

Alcohol Policy and COVID: Who is Minding the Stores?

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EVIDENCE

HOPE

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What unites us?

- The right to life, liberty and the pursuit of happiness
- As part of this, equal access to the opportunity to be healthy, throughout the course of our lives
- The need to protect vulnerable groups – including young people – from being deprived of these rights
- Our common concerns are the basis for our common efforts

ALCOHOL AND COVID 19



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THE WORLD HEALTH ORGANIZATION'S ADVICE:

“

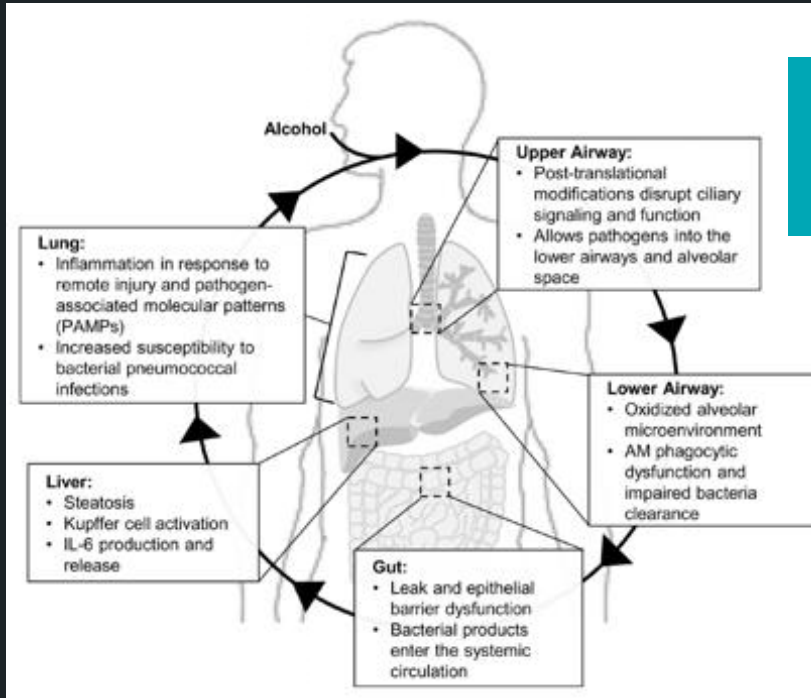
Alcohol consumption is associated with a range of communicable and noncommunicable diseases and mental health disorders, which can make a person more vulnerable to COVID-19. In particular, alcohol compromises the body's immune system and increases the risk of adverse health outcomes. Therefore, **people should minimize their alcohol consumption at any time, and particularly during the COVID-19 pandemic.**

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ALCOHOL, THE IMMUNE SYSTEM, AND THE LUNGS



Persons with an alcohol-use disorder have increased susceptibility to respiratory pathogens and lung injury, including two to four times greater risk of acute respiratory distress syndrome (ARDS), a key cause of death in COVID-19.

(Source: Yeligar SM, Chen MM, Kovacs EJ, Sisson JH, Burnham EL, Brown LAS. Alcohol and lung injury and immunity. Alcohol (Fayetteville, NY). 2016;55:51-59.)

WHAT HAS HAPPENED
TO ALCOHOL
CONSUMPTION IN THE
WAKE OF COVID-19?



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RTI Survey

- Surveyed 993 people May 8-15, 2020
 - 555 drinkers as of February
 - Asked alcohol consumption pre-COVID and as of April
- Key findings:
 - 27% increase in average drinks per day (.74 to .94)
 - 21% increase in drinking above guidelines (29% to 36%)
 - 26% increase in binge drinking (22% to 26%)
 - 5% of respondents increased all three of these – this group accounted for more than 40% of the increase in alcohol consumption for all respondents
 - Being female, Black, or having children in the household associated with significant increases on at least one measure
 - Largest increases in consumption occurred among people who increased usual quantity consumed and who were *not* drinking in excess of guidelines in February

(Barbosa et al., J Addict Med, 2020)

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Rand Panel Study

- Comparison of data collected from nationally representative, probability-sampled panel of 30-80 year-olds from April 29 – June 9, 2019 and from May 28 – June 16, 2020
- Overall frequency of drinking (# days) increased by 14%
 - Alcohol was consumed one more day per month by 3 of 4 adults
- Women:
 - 41% increase in days of heavy drinking – 1 day more for 1 in 5 women
 - 39% increase in Short Inventory of Problems score
 - Indicative of increased alcohol-related problems independent of level of consumption for nearly 1 in 10 women

Washington State study

- 459 young adults ages 23-28 (median age 25.14)
 - Responded to surveys in January and in April/May 2020
- Results:
 - Typical number of drinks/week stayed constant (~ 4.67)
 - Typical number of drinking days increased (from 1.77 to 2.20)
 - Drinks per occasion fell slightly (2.56 to 2.28)
 - Change in heavy episodic drinking occasions/week non-significant
 - NORMS: young people think more of their peers are drinking more during the lockdown; depression coping motives increased

(Graupensberger et al., JAH, April 2021)

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Kent State study

- 1001 students surveyed in late March (retrospective and current), early May, early June
 - Sample skewed female
- Risky drinking increased from wave 1, and remained higher at wave 3
- Only one factor was associated with an increase in risky drinking across all four time periods:
 - Loss of income or employment-related distress due to the pandemic
 - (Jaffe et al., *ACER*, 2021)

Convenience samples

- 832 participants recruited via social media, e-mail, snowball
 - 84% female, 85% White, 72% ages 26-49
 - 60% reported increased drinking, 13% decreased
 - Persons with COVID-related stress consumed more drinks on more days (Grossman et al., Int J Environ Res Public Health, 2020)
- 417 participants recruited via social media
 - 83% female, 77% married, 44% ages 35-44
 - Fewer people using alcohol during social distancing
 - Among those who drank, frequency and quantity ingested increased (Boshuetz et al., WMJ, 2020)

