

Alcohol in Community: Cost and Impact Overview

Presentation to Pacific AIDS Network

adam sherk, phd



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Alcohol: A Brief History



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A Brief History of Alcohol

- Alcohol has been consumed throughout human history for its mind-altering and psychoactive properties
- In Canada, the temperance movement led to a national referendum (51% v. 49%)



"The people's will": Canadians and the 1898 referendum on alcohol prohibition

Benoit Dostie*, Ruth Dupré

Institute of Applied Economics, HEC Montreal, Montreal, Canada

ARTICLE INFO

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ABSTRACT

The 1920s American alcohol prohibition is notorious but not unique. Quite a few countries went through a vigorous struggle. But it is in Canada in 1898 that the very first national referendum on prohibition in the world took place. In this article, we focus on this rare and neglected event in Canadian history, in which the government came close but finally did not impose prohibition. In our empirical analysis, we use census district-level data to investigate how the shares of Yes, No and Abstentions vary according to four sets of factors: religious, demographic, social and economic. Our results confirm the literature on temperance and prohibition with religion [Evangelicals against Catholics and Anglicans] as the key explanatory variable, followed by the heterogeneity of the population, measured by the proportion of foreign-born. Urbanization has also the expected (although small) impact. Results for wealth are mixed. The economic interest rationale is not confirmed but that can be explained by the historical context.

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A Brief History of Alcohol

- In 1918, a federal wartime measure banned the manufacture, sale and import of alcohol (above 2.5%)
- By 1919, all provinces had passed prohibition laws, though these were often quickly repealed
- PEI was the last province to remove prohibition in 1948!



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A Brief History of Alcohol

- Prohibition was replaced with strong public retail monopolies and public control over wholesale and distribution
- Over time, the strength of these policies have been eroded by these policies, through privatization

Addiction

RESEARCH REPORT

doi:10.1111/j.1360-0443.2009.02658.x



Changes in per capita alcohol sales during the partial privatization of British Columbia's retail alcohol monopoly 2003–2008: a multi-level local area analysis

Tim Stockwell^{1,2}, Jinhui Zhao¹, Scott Macdonald^{1,3}, Basia Pakula¹, Paul Gruenewald⁴ & Harold Holder⁴

Centre for Addictions Research of British Columbia, University of Victoria, BC, Canada;¹ Department of Psychology, University of Victoria, BC, Canada;² School of Health Information Sciences, University of Victoria, BC, Canada;³ and Prevention Research Center, Pacific Institute for Research and Evaluation, Berkeley, CA, USA⁴

ABSTRACT

Aim To investigate the independent effects on liquor sales of an increase in (a) the density of liquor outlets and (b) the proportion of liquor stores in private rather than government ownership in British Columbia between 2003/4 and 2007/8. **Design** The British Columbia Liquor Distribution Branch provided data on litres of ethanol sold through different types of outlets in 89 local health areas of the province by beverage type. Multi-level regression models were used to examine the relationship between per capita alcohol sales and outlet densities for different types of liquor outlet after adjusting for potential confounding social, economic and demographic factors as well as spatial and temporal autocorrelation. **Setting** Liquor outlets in 89 local health areas of British Columbia, Canada. **Findings** The number of private stores per 10 000 residents was associated significantly and positively with per capita sales of ethanol in beer, coolers, spirits and wine, while the reverse held for government liquor stores. Significant positive effects were also identified for the number of bars and restaurants per head of population. The percentage of liquor stores in private versus government ownership was also associated significantly with per capita alcohol sales when controlling for density of liquor stores and of on-premise outlets ($P < 0.01$). **Conclusion** The trend towards privatisation of liquor outlets between 2003/04 and 2007/08 in British Columbia has contributed to increased per capita sales of alcohol and hence possibly also to increased alcohol-related harm.

ption and related harm
and number of stores

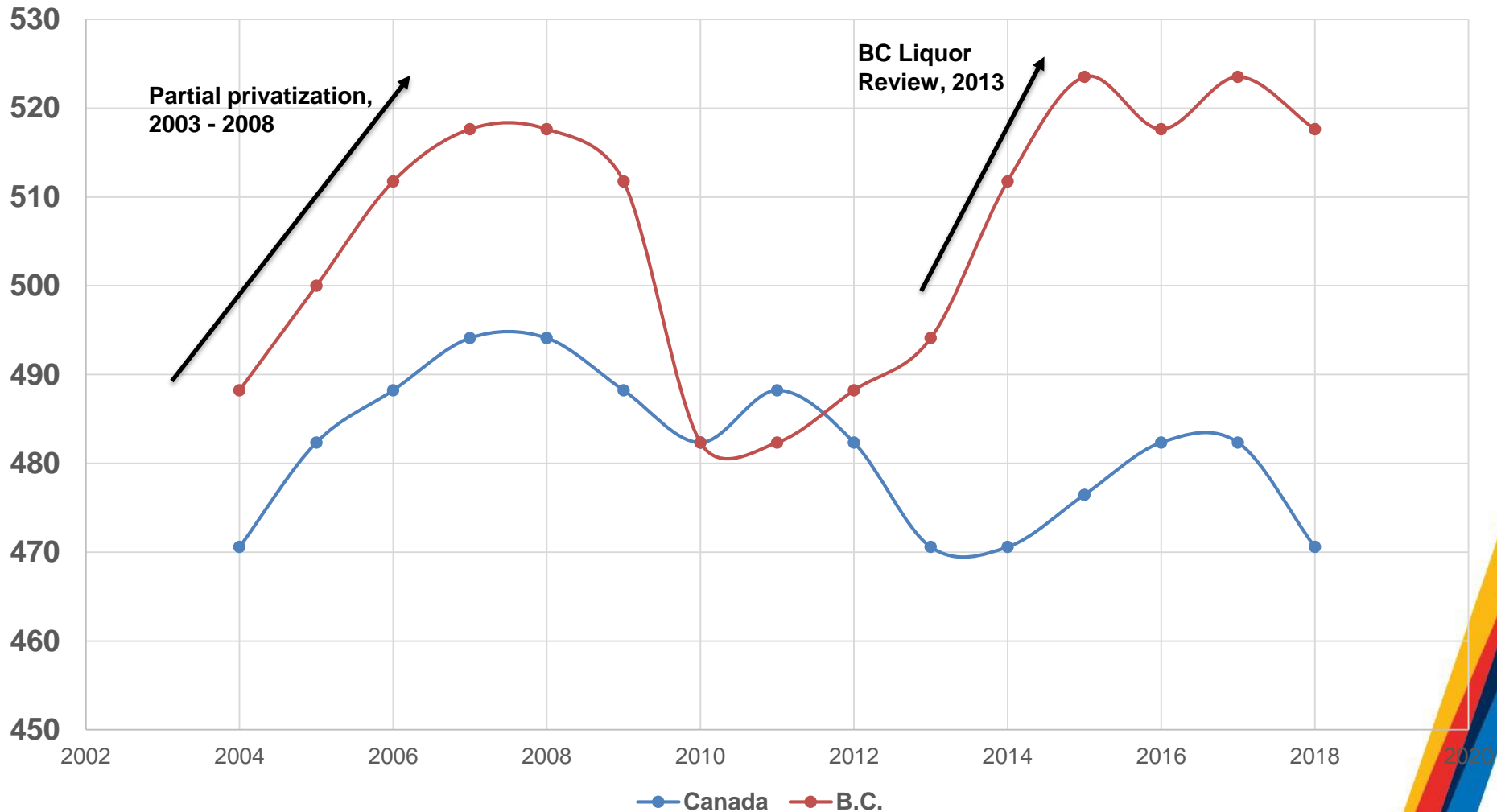


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Alcohol use per adult, Canada and BC, 2004 to 2018 (Drinks per year)



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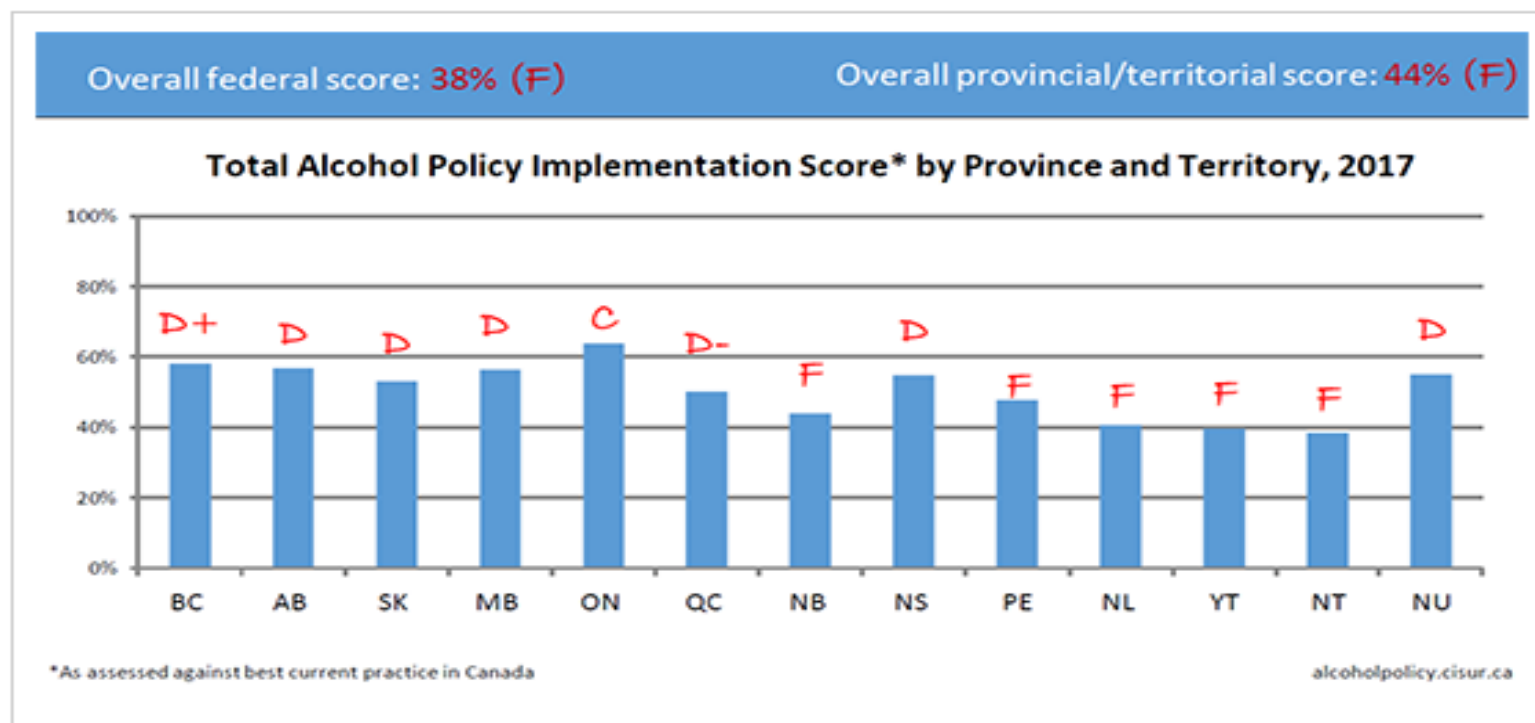
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Source: StatsCan Table 10-10-0010-01

But, also a shout out to B.C.!

