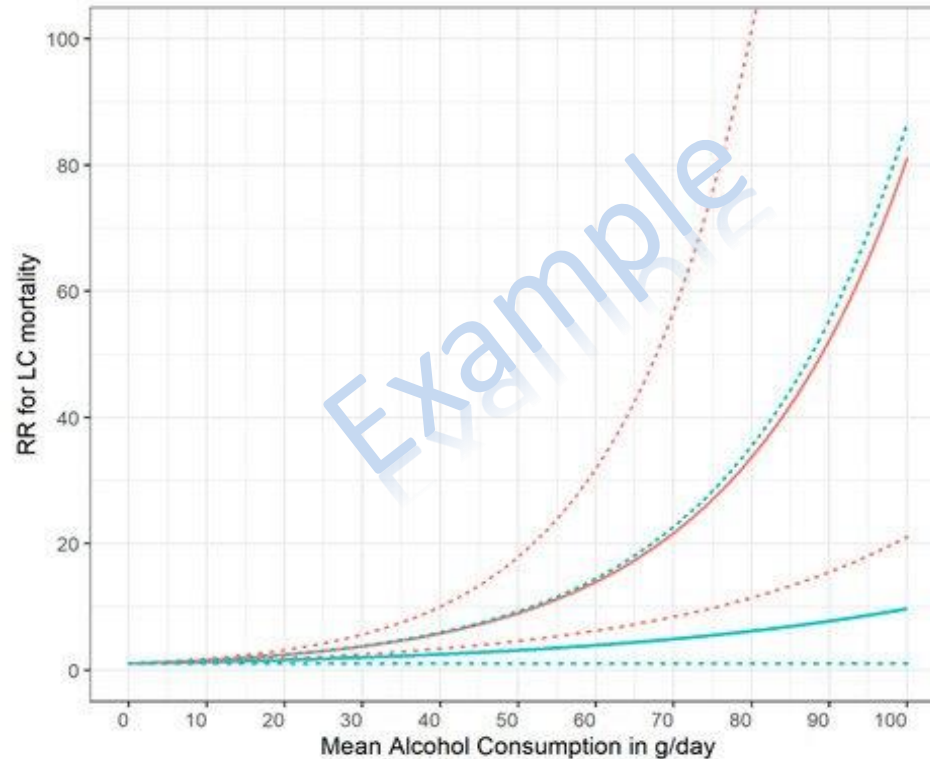


The construction of experts' recommendations

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?



