Alcohol in Community: Cost and Impact Overview

Presentation to Pacific AIDS Network

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Alcohol: A Brief History
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%)
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- By 1919, all provinces had passed prohibition laws, though these were often quickly repealed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!
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 economically "liberalizing" these policies, through privatization

  - Increased alcohol consumption and related harm
  - Increased alcohol sales and number of stores
Alcohol use per adult, Canada and BC, 2004 to 2018
(Drinks per year)

Partial privatization, 2003 - 2008

BC Liquor Review, 2013

Source: StatsCan Table 10-10-0010-01
But, also a shout out to B.C.!
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.
Alcohol, Health and Community: An Overview
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

Percentage of adults who drink:
43%
78%

Per adult, Litres ethanol per year
6.4 L
8.9 L
+ 39%

Per adult, Drinks per year
376
522

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:
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.
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.
In 2017, alcohol caused 18,320 deaths
Alcohol-caused health outcomes in Canada

In 2017, alcohol was responsible for:

- 18,320 deaths
- 105,065 overnight hospital stays
- 700,141 ED visits
Alcohol, leading causes of death (Total 18,320)

- Cardiovascular conditions: 4,951
- Cancers: 4,433
- Digestive conditions: 2,847
- Unintentional injuries: 2,709
- Intentional injuries: 1,345
- Alcohol Use Disorders: 1,033
- Other: 1,002

51%
Alcohol, leading causes of hospital stays (Total 106,000)

- Unintentional injuries: 53,063
- Alcohol use disorders: 20,444
- Digestive conditions: 12,427
- Cancers: 5,803
- Intentional injuries: 5,277
- Communicable diseases: 4,366
- Other: 3,684

70%
Substance-defined crimes

- Cocaine: 0% impaired driving, 8% Drug Defined (i.e. violations of CDSA), 19% Violent crime, 73% Other crime
- Cannabis: 1% impaired driving, 44% Drug Defined (i.e. violations of CDSA), 18% Violent crime, 36% Other crime
- Alcohol: 30% impaired driving, 0% Drug Defined (i.e. violations of CDSA), 31% Violent crime, 39% Other crime
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
## BCAOD: online tool and maps

<table>
<thead>
<tr>
<th>Year</th>
<th>Region</th>
<th>Drinks per year</th>
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</thead>
<tbody>
<tr>
<td>2019</td>
<td>Interior</td>
<td>761</td>
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<tr>
<td>2019</td>
<td>Island</td>
<td>663</td>
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<td>2019</td>
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<td>Vancouver Coastal</td>
<td>492</td>
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<tr>
<td>2019</td>
<td>Fraser</td>
<td>396</td>
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</tbody>
</table>

Global average: 376
BCAOD: online tool and maps

Global average: 376

<table>
<thead>
<tr>
<th>Region</th>
<th>Drinks per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Kootenay</td>
<td>796</td>
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<tr>
<td>Okanagan</td>
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<tr>
<td>Northwest</td>
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<td>Thompson Cariboo Shuswap</td>
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<td>Central Vancouver Island</td>
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<td>North Shore/Coast Garibaldi</td>
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<td>Northeast</td>
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<td>South Vancouver Island</td>
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<td>Fraser South</td>
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<td>Fraser North</td>
<td>354</td>
</tr>
<tr>
<td>Richmond</td>
<td>253</td>
</tr>
</tbody>
</table>
Per Capita Alcohol Consumption vs years (2002-2019)

Year

Litres of Absolute Alcohol per Person

0 2 4 6 8 10 12 14 16 18 20

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 = 38.65 Standard Drinks.
BCAOD: Alcohol-caused deaths, BC 2017, Total of all: 2,380

- Cancer: 603
- Cardiovascular conditions: 507
- Unintentional injuries: 438
- Digestive conditions: 370
- Neuropsychiatric conditions: 205
- Intentional injuries: 130
- Communicable diseases: 105

47% of deaths are due to alcohol-related causes.
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
Social Network Theory
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?

Per person average
= 1.5 drinks / day
What does this look like?

Per person average = 1.5 drinks / 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
What does this look like?

![Graph showing the percentage of drinkers against drinks per day. The graph indicates a decreasing trend as the number of drinks per day increases.]
What if we could modestly reduce drinking?

Percentage of Drinkers

Drinks per day

Today - 10%

Today
Percent by drinking groups, BC 2018

- Up to 1:
  - Today: 45.2%
  - Today -10%: 47.5%
- 1 to 2:
  - Today: 22.0%
  - Today -10%: 22.0%
- 2 to 3:
  - Today: 16.2%
  - Today -10%: 16.0%
- 3 to 4:
  - Today: 7.8%
  - Today -10%: 7.3%
- 4 to 5:
  - Today: 4.1%
  - Today -10%: 3.6%
- 5+:
  - Today: 2.1%
  - Today -10%: 1.7%
Percent by drinking groups, BC 2018

- 0: Today 22.0%, Today -10% 22.0%
- Up to 2: Today 61.4%, Today -10% 63.5%
- 2 to 4: Today 11.9%, Today -10% 10.9%
- 4+: Today 4.7%, Today -10% 3.6%

Today -10% refers to a 10% decrease from the current percentage.
People by drinking groups, BC 2018

- Up to 2: 2,422,290 (Today) - 2,505,035 (Today -10%) = +82,744
- 2 to 4: 469,260 (Today) - 429,055 (Today -10%) = -40,205
- 4+: 183,748 (Today) - 141,209 (Today -10%) = -42,539

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)
Sure, but a 10% reduction seems like a lot

Alcohol use per person, BC, 2004 to 2018
(Drinks per year)
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
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
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
Minimum Unit Price in practice

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

Would be: >= $12.30
Costs: $9.30*
Cost per drink: $1.13

Would be: >= $2.85
Costs: $2.40*
Cost per drink: $1.14

Would be: >= $40.20
Costs: $38.51*
Cost per drink: $1.47

8.2 drinks
1.9 drinks
26.8 drinks

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.
Thank you

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