Canadian Alcohol Policy Evaluation (CAPE)



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Source:

<https://www.uvic.ca/research/centres/cisur/projects/active/projects/canadian-alcohol-policy-evaluation.php>

A Brief History of Alcohol: Takeaways

- In 1898, more than half of Canadian supported prohibition, while now more than 75% of Canadian adults use alcohol
- Societal-level alcohol policies have been generally weakened since around the 1960s
- In BC, there have been two large increases in drinking in the past two decades, both occurring after policy liberalizations



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Alcohol, Health and Community: An Overview



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The reach and harm of alcohol

Alcohol:

- Is the most commonly used psychoactive drug in Canada: almost 80% of adults are users
- Causes 43 different health conditions: these harms are not well understood by drinkers
- Is a leading behavioural risk factor for cancer, along with smoking, diet and physical inactivity
- Is this world's 7th leading cause of death, and causes more than 5% of all global death and disability



Canada in global perspective



Global status report on alcohol and health 2018

78%

8.9 L
+ 39%

522



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Source: **World, Canada:** WHO Global Status
Report on Alcohol and Health

The largest community, Canada

The following is from the Canadian Substance Use Costs and Harms project:

- Collaboration of CISUR and Canadian Centre on Substance Use and Addiction (CCSA)
- National project to estimate costs and harms of substance use by province and in Canada
- Current years: 2007 to 2017
- www.csuch.ca
- Slide credit: CCSA



Substance Categories

Eight substance categories are included:



ALCOHOL



TOBACCO



CANNABIS



COCAINE



OPIOIDS



**OTHER CNS
DEPRESSANTS**



**OTHER CNS
STIMULANTS**



**ALL OTHER
PSYCHOACTIVE
DRUGS**

Cost Categories

We assessed costs across the following categories:

Healthcare Related Costs



Lost Productivity Costs



Criminal Justice



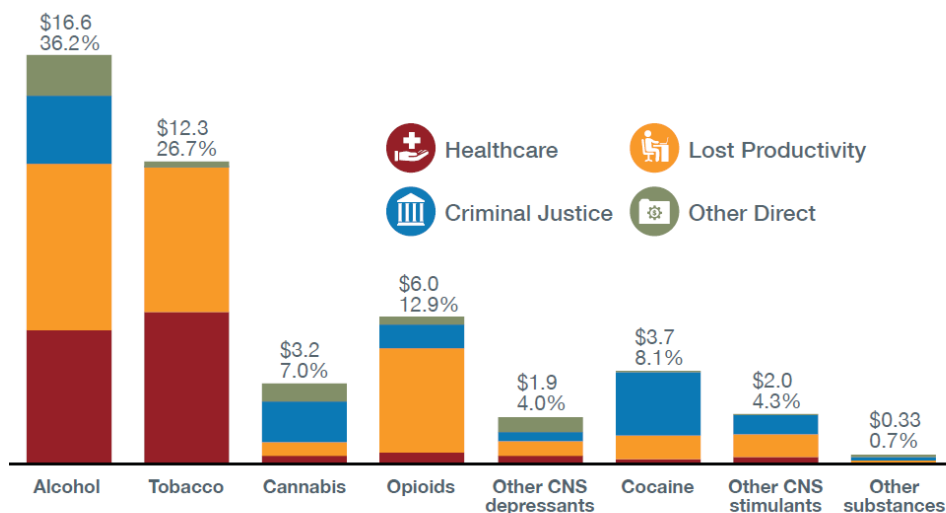
Other Direct Costs



Greatest Costs - Alcohol and Tobacco

- The overall economic cost of substance use in Canada in 2017 was estimated to be **\$46.0 billion**.
- In 2017, the legally available and most widely used psychoactive substances, alcohol and tobacco, contributed almost **63%** of these costs.

Figure 1. Overall costs (in billions) and percentage of total overall costs attributable to substance use by substance and cost type, 2017

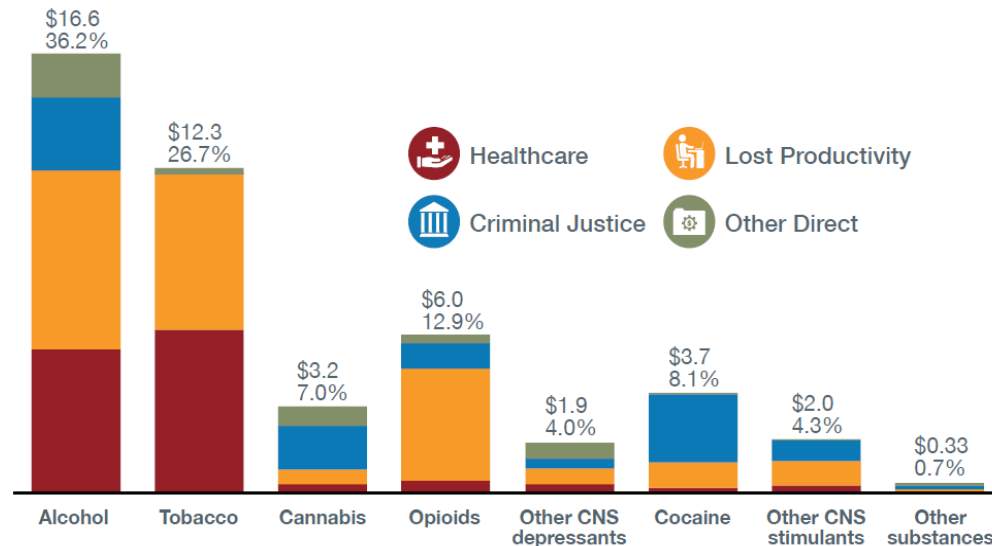


Alcohol has the greatest cost

- The cost of substance use was \$46.0 billion in 2017; alcohol and tobacco together account for 63% of these costs
- Alcohol accounts for **42%** of all SU related healthcare-related costs
- Almost **20% of violent crimes** are alcohol attributable

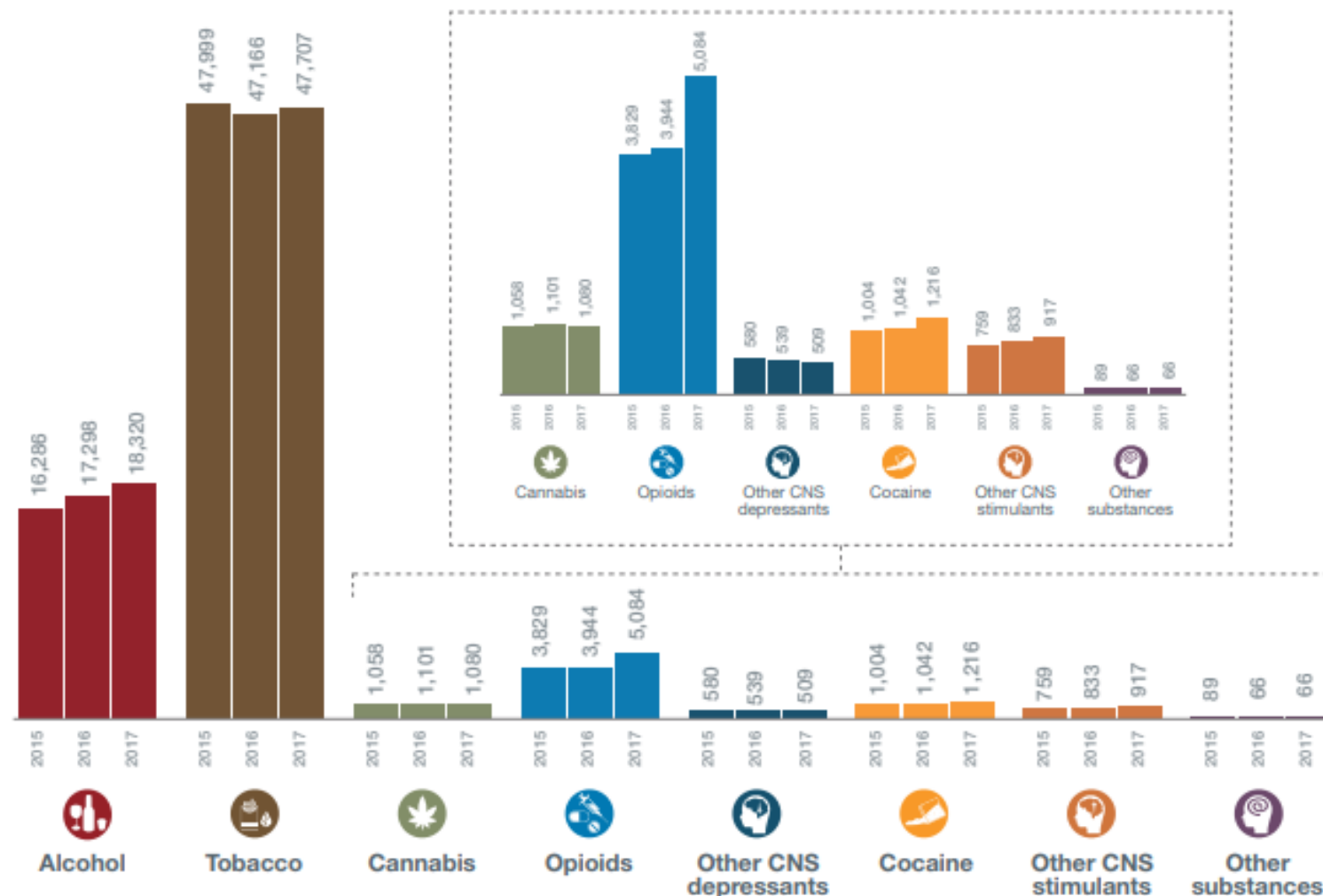


Figure 1. Overall costs (in billions) and percentage of total overall costs attributable to substance use by substance and cost type, 2017



In 2017, alcohol caused 18,320 deaths

Figure 11. Number of deaths attributable to substance use by substance, 2015–2017



Note: At the time of this report, data on premature deaths in Yukon (2017 only) were not available from Statistics Canada's Vital Statistics database.