Evidence Review: Effects of Alcohol on Health

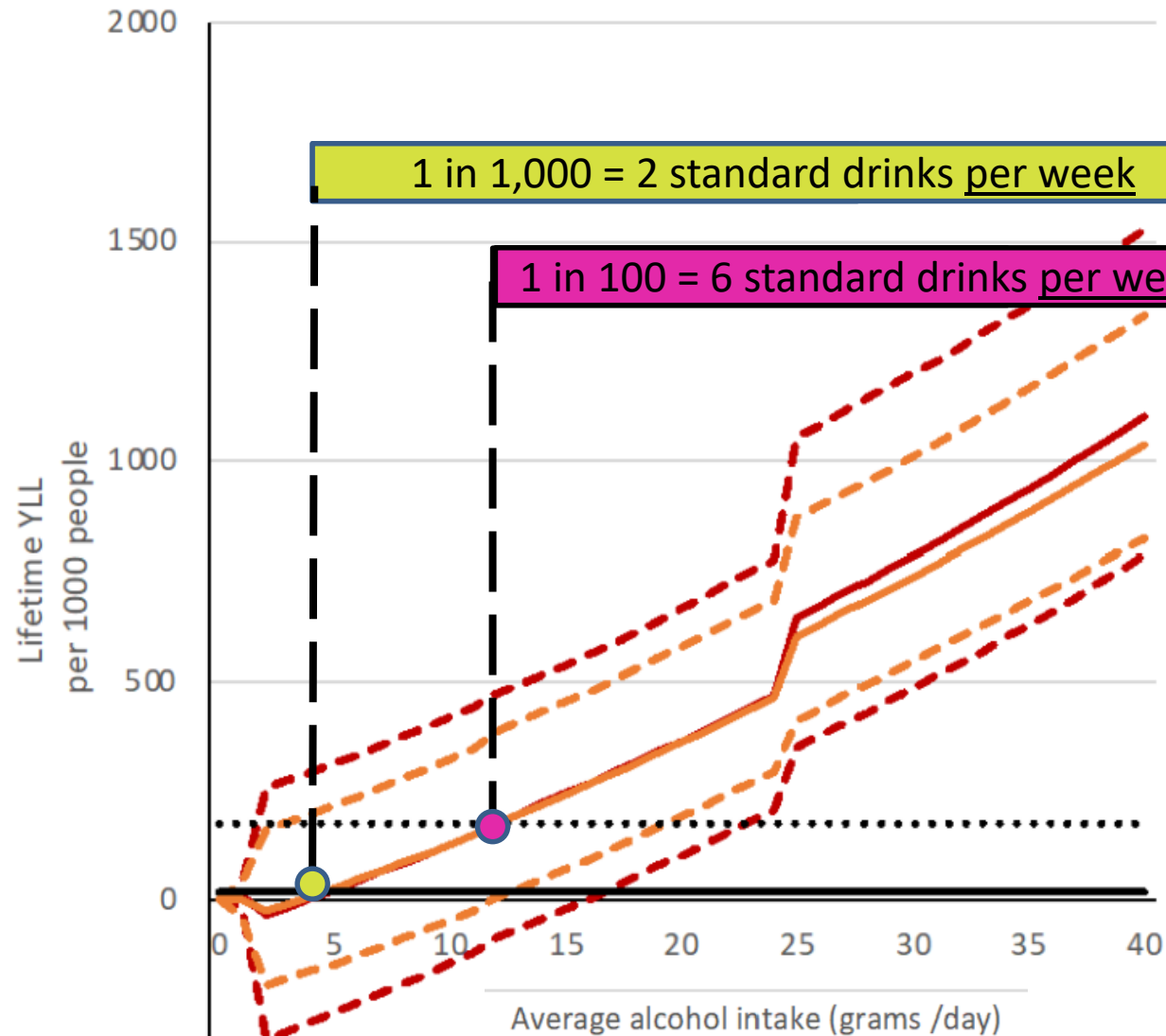
- 2000 – 2017
- Australia’s results of systematic searches on the impacts of alcohol use

2017 – 2021
5,915 systematic reviews were retrieved

Tools:
AGREE II
AMSTAR 2
GRADE

239 systematic reviews were screened for full-text eligibility

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



Reviews on 4 Key Topics

Alcohol & Women

Per Occasion Drinking

Alcohol & Violence

Alcohol & Mental Health

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.



Experts' Recommendations

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.