Other surveys

- Kelton Global (market research firm) and Weconnect Health (medical technology company) survey
 - 2000 people answering on-line poll (non-representative) – results released in June
 - 33% of adult drinkers reported consuming more now than they were before the coronavirus outbreak began
 - 50% said they were drinking to cope with stress and anxiety
 - 54% of people in living in small towns reported increasing their drinking
 - 57% of persons making \$50,000/year or less reported drinking more
 - Reported on at

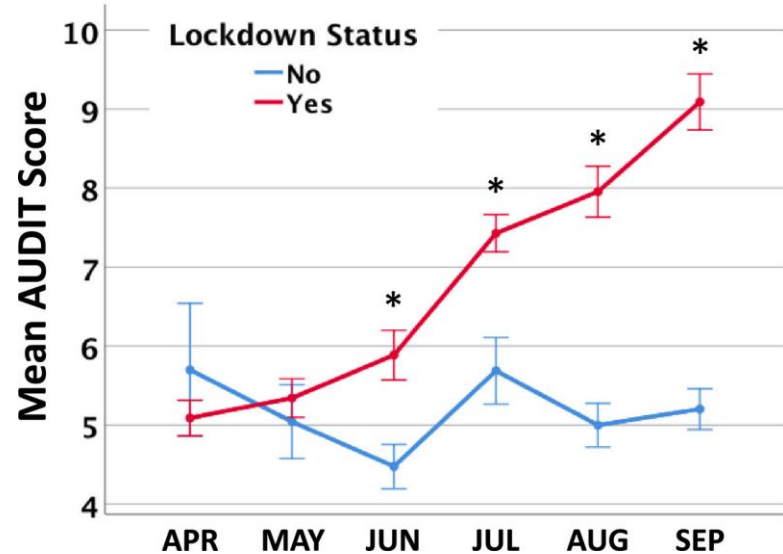
<https://www.forbes.com/sites/chrisfurnari/2020/06/30/survey-americans-are-drinking-more-to-cope-with-coronavirus-induced-stress/#542bc8c17605>

Other surveys

- Recovery Village survey of 1,000 U.S. adults 18+ in April about past month use
 - Alcohol most common substance used (88%)
 - 55% reported increased in past-month alcohol consumption, 18% report “significant increase”
 - States hardest hit by pandemic at that time (NY, NJ, MA, RI, CT) – 67% increased, 25% significantly
 - <https://www.therecoveryvillage.com/drug-addiction/news/drug-alcohol-use-rising-during-covid/>
- Morning Consult poll of 2,200 U.S. adults in early April
 - 16% of all adults said they were drinking more, 18% less during the pandemic
 - Rates higher among younger adults:
 - 25% more among millennials, 16% less
 - 19% more among Gen Xers, 18% less
 - <https://morningconsult.com/2020/04/06/coronavirus-social-distancing-millennials-eating-drinking/>

What about people with AUD?

- 188,653 COVID patients in NYC hospital system, January – October:
 - Odds of hospitalization were 6.88 higher for persons with AUD (Allen et al., J Public Health [Oxf], 2020)
- 5,931 AUDIT tests April – September:
 - Under lockdown, AUDs increased; not under lockdown they did not (Killgore et al., Psychiatry Res., 2020)



The Shadow Pandemic: Violence Against Women and Girls and COVID-19

Globally,

243 million



women and girls aged 15-49 have been subjected to sexual and/or physical violence perpetrated by an intimate partner in the previous 12 months.

The number is likely to **INCREASE** as security, health, and money worries heighten tensions and strains are accentuated by cramped and confined living conditions.

Emerging data shows that since the outbreak of COVID-19, violence against women and girls (VAWG), and particularly domestic violence, has **INTENSIFIED**.

In **France**, reports of domestic violence have increased by **30%** since the lockdown on March 17.

In **Argentina** emergency calls for domestic violence cases have increased by **25%** since the lockdown on March 20.



In **Cyprus and Singapore** helplines have registered an increase in calls of **30%** and **33%**, respectively.

Increased cases of domestic violence and demand for emergency shelter have also been reported in **Canada, Germany, Spain, the United Kingdom and the United States**.

As stay-at-home orders expand to contain the spread of the virus, women with violent partners increasingly find themselves isolated from the people and resources that can help them.

87,000

 women

were intentionally killed in 2017. The majority of these killings were committed by an intimate partner or family member of the victim.

Violence against women and girls is pervasive but at the same time widely under-reported. Less

than **40%** of women who experience violence report these crimes or seek help of any sort.

The global cost of violence against women had previously been estimated at approximately.

US\$1.5 trillion

That figure can only be rising as violence increases now, and continues in the aftermath of the pandemic.

The surge in COVID-19 cases is straining even the most advanced and best-resourced health systems to the breaking point, including those at the front line in violence response.



Domestic violence shelters are reaching capacity, or unable to take new victims due to lockdown and social distancing measures. In other cases, they are being re-purposed to serve as health centers.

National responses to COVID-19 must include:



Services to address violence against women and girls, including increased resources to support shelters, hotlines and online counselling. These essential services should be expanded and adapted to the crisis context to ensure survivors' access to support.



A strong message from law enforcement that impunity will not be tolerated. Police and Justice actors must ensure that incidents of VAWG are given high priority and care must be taken to address the manifestations of violence emerging in the context of COVID 19.



Psychosocial support for women and girls affected by the outbreak, gender-based violence survivors, frontline health workers and other frontline social support staff must be prioritized.