Alcohol-caused health outcomes in Canada

In 2017, alcohol was responsible for:

- 18,320 deaths
- 105,065 overnight hospital stays
- 700,141 ED visits

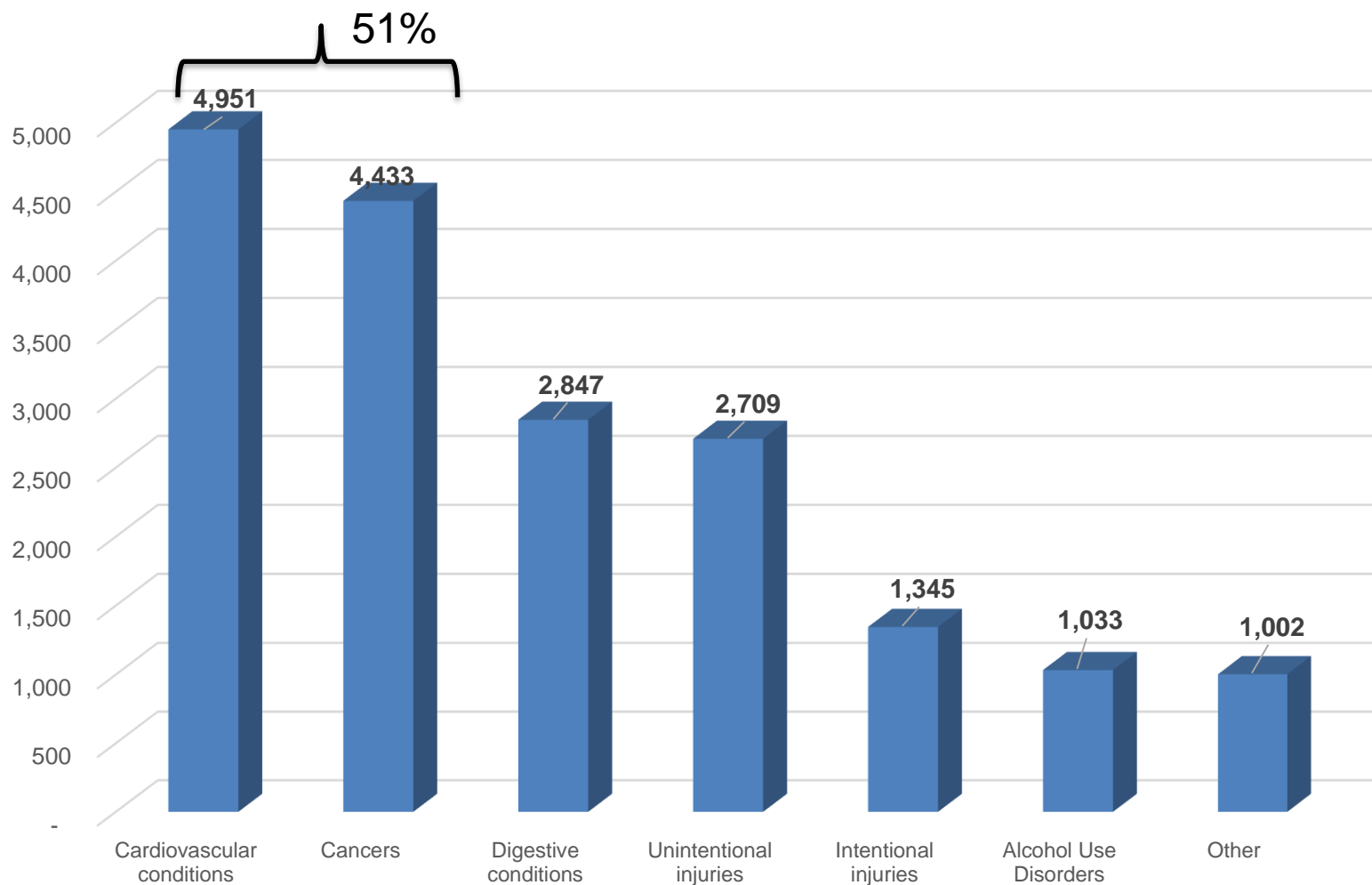


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Alcohol, leading causes of death (Total 18,320)

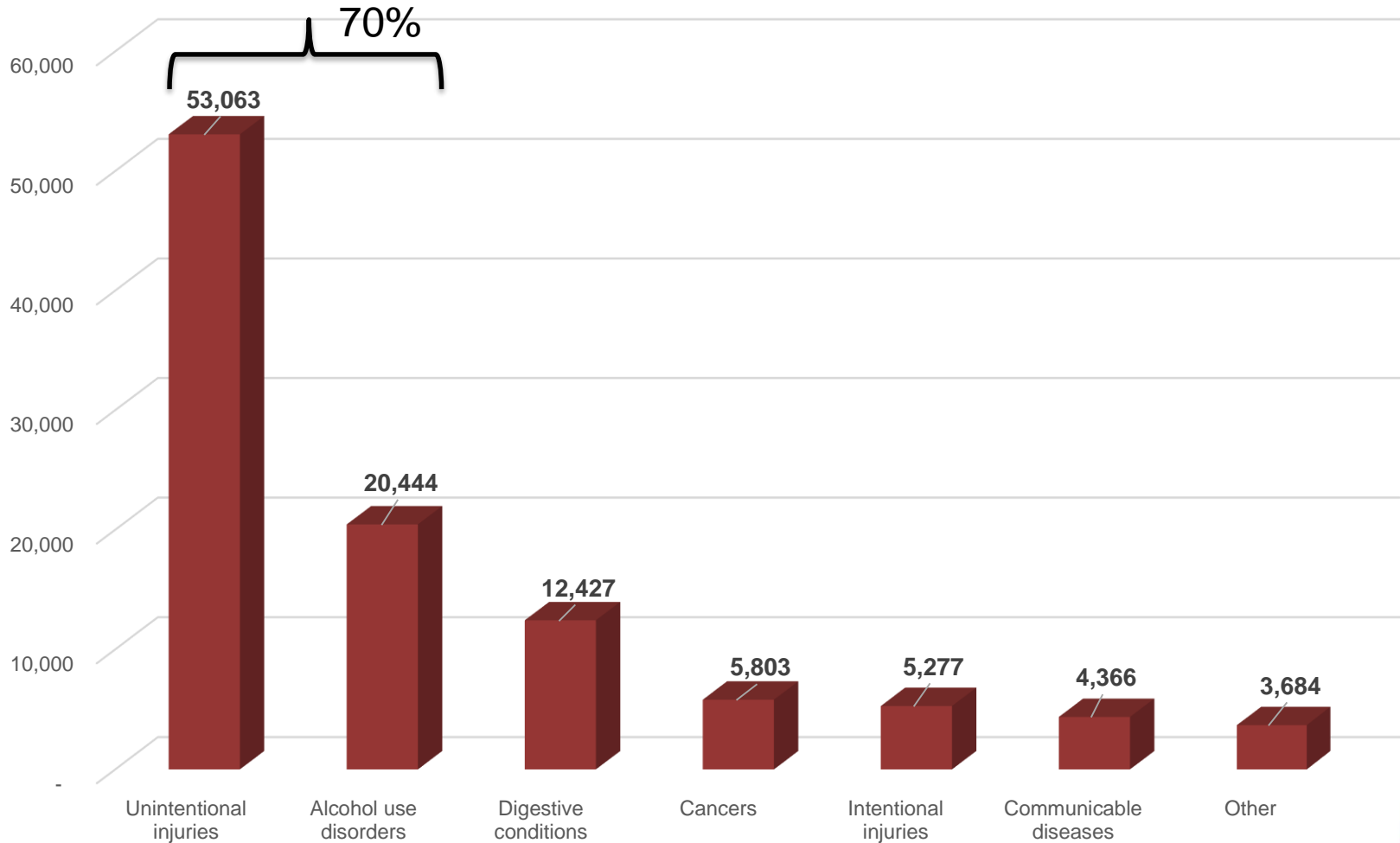


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Alcohol, leading causes of hospital stays (Total 106,000)

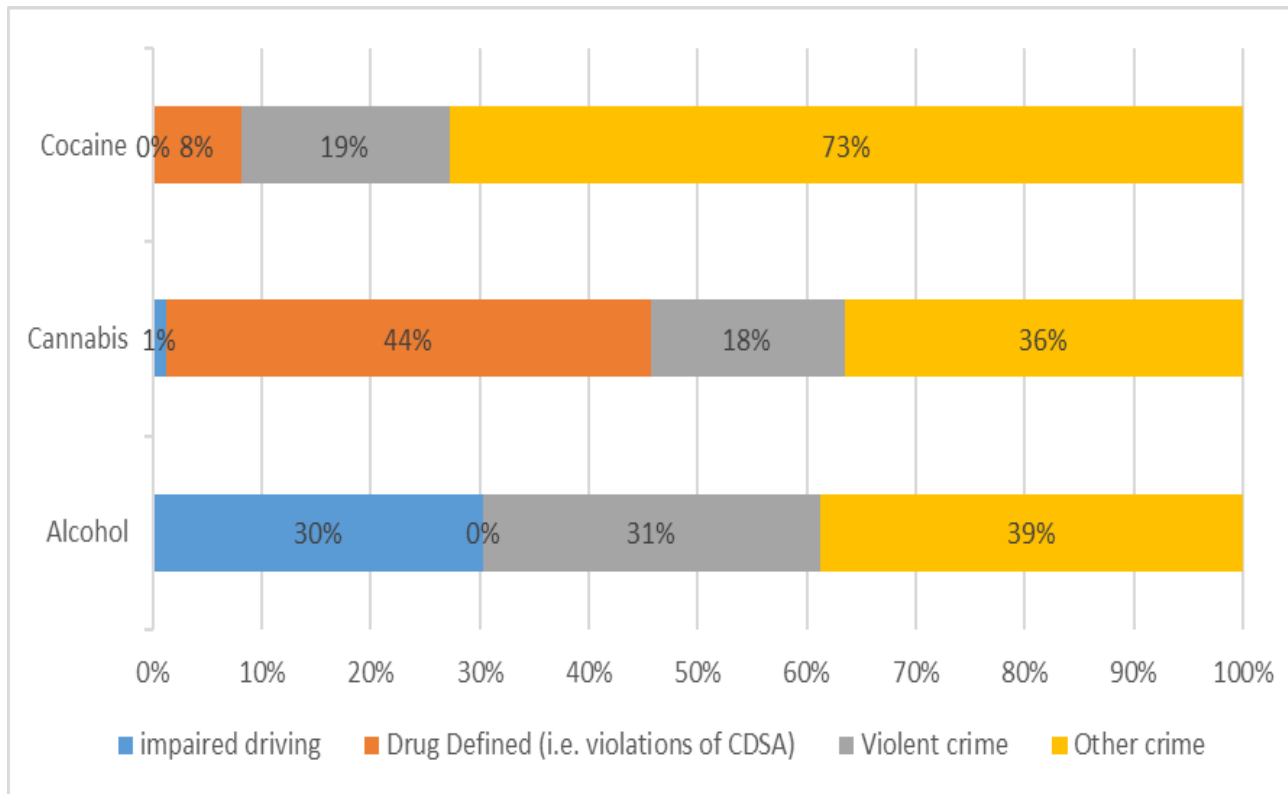


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Substance-defined crimes



COCAINE



CANNABIS



ALCOHOL

The provincial community, BC

The following is from the BC Alcohol and Other Drug (AOD) Monitoring System

- Provincial project to estimate health burden caused by substance use in BC, by province, Health Authority, HSDA, LHA
- Current years: 2007 to 2018
- Google: BCAOD CISUR