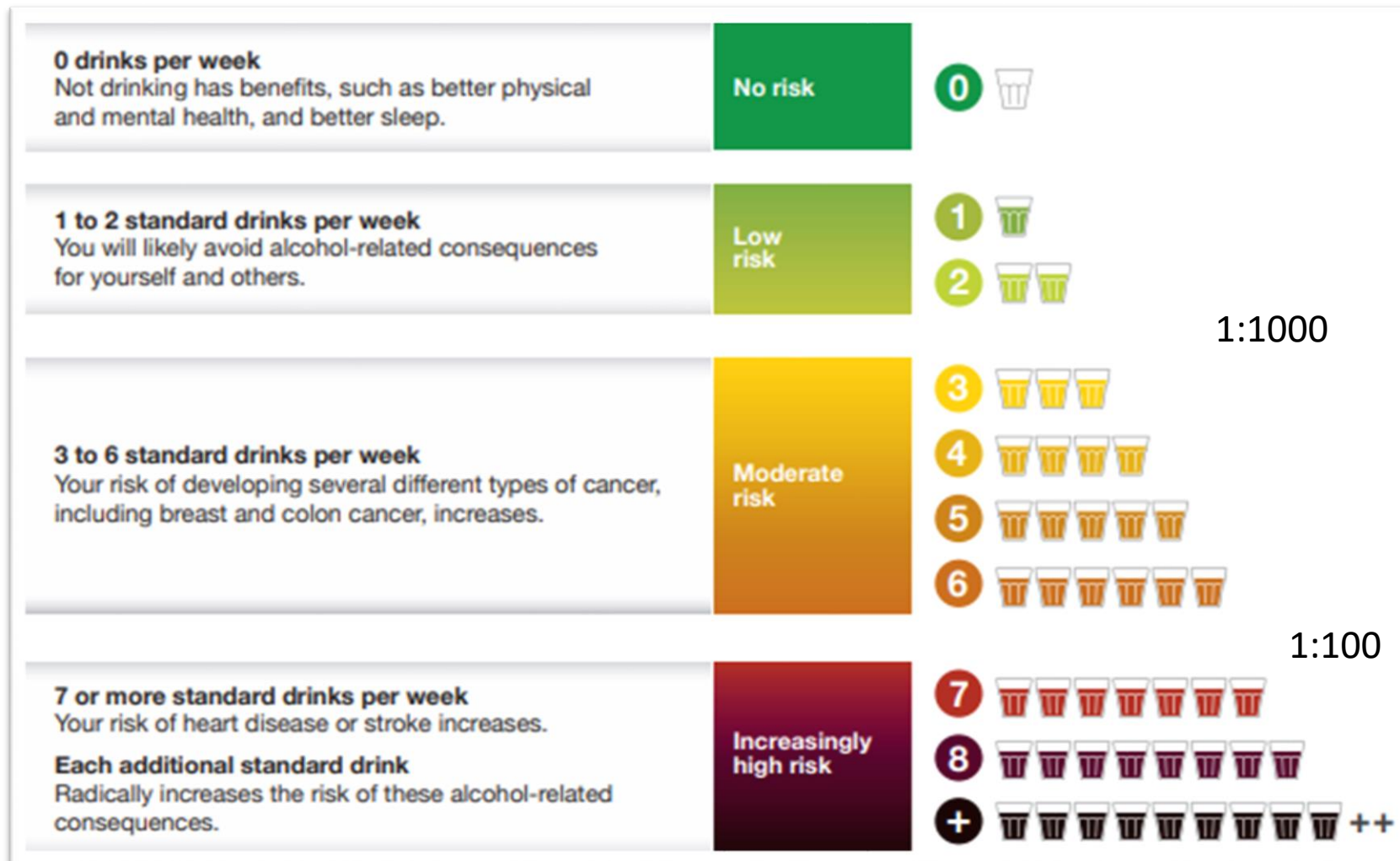
Canada's Guidance on Alcohol and Health



Recommendation

To reduce the risk of harm from alcohol,
it is recommended
for people living in Canada
to consider reducing their alcohol use

A Continuum of risk



Standard Drink & Alcohol Literacy

Standard drink

A standard drink is a measure of how much pure alcohol you are drinking. It varies based on the concentration of alcohol in a beverage.

In Canada, a standard drink is 17.05 millilitres or 13.45 grams of pure alcohol. This is the equivalent of:

- a bottle of beer (12 oz., 341 ml, 5% alcohol)
- a bottle of cider (12 oz., 341 ml, 5% alcohol)
- a glass of wine (5 oz., 142 ml, 12% alcohol)
- a shot glass of spirits (1.5 oz., 43 ml, 40% alcohol)



Beer

341 ml (12 oz.)
5% alcohol content



Cider/cooling

341 ml (12 oz.)
5% alcohol content



Wine

142 ml (5 oz.)
12% alcohol content



Distilled alcohol

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

Per occasion drinking

Consuming more than 2 drinks in one occasion is associated with an increased risk of harms to self and others, including injuries and violence.

Reproductive Health

When pregnant or trying to get pregnant, there is no known safe amount of alcohol use.

When breastfeeding, not drinking alcohol is safest.



Sex & Gender

Above the upper limit of the moderate risk zone for alcohol consumption, the health risks increase more steeply for women than for men.

Far more injuries, violence (GV, IPV, SV) and deaths result from men's alcohol use, especially in the case of per occasion drinking.