Bottom line about drinking patterns and the pandemic

- Some people – particularly women and young adults – have increased their drinking during the pandemic
- Alcoholic liver disease admissions at Keck Hospital USC up 30% in 2020 compared to 2019; other major hospital reporting as much as 50% increase (*LA Times 2/8/21*)
 - More cases presenting among people under 40
 - More cases presenting among women
- Countervailing trend: some people have had less money

Happy Hour at home? Des Moines restaurants and bars selling to-go cocktails

Cody Goodwin, Des Moines Register | Published 5:47 p.m. CT April 4, 2020 | Updated 9:06 a.m. CT April 6, 2020

Cheers! Ohio to allow 2 alcoholic drinks per meal for carryout, delivery during coronavirus pandemic



Bites & Sips: Reopenings, Beer Collabs, Wine Flights To-Go & More

May 4, 2020 2:48 pm

Sus

Food and Drink

Alaska alcohol board approves beer and wine deliveries

Author: James Brooks | Up

7-Eleven Offers Alcohol Delivery Through 7NOW App

7NOW users in participating markets can order beer, wine or liquor anytime, plus \$5 hot or ready-to-bake whole pizzas on weekends.

By Isabelle Gustafson | April 21, 2020



Assembly Passes Bill on Alcohol Takeout and Delivery to Help Boost NJ's Hospitality Industry

COLLEEN O'DEA | MAY 5, 2020 | MORE ISSUES, CORONAVIRUS IN NJ

Legislators also back expanding and creating new loans for small bars, restaurants, craft alcohol producers

To-go alcohol might still be available in Florida even after the coronavirus pandemic

Governor hints at changing law



Ohio joins states allowing restaurants to sell alcohol with takeout or delivery orders

Demand for alcohol delivery in Georgia highlighted by coronavirus

CORONAVIRUS

Gov. Abbott: Alcohol to-go could stay 'forever' in Texas



It's Maybe Time to Make To-Go Cocktails Legal

help struggling restaurants, states across the country have loosened up laws send to-go and delivery drinks — and it's hard to imagine going back.

via @boston | May 6, 2020, 10:00am-02:02





CHANGES IN ALCOHOL SALES DATA

INCREASED SALES

- Off-premise sales jumped by 55% for the week ending March 21 compared to the same week a year earlier
- Ready-to-drink cocktails rose by 106%
- Consumers purchased 90% more 24 and 30-packs of beer
- Sales of 3-liter boxed wine and online alcohol sales also up substantially
- A week later, overall sales still up by 22%

STOCKPILING OR STOKING CONSUMPTION?

THE WORD FROM THE INDUSTRY:

“

IT'S BEEN
SOMEWHAT LIKE
CHRISTMAS IN
MARCH AND
APRIL. (MN)

“

THEY'RE GOING
FOR BIGGER CASES
OF THE MAIN
BRANDS. (OH)

“

THEY HAVE BEEN
EXPONENTIALLY
BUYING MORE.”
(WV)

“

WE KNEW THERE
WOULD BE
TREMENDOUS
DEMAND. (PA)

Online sales of PLCB nearly tripled in a month from what they had been in a full year

“

WE THOUGHT IT
WOULD SLOW
DOWN IN APRIL
AND IT TURNS
OUT IT DIDN'T
SLOW DOWN. (KS)



GET THE DOOR.

IT'S THE

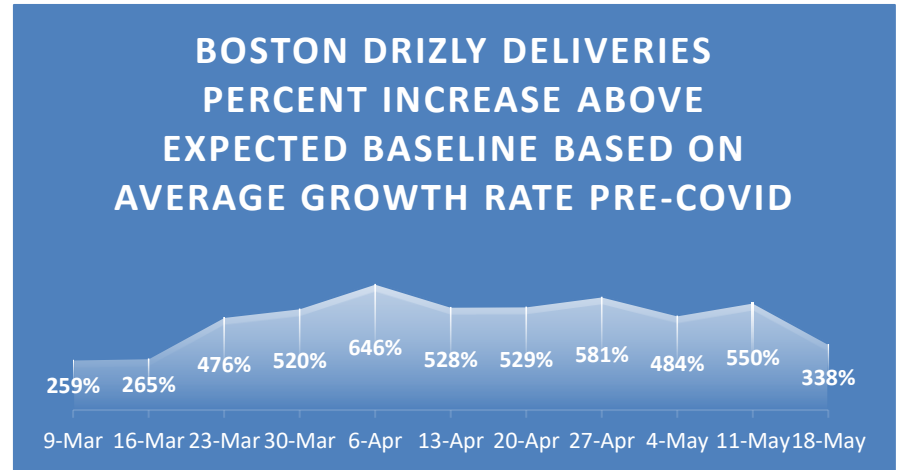
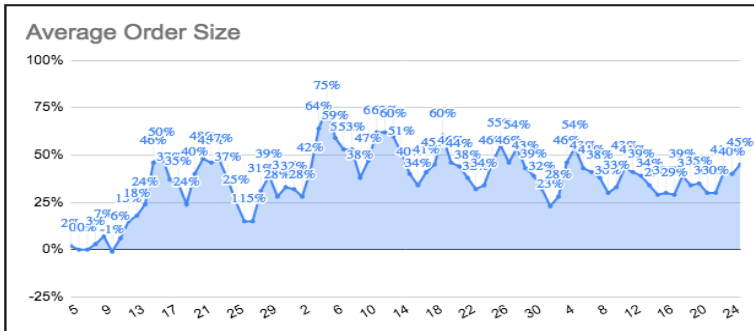
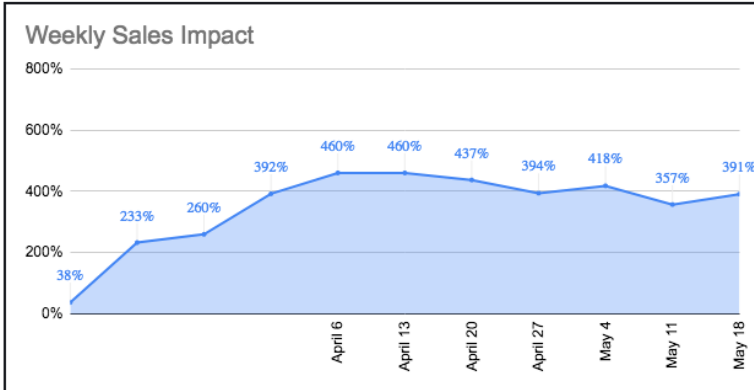
LIQUOR STORE.