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BCAOD: online tool and maps

2019 per Capita Alcohol Consumption by HA

Litres of Absolute Alcohol*



* 1 Litre of Absolute Alcohol = 58.65 Standard Drinks

Year	Region	Drinks per year
2019	Interior	761
2019	Island	663
2019	Northern	617
2019	Vancouver Coastal	492
2019	Fraser	396

Global average: 376



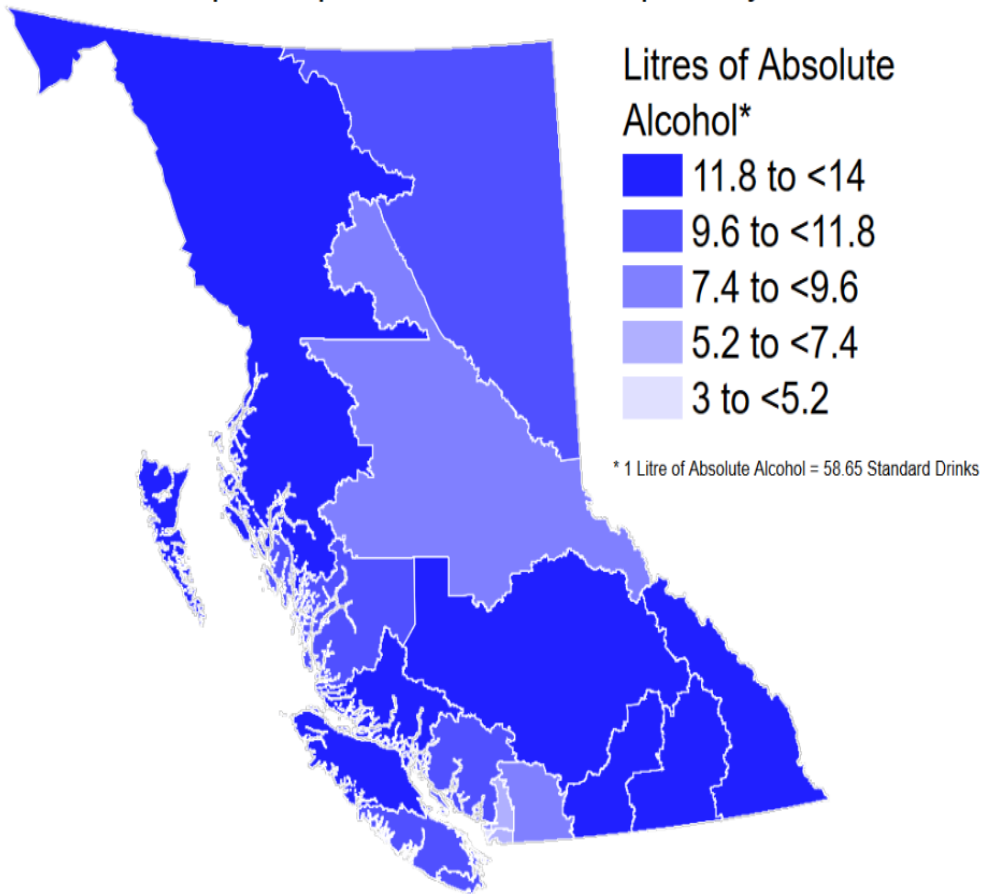
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BCAOD: online tool and maps

2019 per Capita Alcohol Consumption by HSDA



Region	Drinks per year
East Kootenay	796
Okanagan	787
Northwest	741
North Vancouver Island	727
Kootenay Boundary	711
Thompson Cariboo Shuswap	706
Central Vancouver Island	673
North Shore/Coast Garibaldi	646
Northeast	644
South Vancouver Island	629
Northern Interior	537
Fraser East	504
Vancouver	496
Fraser South	385
Fraser North	354
Richmond	253

Global average: 376



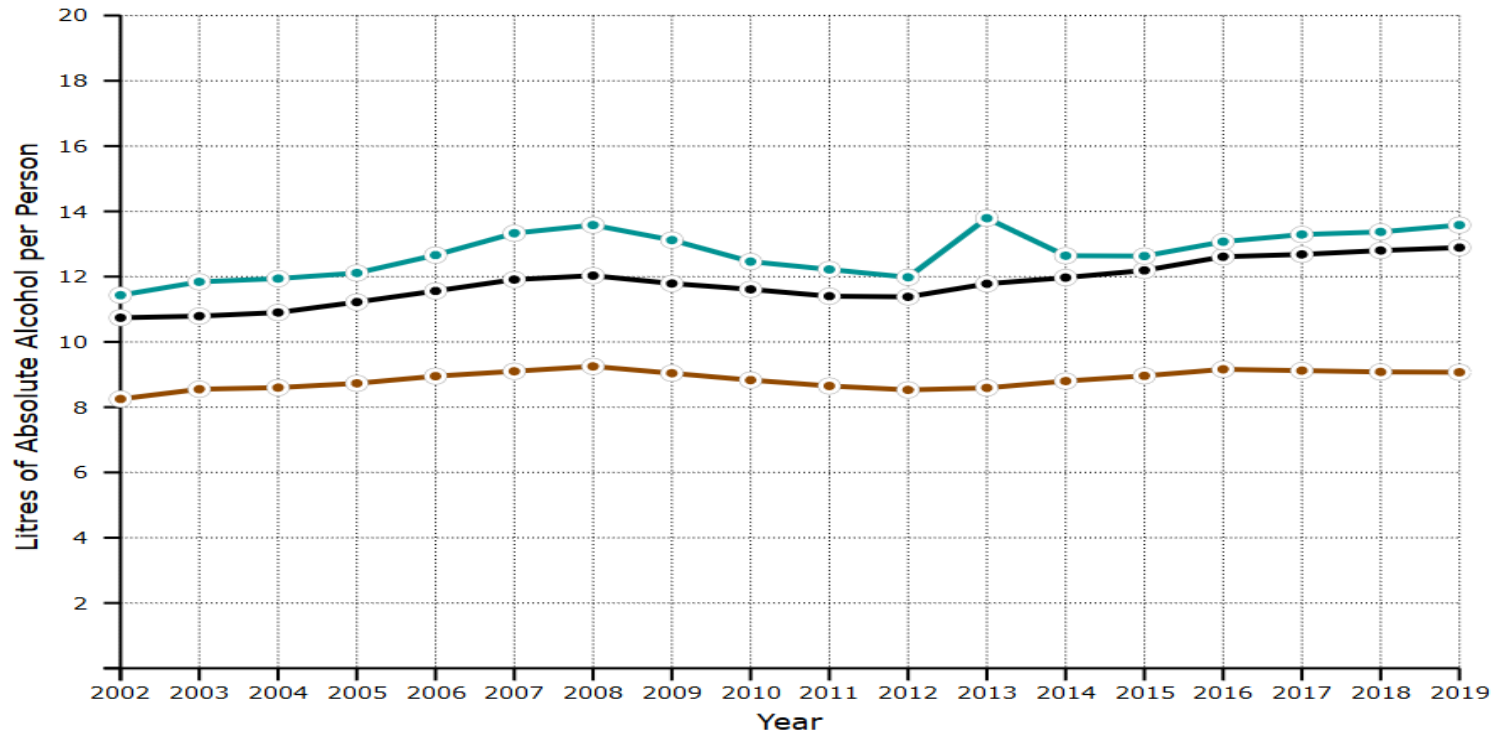
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East Kootenay, 2002 to 2019

Per Capita Alcohol Consumption vs years (2002-2019)



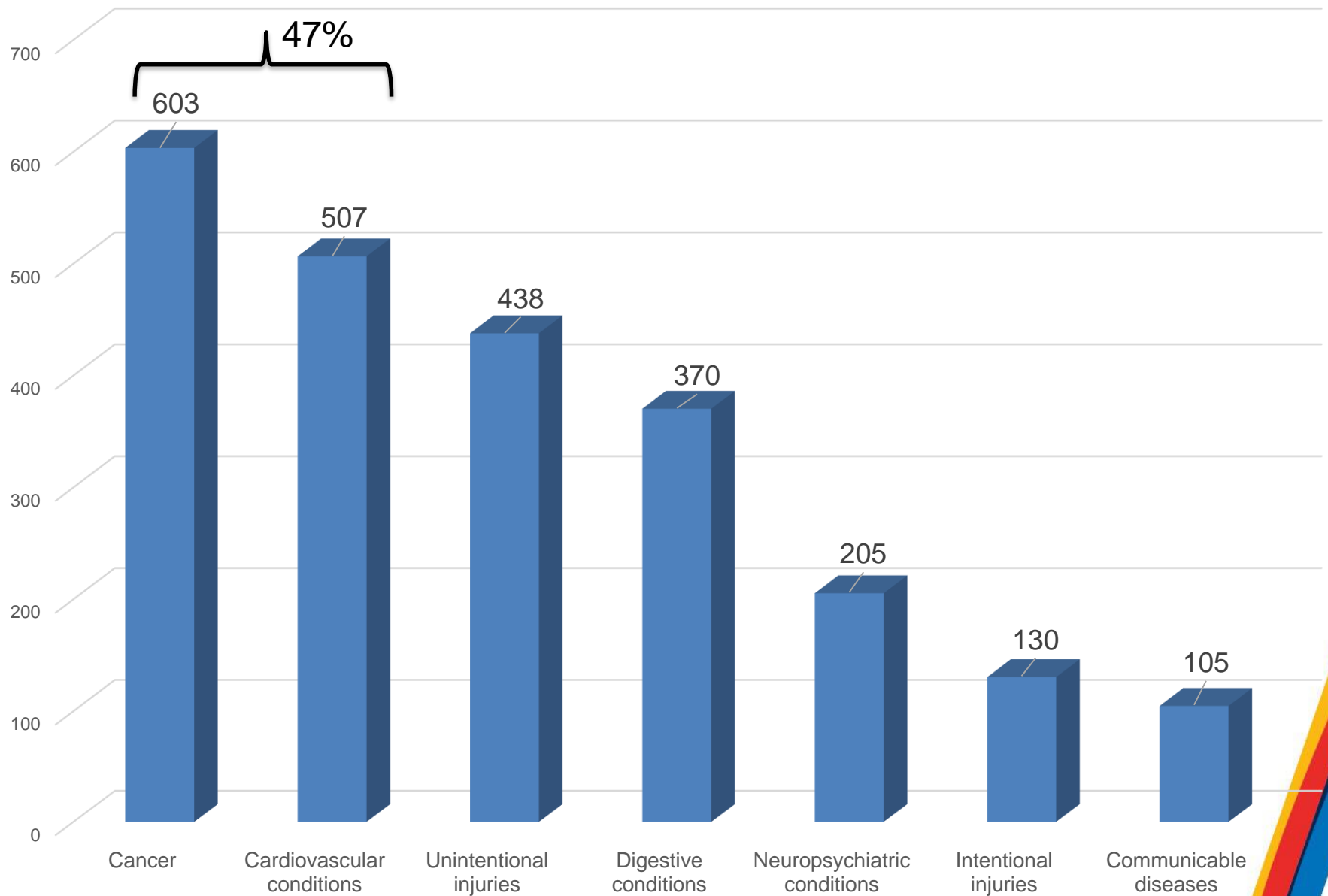
— Region: Interior
— Region: BC
— Region: East Kootenay

Source: Canadian Institute of Substance Use Research, University of Victoria.