Harm Reduction: Right to know

**Less consumption means
less risk of harm from alcohol**

Carcinogen

**Risk factor for
most
cardiovascular
disease**

**Injuries
Road crashes
Violence**

RIGHT TO KNOW

Implications

Cost-Effective Policies

**Standard
Drink
Labelling**

**Health
Warnings**

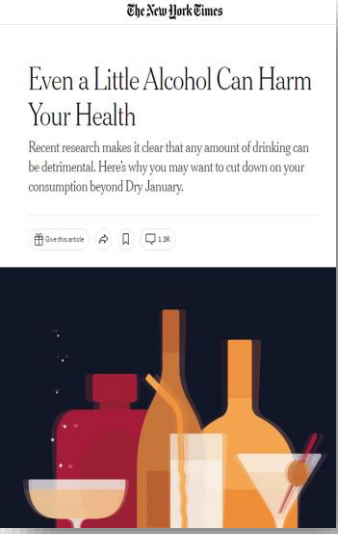
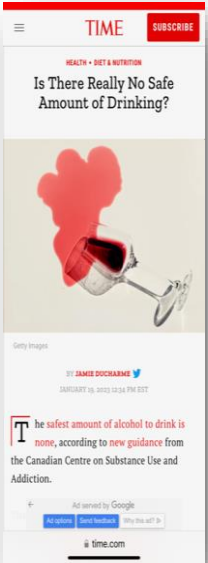
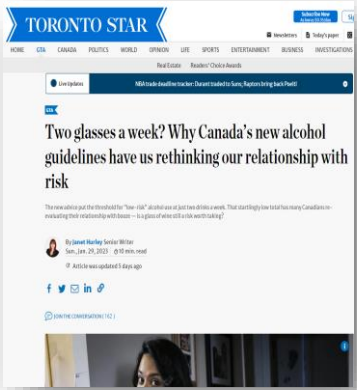
**Guidance on
Alcohol and
Health
Labelling**

“Cette bouteille contient 5 verres standards de 142 ml; pour réduire les risques de cancers et de maladies cardiaques, il est recommandé de ne pas boire plus de 2 verres hebdomadairement” Patrick Lagacé, La Presse.



Post January 17th

Media Coverage



Number of articles: 2532

Potential reach: 5.9 billion

Knowledge Transfer

Dissemination

Exchanges and
expert advice

Training &
Tools

Collaborative
efforts

Clinical Implications

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.

Clinical Implications

Increased risk for females - Example

	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
Heart disease	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%
	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%
	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%
	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%
	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%
Cancer	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%
	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%
	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%
	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%
	Oral 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%
	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%

Clinical Implications

Increased risk for males - Example

	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
Heart disease	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%
	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%
	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%
	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%
	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%
	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%
	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%
Cancer	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%
	Liver cancer	12.2	10.3	15.5%	32.9%	52.8%	75.7%	102.0%	132.3%	167.1%	207.1%	253.2%	306.1%
	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%
	Oral 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%