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DRIZLY AND COVID

- Describes itself as the #1 alcohol delivery app
- Partners with 2,500+ retailers across North America in door-to-door delivery of beer, wine and distilled spirits
- As of May 18, sales are up by 357% over what they would expect to see during this time
- Customers are ordering more frequently, and with larger quantities – on average 50% more than previously



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CHANGES IN ALCOHOL AVAILABILITY

TO-GO SALES

- Bars/restaurants closed
- Off-premises open and "essential"
- Home delivery/carryout cocktails normalized
- Bars "morphing" into restaurants

ECONOMIC WOES

- Economic crisis leads to less money available to buy alcohol

LIKELY OUTCOME

- People buy more
- People buy cheaper

CHANGES IN MASSACHUSETTS: Curbside pickup and home delivery permitted

PUBLIC HEALTH IMPLICATIONS OF CHANGES IN ALCOHOL AVAILABILITY

- Shift from on-premise to off-premise consumption likely to be associated with increase in violence due to unsupervised drinking
- Worldwide, 63% of violent injuries in emergency rooms involved alcohol use by the victim, perpetrator or both (Source: Cherpitel et al., JSAD, 2012)
- In the U.S., 55% of victims of domestic violence who could report whether their attacker had been drinking believed they had (Source: US BJS)
- Police reports: 18 of 22 police departments surveyed by NBC News reported an increase in domestic violence calls in March
- Confinement, unemployment, economic instability and alcohol consumption increase risk of child abuse, at same time that usual avenues for reporting (teachers, social workers, pastors) are shut down from contact with the children

WHO IS MINDING THESE STORES?

- What social scientists refer to as a large-scale national experiment
- Those paying most attention to this are those who stand to make the most money from it
- Research cannot move quickly enough to keep up with policy change
- Recent policy changes have a good chance of becoming permanent without sustained public health input:
 - Home delivery
 - Takeout alcohol from bars and restaurants
 - 2017 “temporary” tax cut on alcohol at the federal level

Alcohol and global health

- Approximately 3 million deaths per year
- Top risk factor for death and disability among persons aged 15-49
- Major driver of health inequality: Same amount of alcohol will do much greater harm in a poor family, community or country
- In 2016, alcohol caused more death and disability worldwide than:
 - Tuberculosis
 - HIV
 - Diabetes
 - Hypertension
 - Digestive system diseases
 - Road traffic injuries
 - Violence

Alcohol and health

- A causal factor in more than 200 disease and injury conditions
- No safe level of alcohol consumption for cancer risk
 - Causally linked to cancers of the oral cavity, pharynx, larynx, esophagus, liver, colorectal, and female breast (15% in the US) (Nelson et al. 2013; Baan et al. 2007)
- *If* there is health benefit from light drinking, none for anyone under age 44
- The great “co-factor”:
 - Interpersonal violence
 - Sexual assault
 - Child abuse
 - Family instability
 - Community disruption



Alcohol and health in the U.S.

- Causes 104,000 deaths per year (CDC)
 - 1 in 10 deaths among people of working age (18-64)
- Plays a key role in the “diseases of despair”
 - Poisoning/overdose (alcohol-specific death rates for 18-34 year-olds up 69% from 2007-2017)
 - “Alcohol-induced” deaths increased 1.4 fold 1999-2017 Shiels et al. JAMA Netw. Open 2020
 - Suicide (23% alcohol attributable) – increased 1.3 fold 1999-2017
 - Liver cirrhosis (more than 50% caused by alcohol)
 - BMJ study of DoD: health claims from 12 million people
 - Alcohol responsible for 54% of DoD, rising the slowest (prevalence up 37% 2009-2018) but steadily the biggest cause of DoD Brignone et al. BMJ Open 2020

Alcohol and health in the U.S.

- Consumption increasing:

- Comparing 2001-2002 to 2012-2013:

- Total population past 12 months alcohol use up 11.2%,
- High-risk drinking grew 29.9%
- DSM-IV alcohol use disorders increased by 49.4%

- Increases were greatest among:

- Women, older adult, R/E minorities, low-income/educ.

JAMA Psychiatry 74(9):911-923, 2017.

- Problems increasing

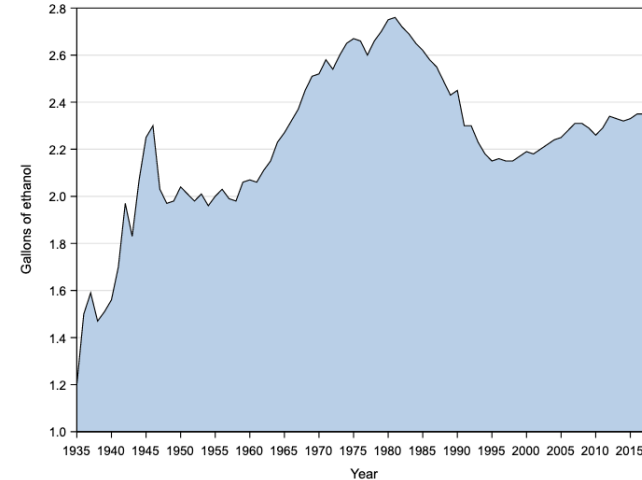
- Between 2000—2016, death rates from alcohol increased 55% TFAH, 201

- ED visits in the US, 2006-2014

- ED visits involving alcohol consumption increased by 61.6%, costing \$15.3 billion
- Annual percentage change larger for females than for males (5.3% vs. 4.0%) White et al., ACER, 2018

- Age-adjusted death rates for alcoholic liver disease up by 40.6% 1999-2017; increase higher among women and young people Woolf and Schoomaker, JAMA, 2019

Figure 1. Total per capita ethanol consumption, United States, 1935–2018.