Note: The figures contained in the graphs and tables are derived using record-level data, estimates, and imputed data.

Note: 1 Litre of absolute Alcohol = 58.65 Standard Drinks.

BCAOD: Alcohol-caused deaths, BC 2017, Total of all: 2,380



Alcohol and Health: Takeaways

- Canadians drink a lot and people in BC drink even more
- Alcohol causes substantial and growing health harms, in BC and in Canada
- Many alcohol users are largely unaware of the greatest risks, especially long-term risk
- There are national and provincial tools to help figure this out



A Social View of Alcohol Use



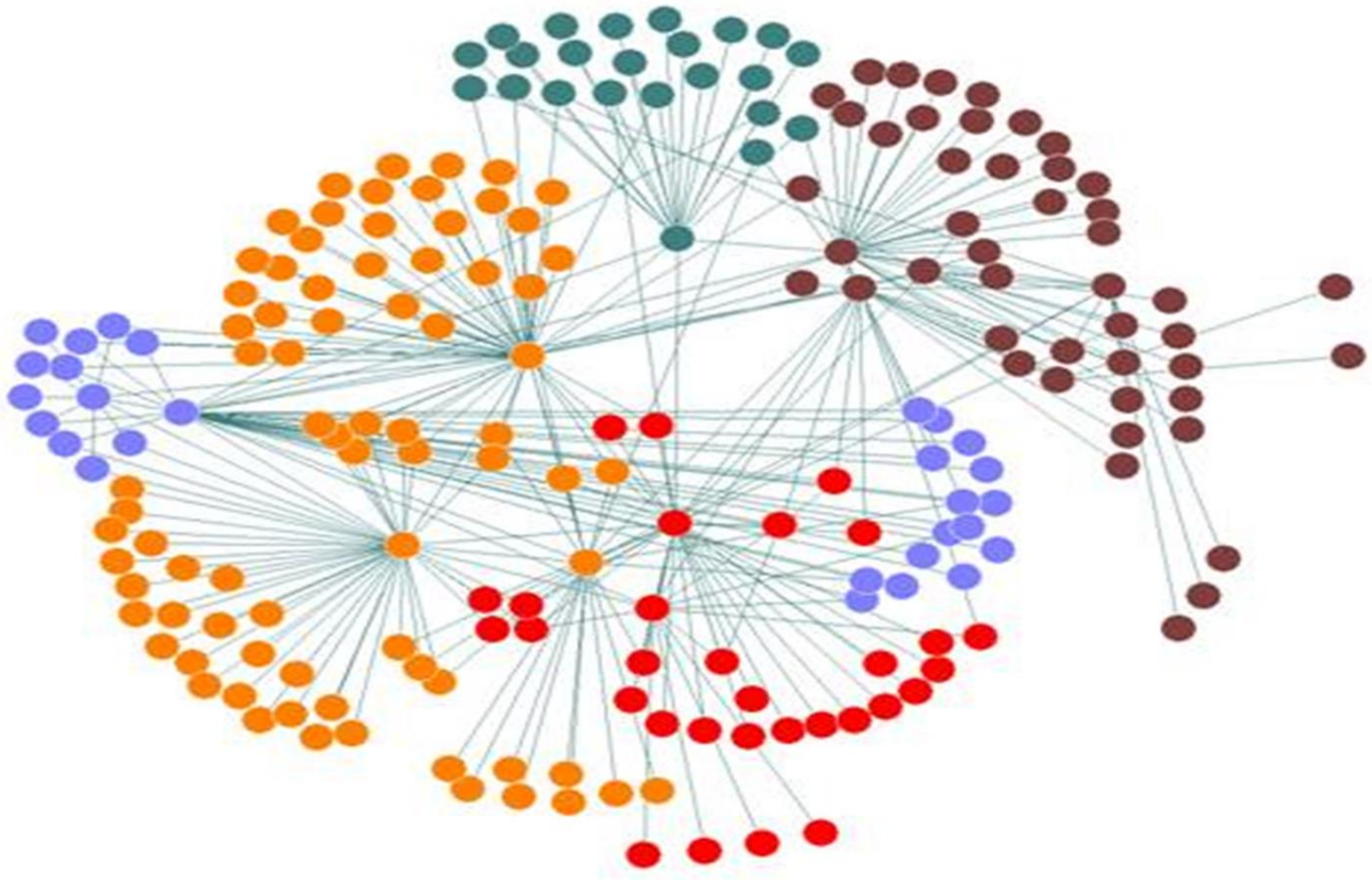
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Social Network Theory



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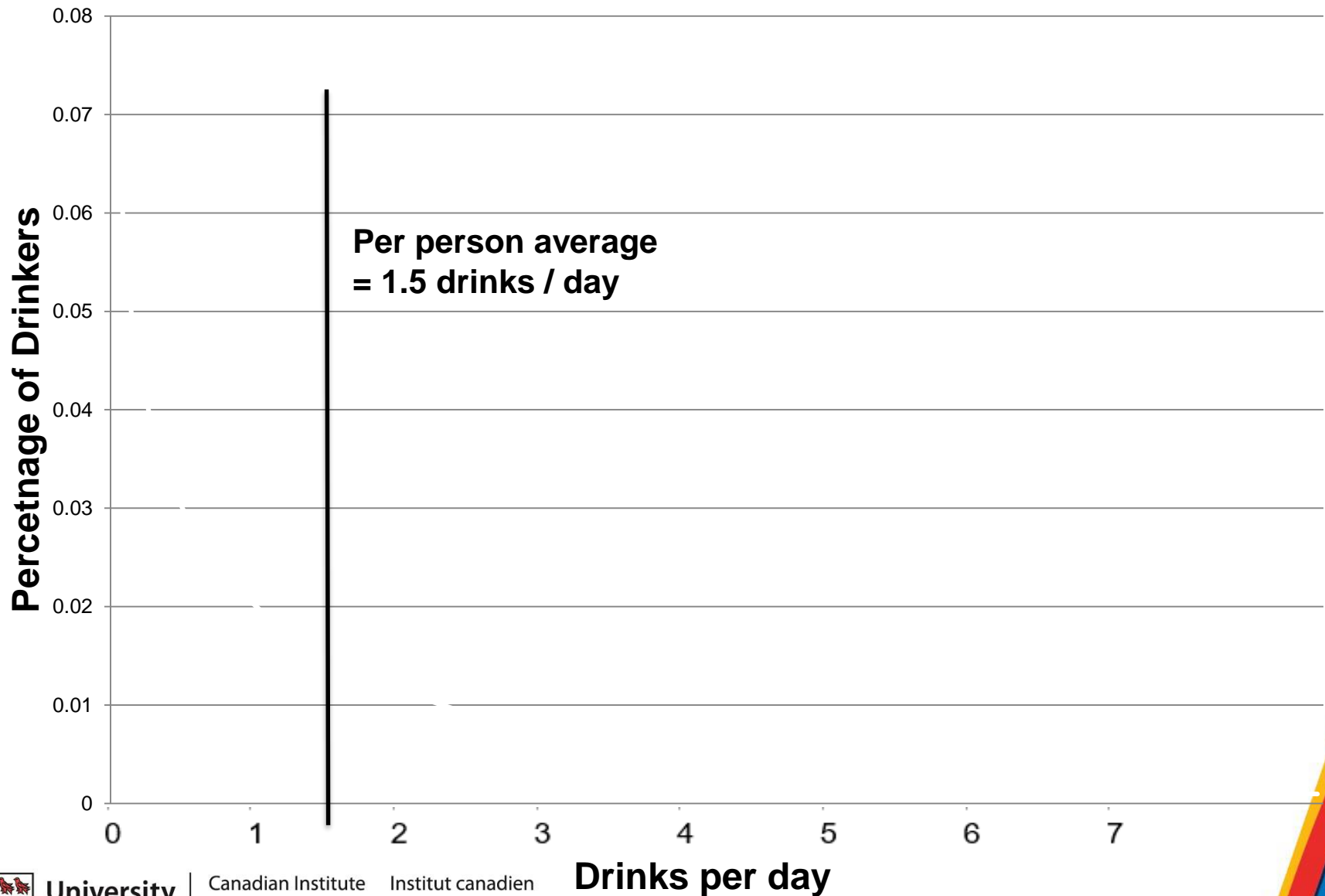
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Are there only “moderate drinkers” and “alcoholics”?

- Many members of the public and, until the 1960s, researchers conceived of only these two types of drinkers
- Not true, drinkers exist on a spectrum of increasing risk
- The shape of this spectrum is predicted by *per person* alcohol consumption



What does this look like?