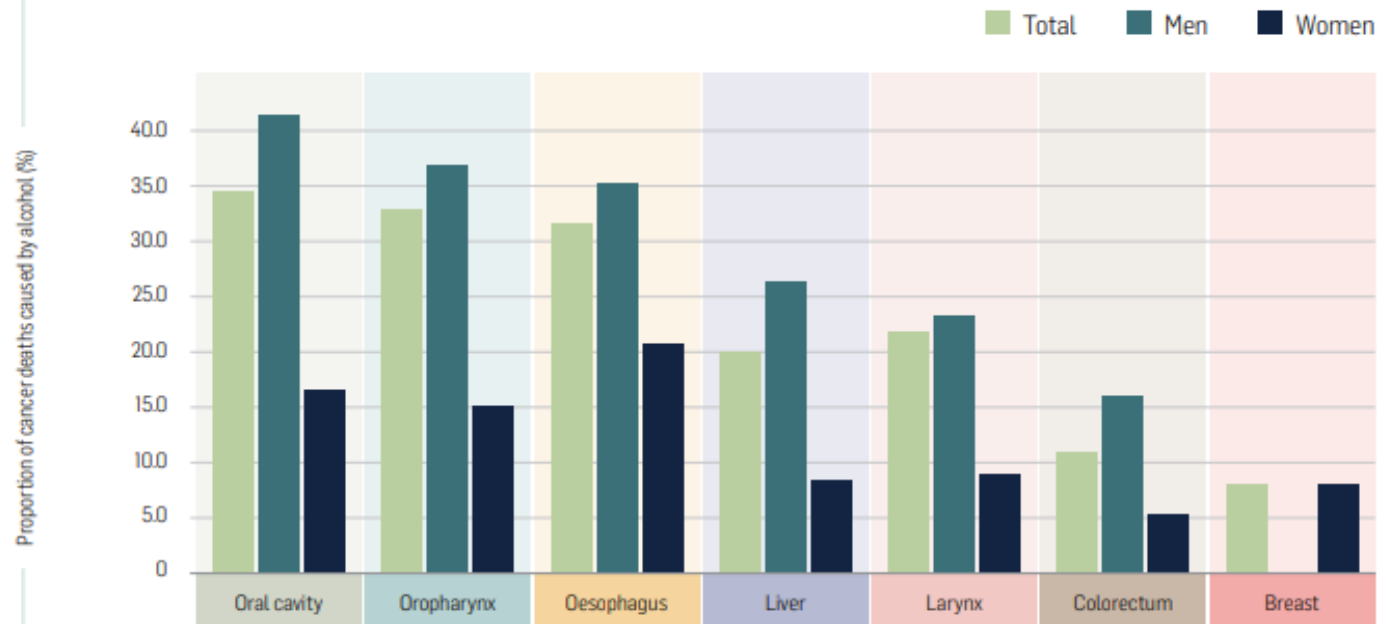
Criteria for Cancer Causation



- 1) *Epidemiological data establishes association*
- 2) *Animal models reproduce the mechanism*
- 3) *Cellular impact demonstrates mechanism*

Alcohol Attributable Cancer Deaths

Fig.2. Proportion of cancer deaths, per cancer type, that are attributable to alcohol (alcohol-attributable fractions), by sex, 2018^a



Percentages

<i>Oral</i>	34
<i>Oropharynx</i>	33
<i>Esophagus</i>	32
<i>Liver</i>	20
<i>Larynx</i>	22
<i>Colorectal</i>	11
<i>Breast</i>	7

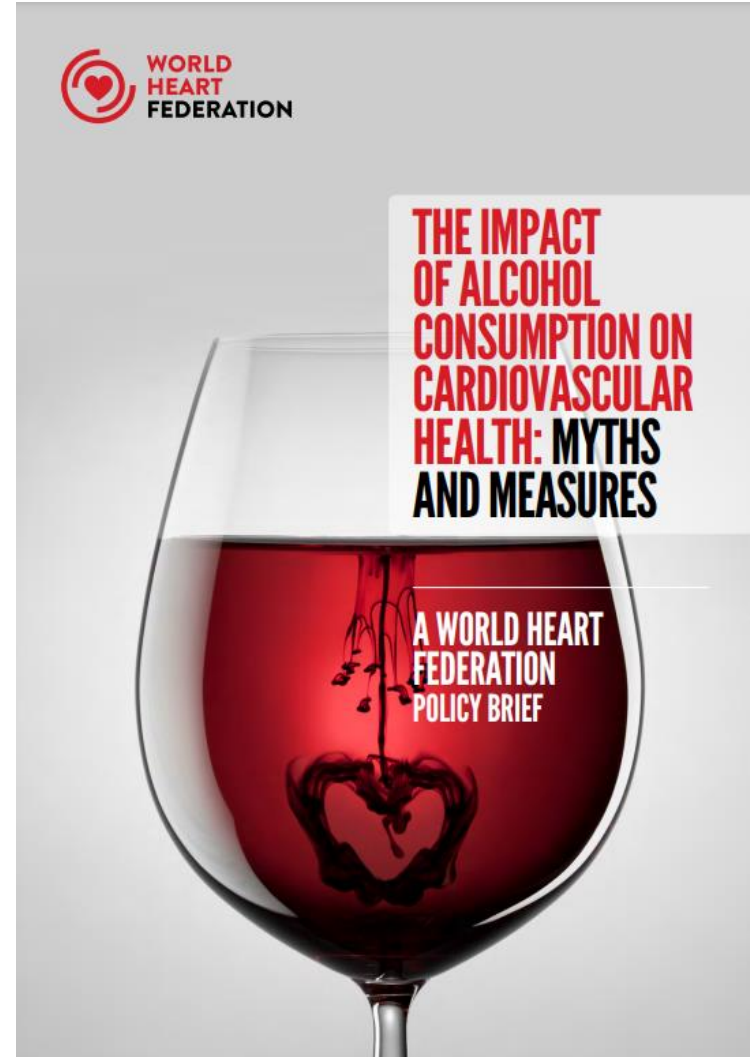
^a Displayed are alcohol-attributable fractions (AAFs) for the entire WHO European Region. The AAFs denote the proportion of deaths that are caused by alcohol (i.e. the proportion that would disappear if alcohol consumption were removed). Data were obtained from the International Agency for Research on Cancer.