\$249 billion



\$13.5b

Motor vehicle
crashes



\$24.8b

Criminal justice



\$28.4b

Healthcare



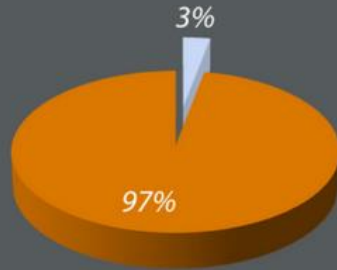
\$179.1b

Lost productivity

Cost of excessive drinking in the United States, 2010

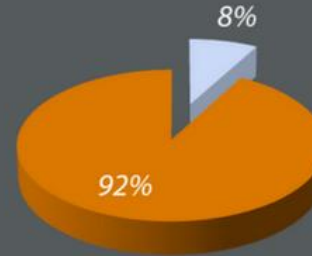
- Approximately \$2.05 per drink
- 2 in 5 dollars paid directly by government
 - NOT just alcohol dependence

Current drinkers



■ Dependent ■ Non-dependent

Binge drinkers

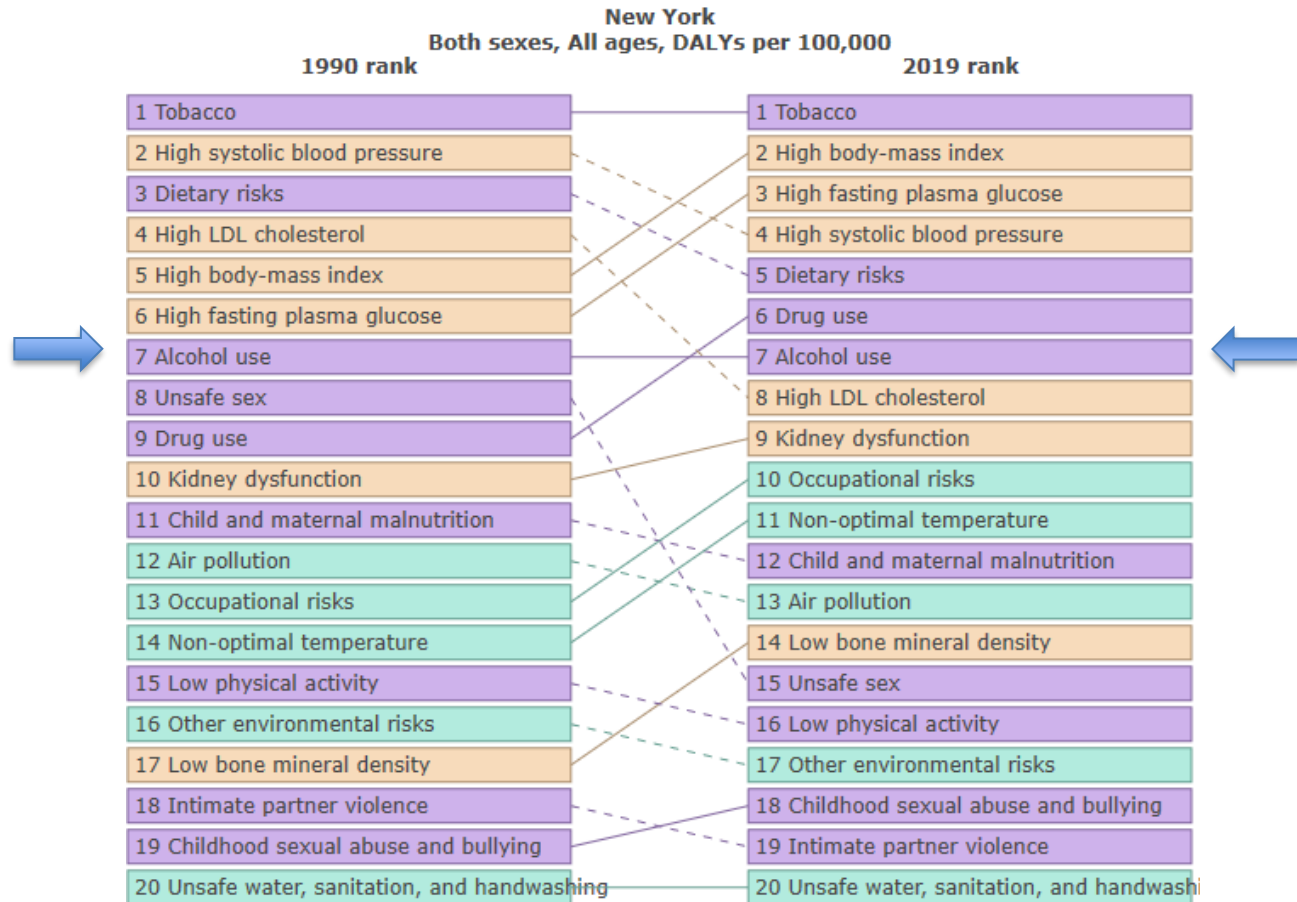


■ Dependent ■ Non-dependent

Source: Woerle, 2007

MOST BINGE DRINKERS ARE NOT
DEPENDENT

Alcohol over time – New York State



Source: IHME

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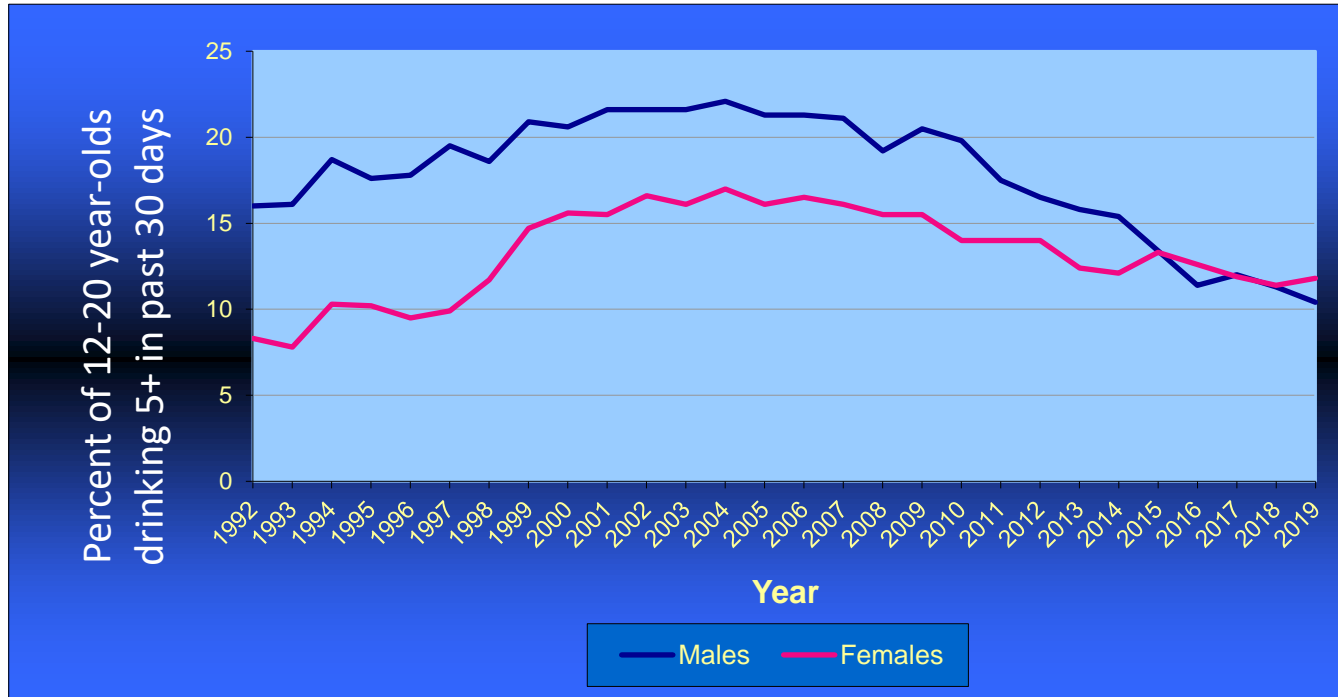
Youth drinking in the U.S.

- Alcohol use is the number one drug problem among young people. (NSDUH)
- In 2019, 7 million U.S. young people ages 12-20 reported drinking in the past month, and 4.2 million reported binge drinking. (NSDUH)
- Every year, 3,400 people under 21 die because of excessive alcohol use. (CDC ARDI)
- Every day, more than 4,000 kids under age 16 start drinking. (NSDUH)
- The earlier young people begin drinking, the worse the consequences are likely to be.

Consequences of youth drinking

- Young people who begin drinking before age 15 are five times more likely to develop alcohol problems later in life than those who wait until they are 21. (OSG, 2007)
- They are:
 - Four times more likely to develop alcohol dependence (Grant and Dawson 1997)