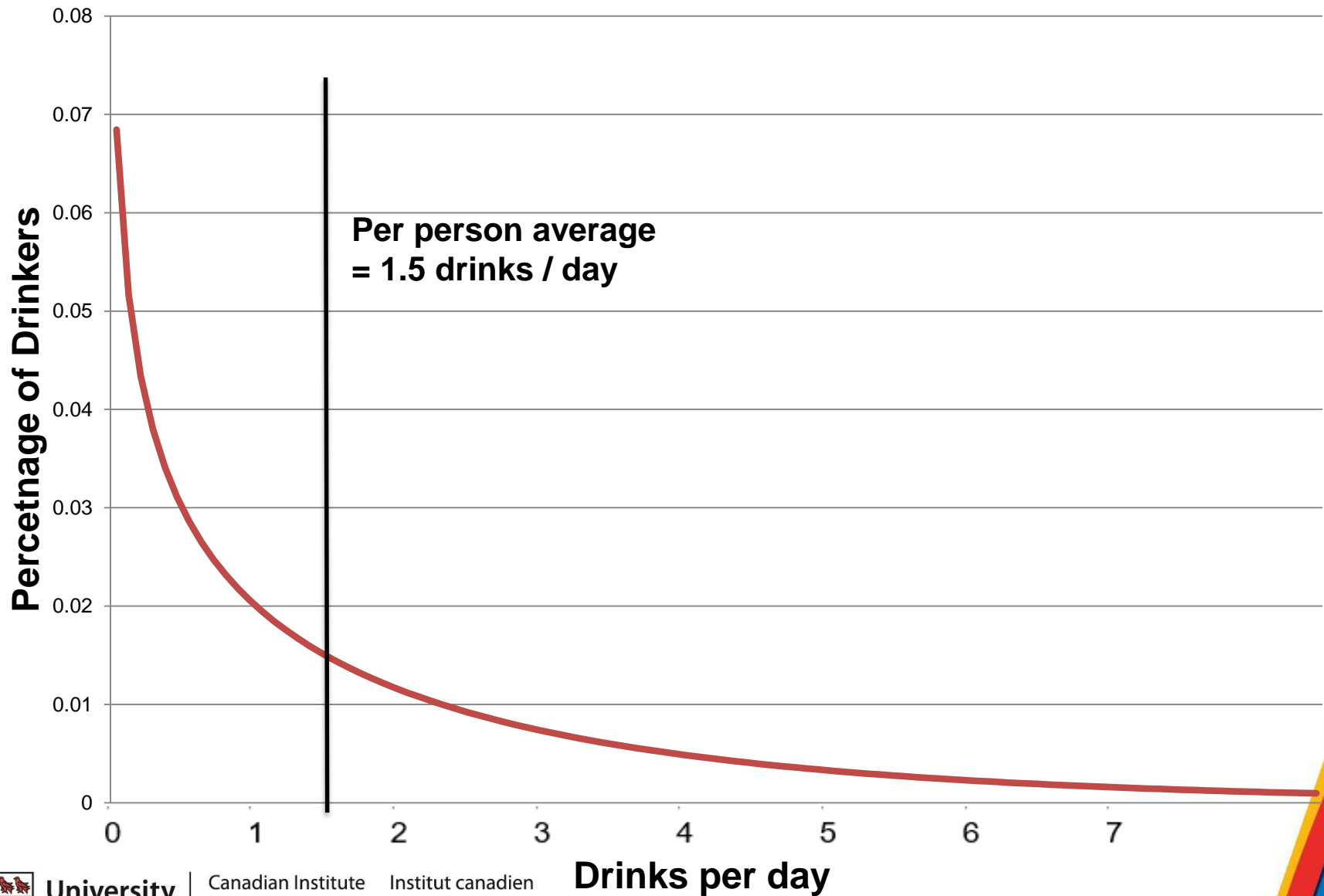
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Drinks per day

What does this look like?



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Drinks per day

Total Consumption Model of Alcohol Use

- The more alcohol a society uses, the more heavy drinkers there will be

Put another way:

- As a society or community becomes more alcogenic, more people will experience alcohol use disorders

Or:

- Though AUD is experienced by an individual, it is a societal illness

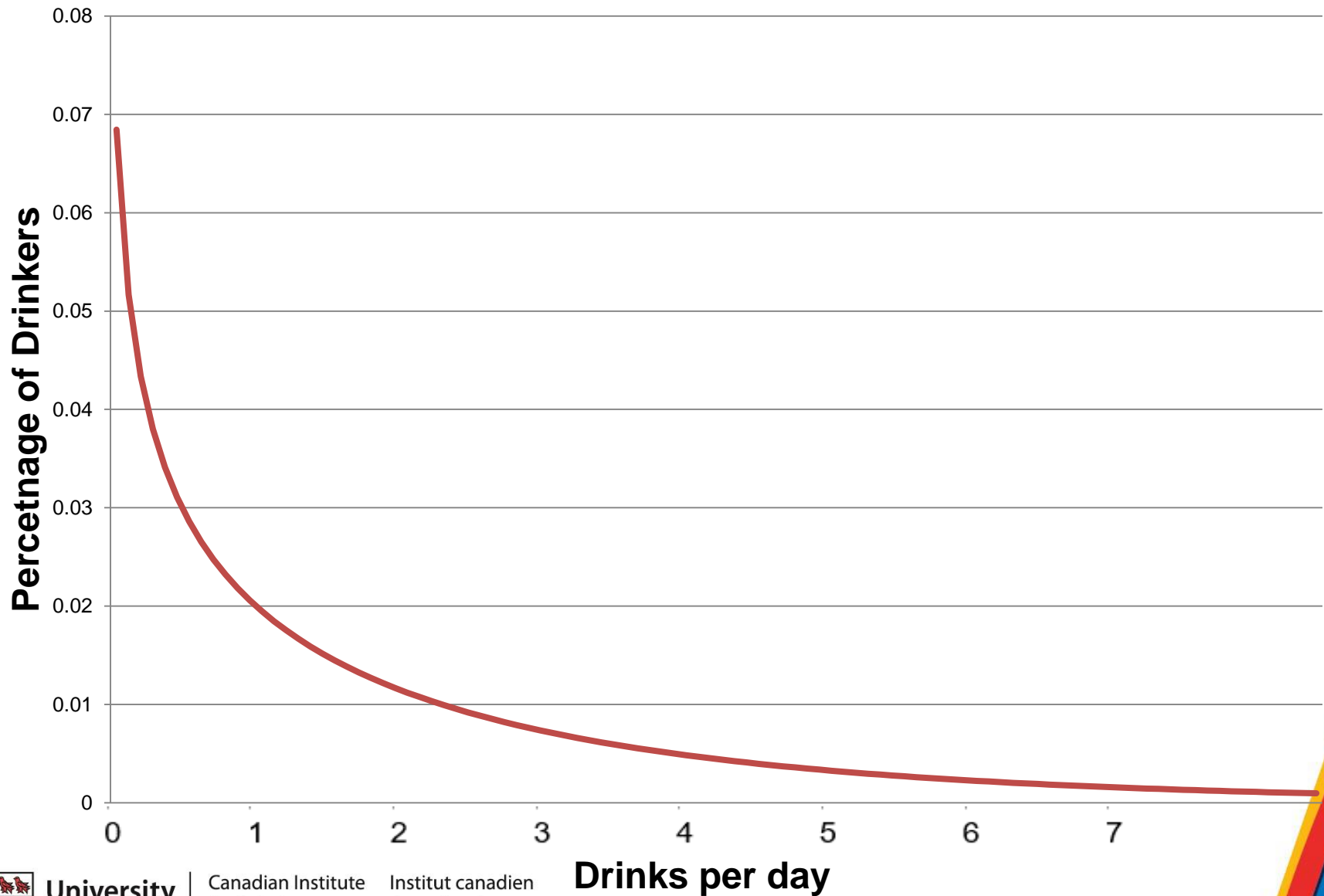


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What does this look like?



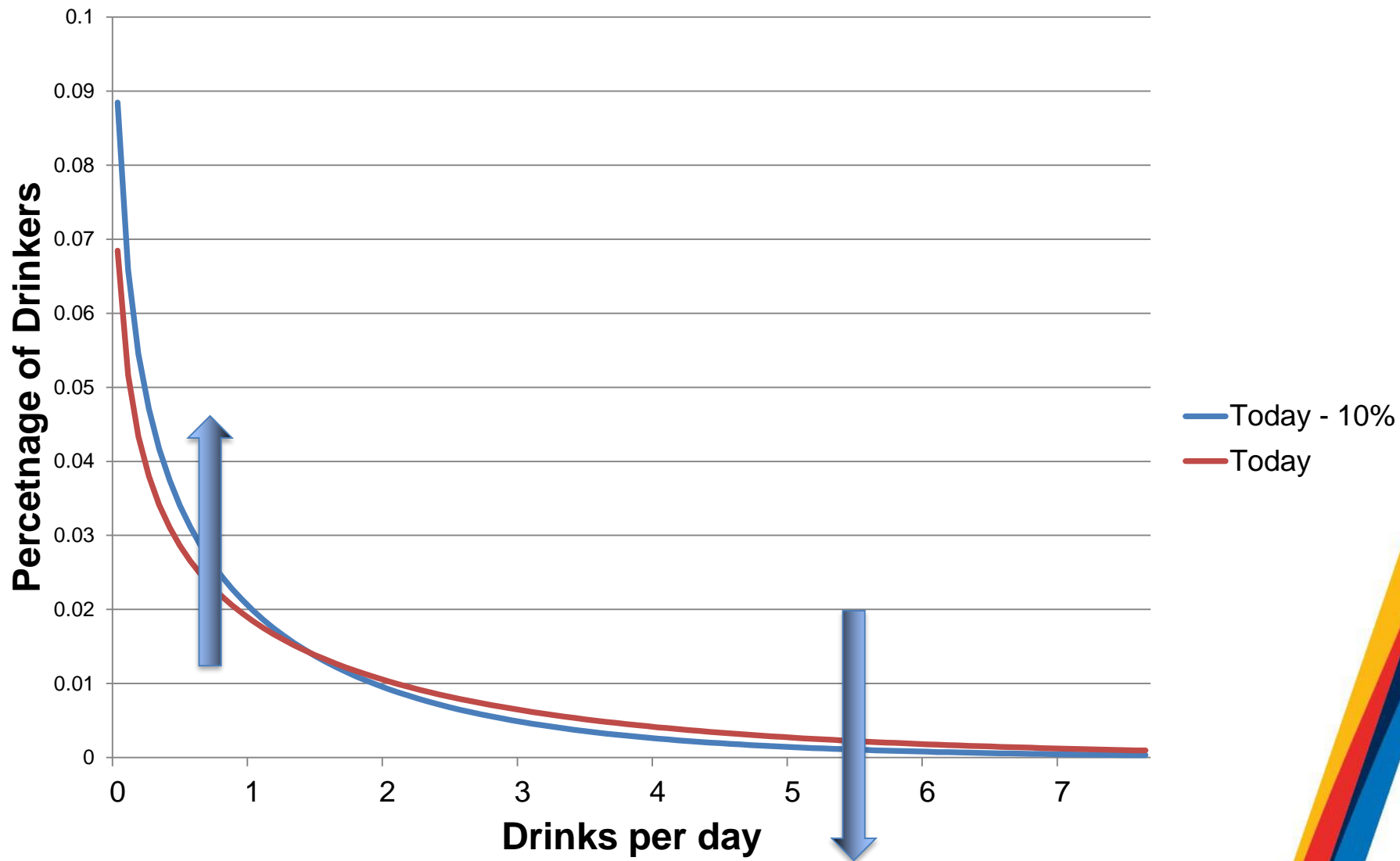
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Drinks per day

What if we could modestly reduce drinking?