World Heart Federation Policy Brief (2021)

“Contrary to popular opinion, alcohol is not good for the heart.”

“Research in the latest decade has led to major reversals in the perception of alcohol in relation to health in general and cardiovascular disease in particular.”

“Risks due to alcohol consumption increase for all major cardiovascular diseases, including hypertensive heart disease, cardiomyopathy, atrial fibrillation and flutter, and stroke.”



Harm Reduction Strategies

- 1. Keep track of how many drinks you have per week.*
- 2. Decide on a weekly drinking target, and stick to your limit.*
- 3. Eat before and while you are drinking.*
- 4. Choose drinks with a lower percentage of alcohol*
- 5. Drink slowly, in small sips.*
- 6. Always have water on hand.*
- 7. Alternate between alcohol and non-alcoholic beverages.*
- 8. Explore alcohol-free products.*

Primary Health Care Alcohol Process Mapping: From SBIRT to SIPR(3)

SCREENING

INTERVENTION

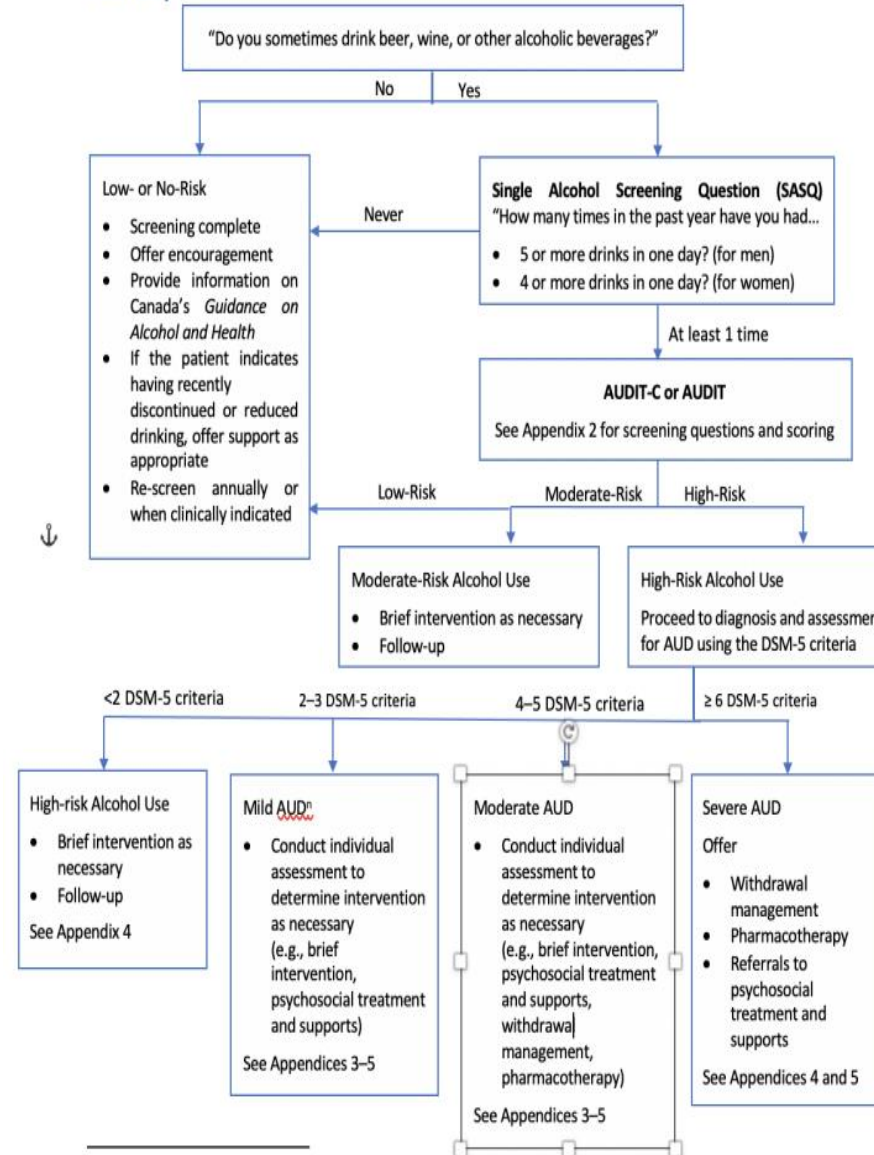
PHARMACOTHERAPY

REFERRAL TO COMMUNITY RESOURCES

REASSESS

RECOVERY SUPPORT

Appendix 1: Screening, Brief Intervention, and Referral to Treatment Pathway



ⁿ Previously diagnosed as alcohol abuse in the DSM-IV.