 - Six times more likely to be in a physical fight after drinking;
 - Greater than six times more likely to be in a motor vehicle crash because of drinking;
 - Almost five times more likely to suffer from other unintentional injuries after drinking (Hingson et al. 2009).

Youth (age 12-20) Binge Drinking in the U.S. (NSDUH)



- 1 in 9 young people age 12 to 20 binged in the past 30 days.
- The rates are slightly higher for females than for males.

Source: NSDUH 2018 (SAMHSA 2019)

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POPULAR BELIEF:

We should just **EDUCATE** young people about these serious problems. If they knew the risks, they would drink responsibly.

True or False?

Neurodevelopmental Origins of Risk-taking



- Adolescence is a period of profound brain maturation to maximize capacity for exploration and to begin the separation from caregivers.
- We *thought* brain development was complete by adolescence.
- We now know... maturation is not complete until about age 25.

Neurodevelopmental Origins of Risk-taking



The area that develops **earlier**: [Limbic System](#)

- Processing emotions
- Processing social info
- Experience reward, punishment

The area that develops **later**: [Prefrontal Cortex](#)

- Deliberative thinking
- Logical reasoning
- Planning ahead
- Weighing costs and benefits
- Regulating impulses

Limbic System



Prefrontal Cortex



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Limbic System > Prefrontal Cortex