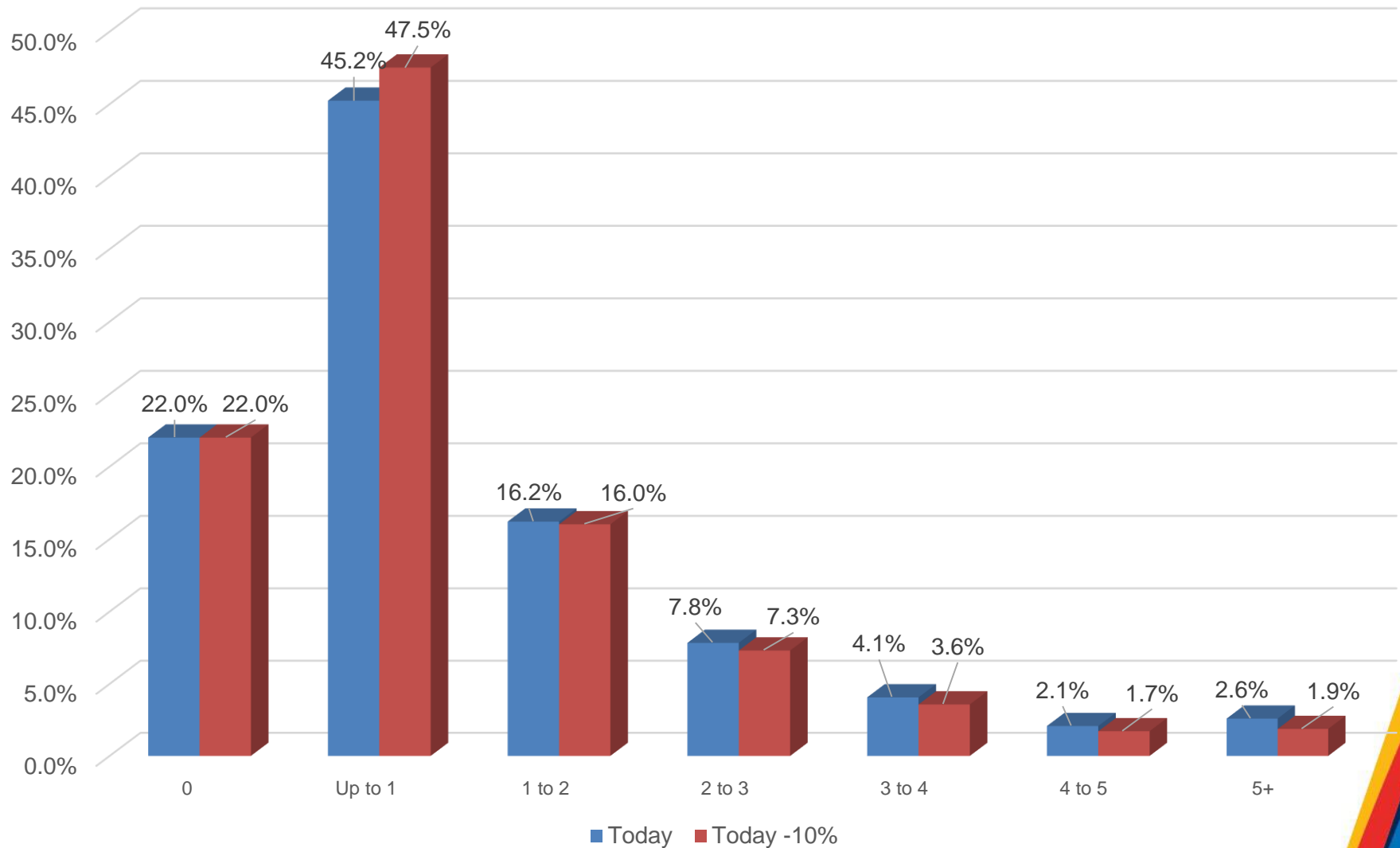


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Percent by drinking groups, BC 2018

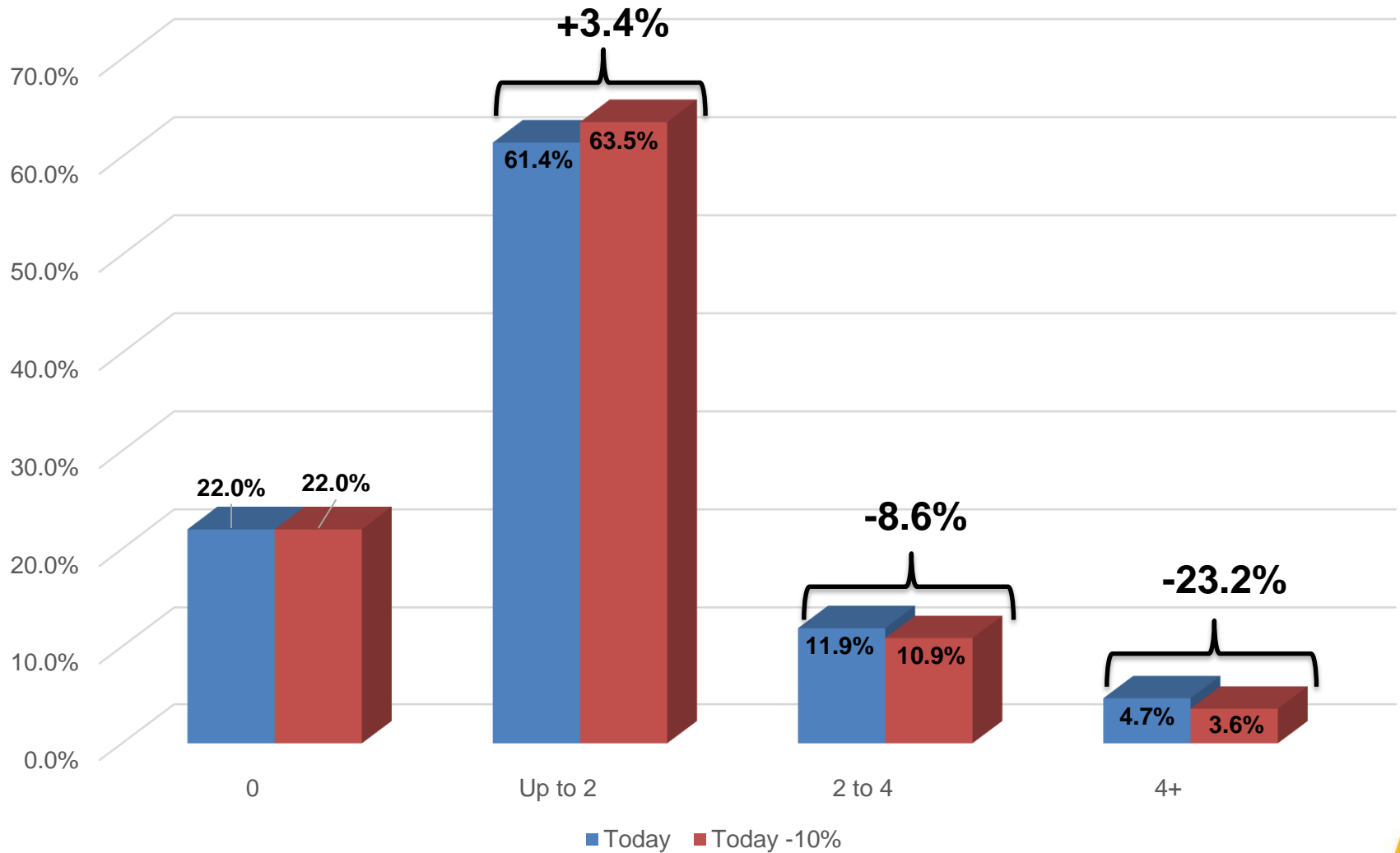


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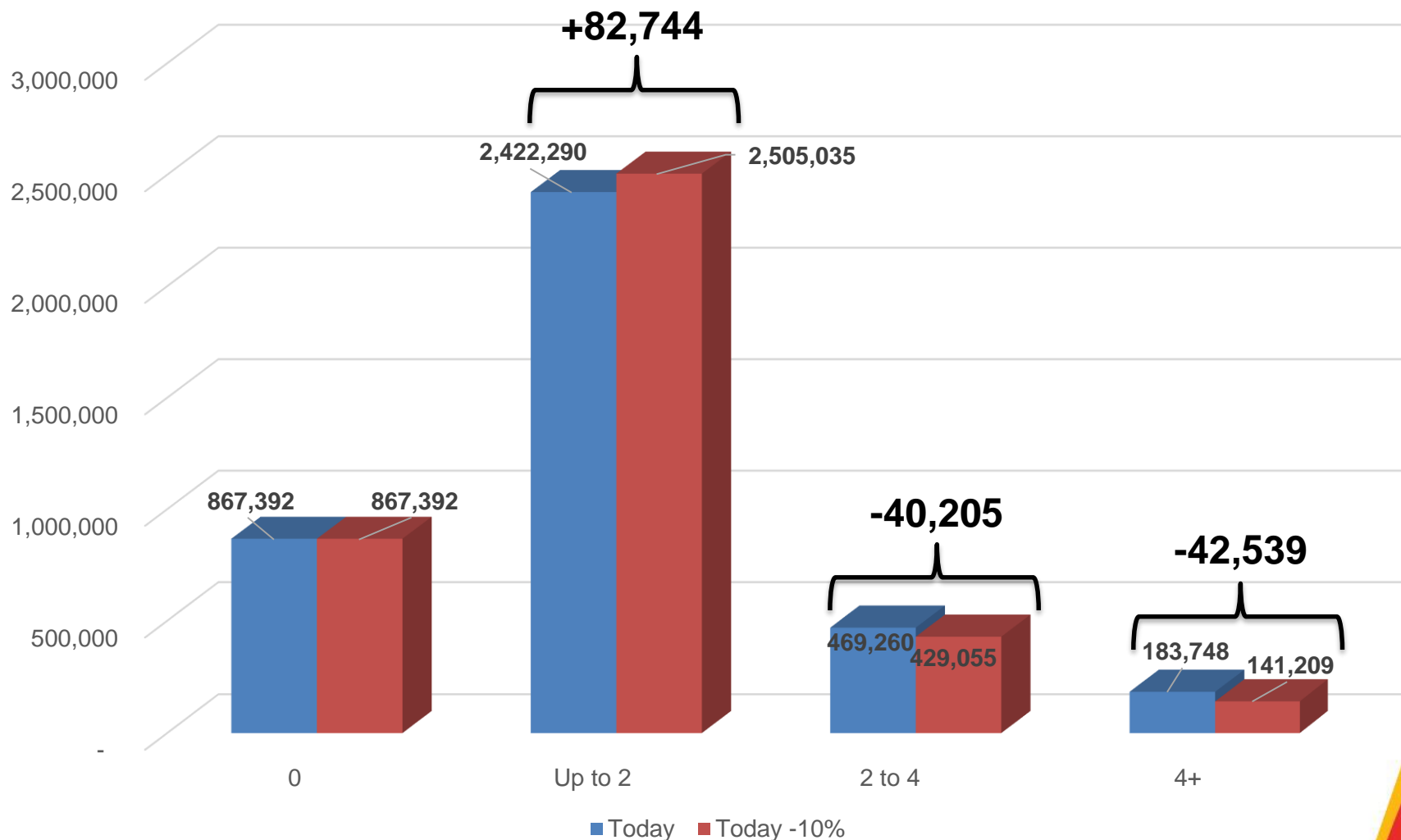