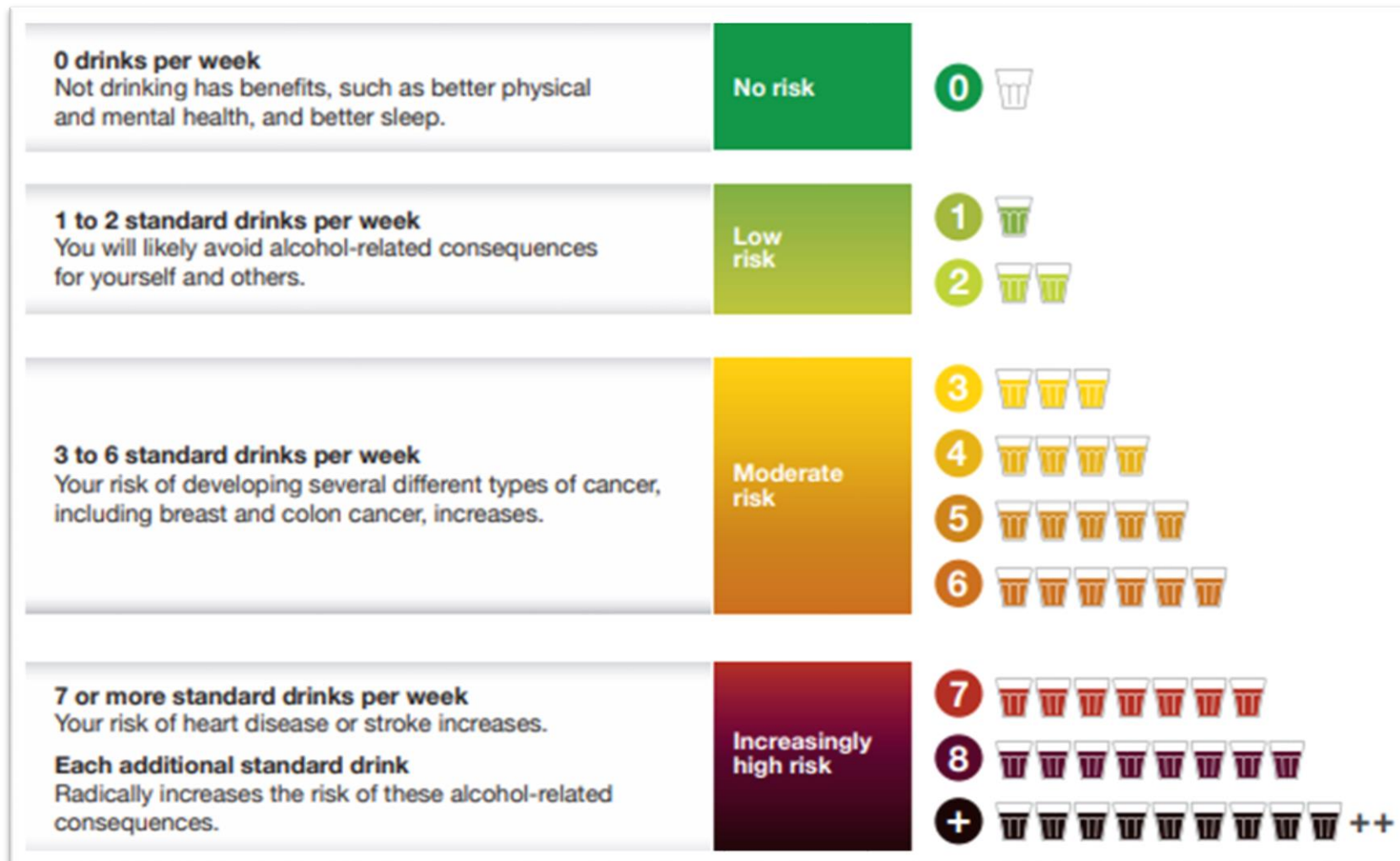
Clinical Implementation

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?

A Continuum of Risk: Less is Better



QUESTIONS?



Thank you!

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