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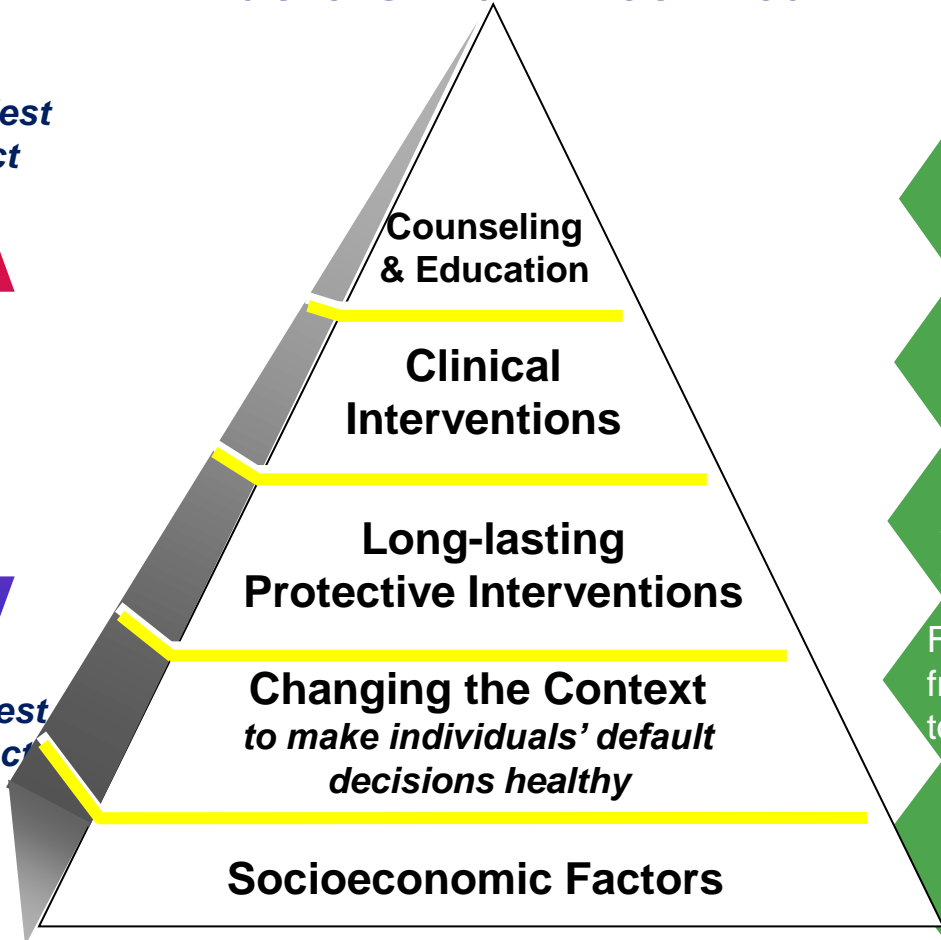
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Factors that Affect Health

Smallest Impact



Largest Impact



Counseling & Education

Clinical Interventions

Long-lasting Protective Interventions

Changing the Context
to make individuals' default decisions healthy

Socioeconomic Factors

Eat healthy, be physically active

Rx for high blood pressure, high cholesterol, diabetes

Immunizations, smoking cessation, alcohol SBI

Fluoridation, smoke-free laws, alcohol & tobacco taxes

Poverty, education, housing, inequality

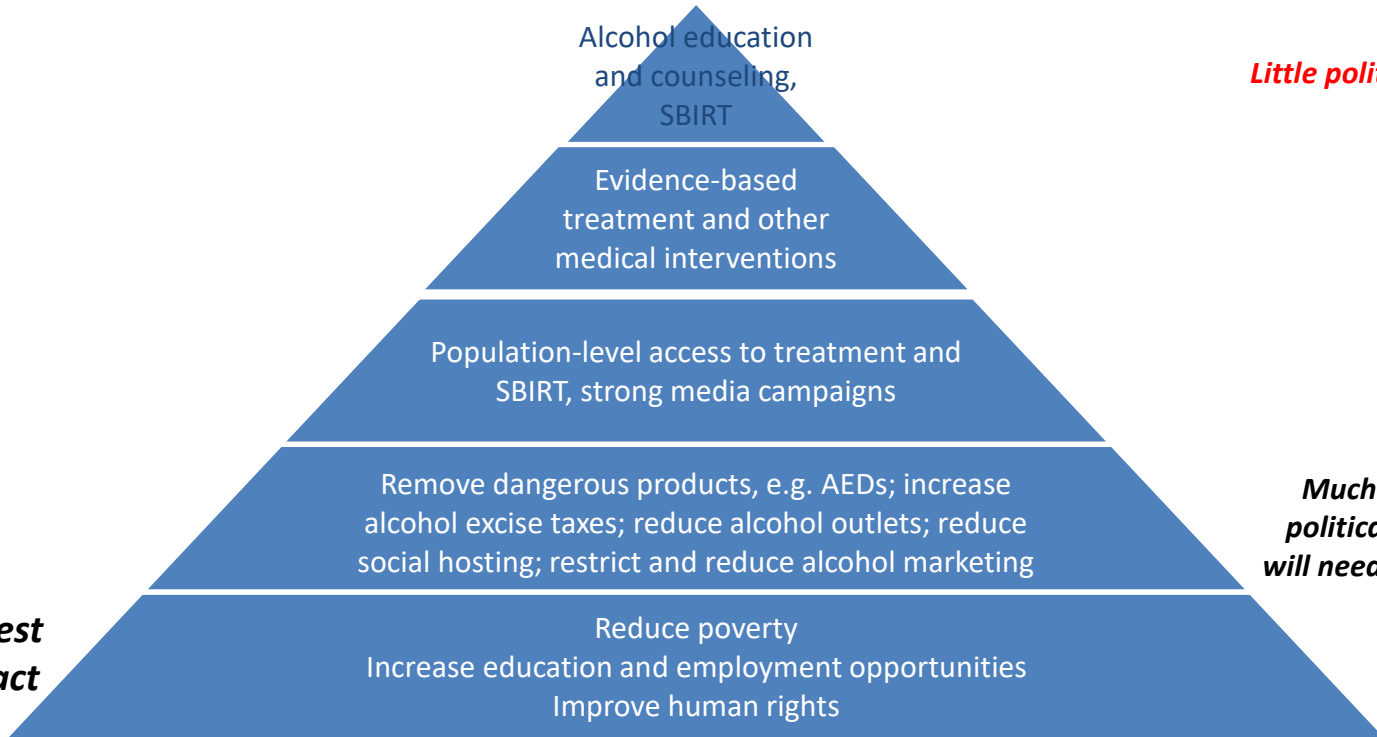
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Health impact pyramid applied to alcohol

***Smallest
Impact***



***Largest
Impact***



Little political will needed



***Much
political
will needed***

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What to do?