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People by drinking groups, BC 2018



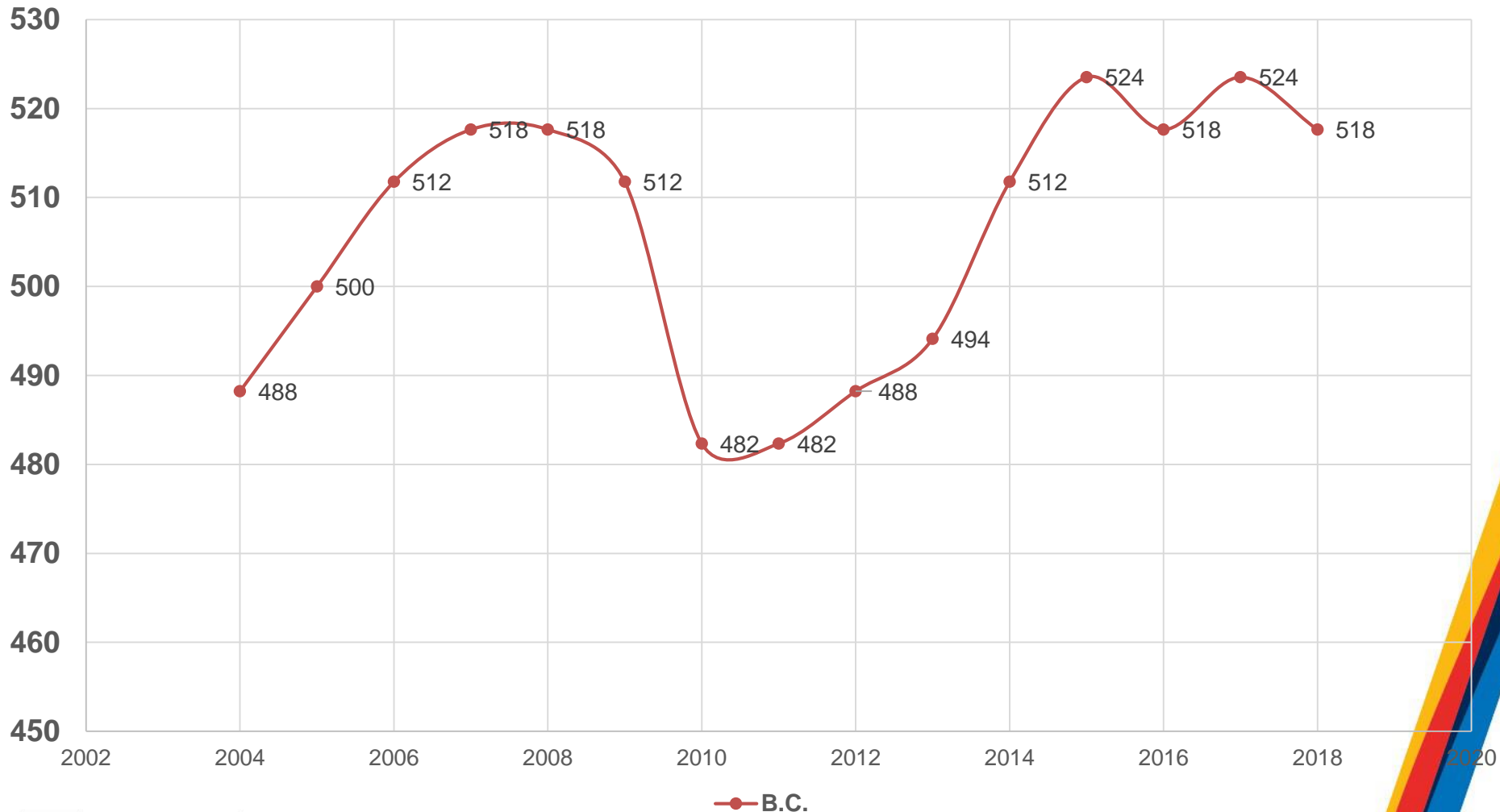
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Sure, but a 10% reduction seems like a lot

Alcohol use per person, BC, 2004 to 2018
(Drinks per year)



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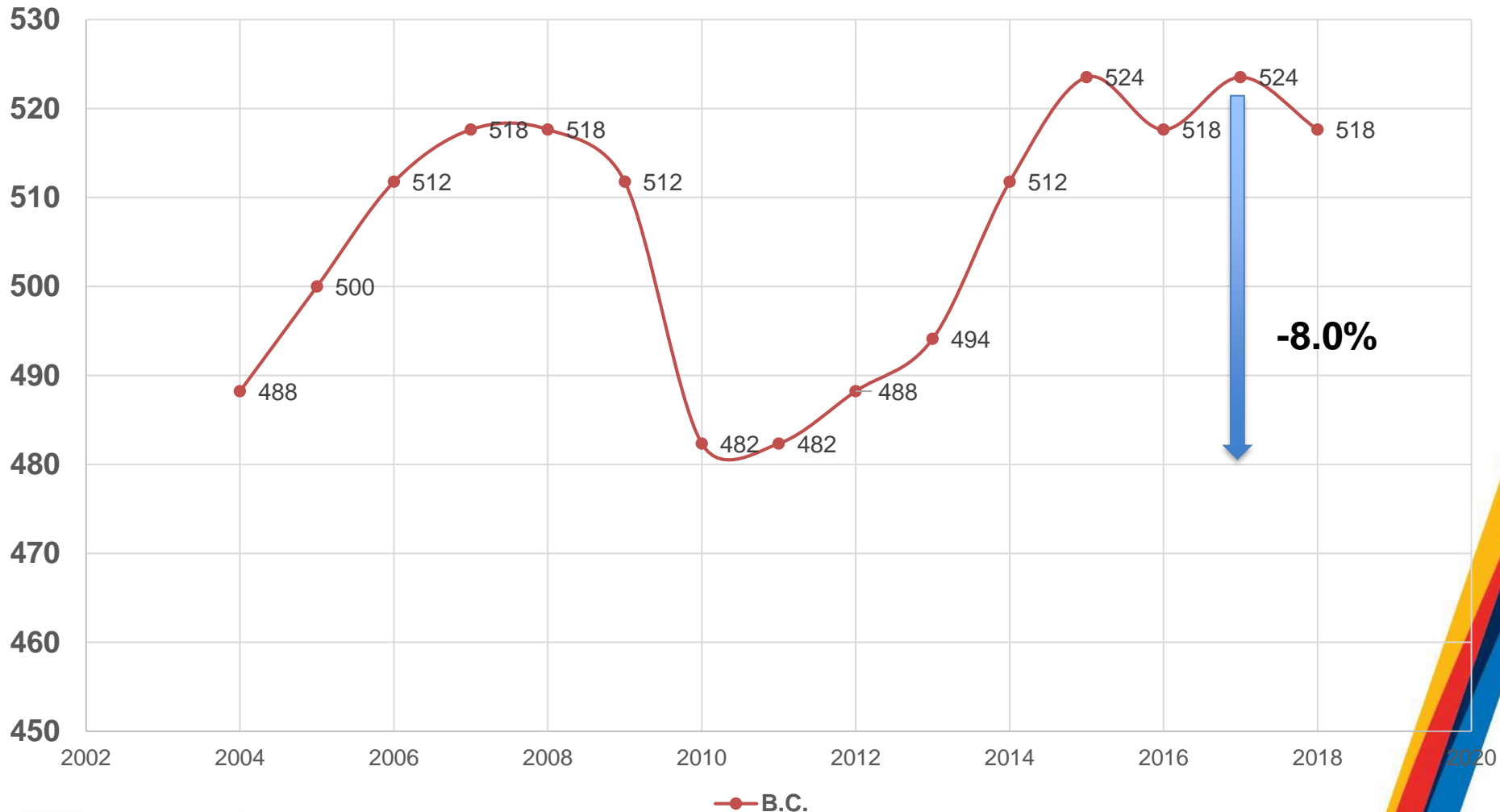
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—●— B.C.

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A Way Forward: First

A concerted effort, by government, alcohol producers, clinicians and all people to learn the risks

Alcohol labeling: Standard Drinks per bottle, nutrition facts, health messaging




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Drinks per bottle

- Many drinkers have little knowledge of how much ethanol (pure alcohol) is in a drink
- One drink =  (bottle of 5% beer)



8.2 drinks



1.9 drinks



26.8 drinks



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OPEN ACCESS



Immediate impact of minimum unit pricing on alcohol purchases in Scotland: controlled interrupted time series analysis for 2015-18

Amy O'Donnell,¹ Peter Anderson,^{1,2} Eva Jané-Llopis,^{2,3,4} Jakob Manthey,^{5,6} Eileen Kaner,¹ Jürgen Rehm^{3,5,7,8,9,10,11}

A minimum

- Targets only supercheap alcohol
- Our work suggests around \$1.50 or \$1.75 / drink
- Scotland, Wales, Australia have it
- Scotland: May 2018 implemented CAD\$1.44 / drink
- Evaluations have been positive:
 - 7.6% reduction in alcohol sales
 - The largest decreases among the heaviest drinkers



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Minimum Unit Price in practice

Applying a \$1.50 per drink MUP to BC Liquor Store prices

Would be: $\geq \$12.30$

Costs: \$9.30*

Cost per drink: \$1.13



8.2 drinks

Would be: $\geq \$2.85$

Costs: \$2.40*

Cost per drink: \$1.14



1.9 drinks

Would be: $\geq \$40.20$

Costs: \$38.51*

Cost per drink: \$1.47



26.8 drinks



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Source: BC Liquor store website, Nov 30th, 2020

* I added 15% tax to the listed price

A Social View of Alcohol: Takeaways

- The more alcohol a society uses, the more heavy drinkers there will be
- A 10% reduction in consumption is attainable and would reduce those at risk of AUD by 23%
- There are policy ideas that may help to prevent harm



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Thank you

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