- Screening, brief intervention and referral to treatment (SBIRT)
 - Promising, including e-SBI
 - Treatment – the ethical responsibility of a humane society but...
 - Important to screen young people, but expensive and difficult to have enough touchpoints to capture them

Drinking-driving prevention

- .05 – implemented in Utah in January, under consideration in California and elsewhere
- Recommended by NASEM panel last year
- The standard in most of the wealthy countries, except USA
- Keep doing what we're doing, and do it better, BUT
- Can't let drinking-driving carry all the water

What does not work, at least in isolation:

- The impact of education and persuasion programs tends to be small at best.
- When positive effects are found, they do not persist.
- Among the hundreds of studies, only a few show lasting effects (after 3 years) (Foxcroft et al. 2003).
- Media campaigns – IOM/NRC study doubtful that youth-oriented campaign can work, although adult-oriented campaign might.
- Casswell et al. in NZ – media campaigns can soften the ground for more effective policies

Community Guide Recommendations for Preventing Excessive Drinking

- **Recommendations:**
 - Increase alcohol taxes
 - Regulate alcohol outlet density
 - Dram shop (commercial host) liability
 - Avoid privatization of alcohol sales
 - Maintain limits on days of sale
 - Maintain limits on hours of sale
 - Enhance enforcement of laws prohibiting alcohol sales to minors

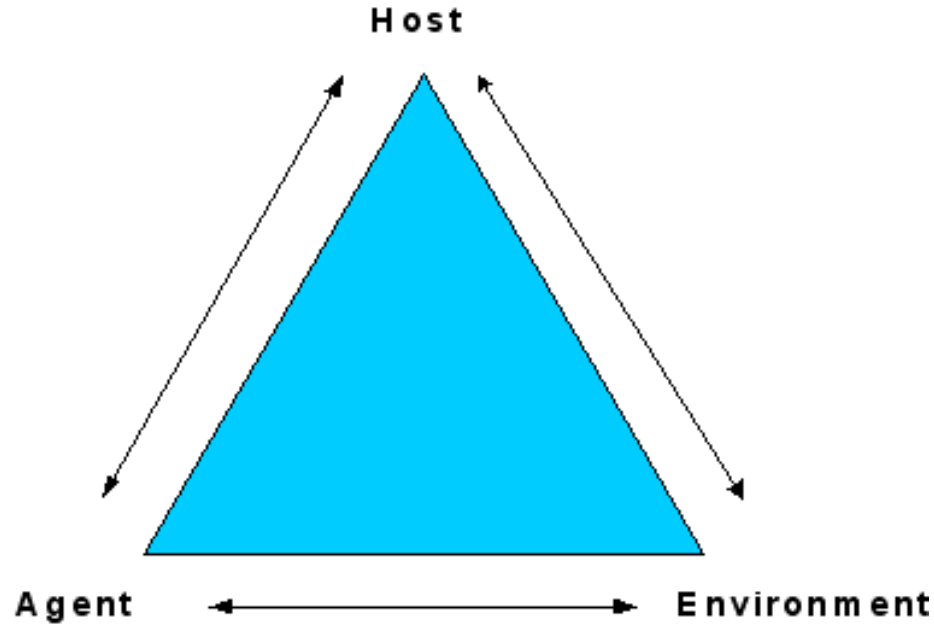
Why do young people drink?

- In the USA, at the state level, highly correlated with adult drinking
 - BUT, drinking less common than many people think - only 57% of persons 18+ had alcohol in the past month
- Price and availability of alcohol
- Religious and cultural factors
- Exposure to alcohol marketing

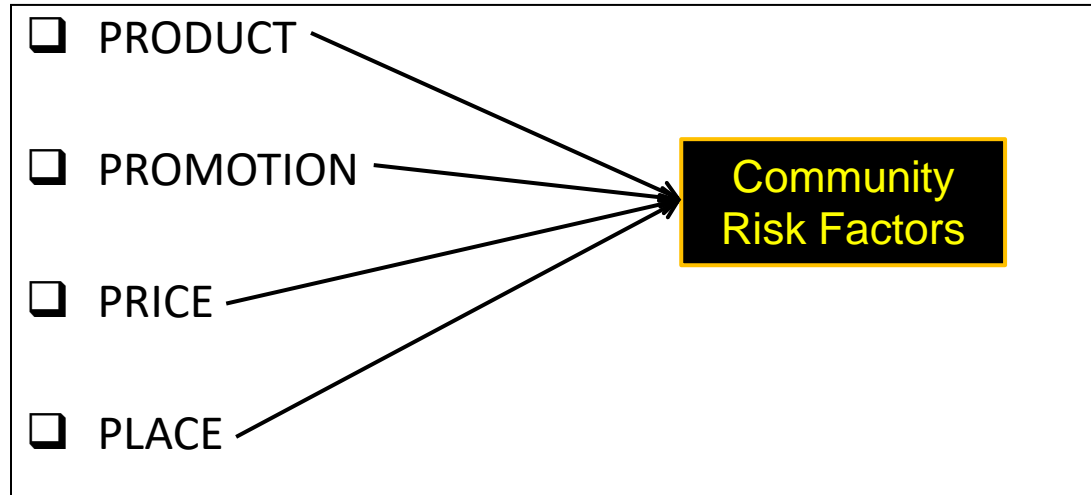
Alcohol Marketing

THE MOST EFFECTIVE FORM OF ALCOHOL EDUCATION

“Environment” in the public health model



Environmental Prevention: The “Four P’s”



“Alcopops”

- Industry spokespersons have described alcopops as designed for “entry-level drinkers” and those who do not like the taste of beer.
- Even though most of them have distilled spirits in them, the industry claimed they were made from beer, so that they could be:
 - Taxed lower
 - Sold in convenience stores
 - Advertised on TV

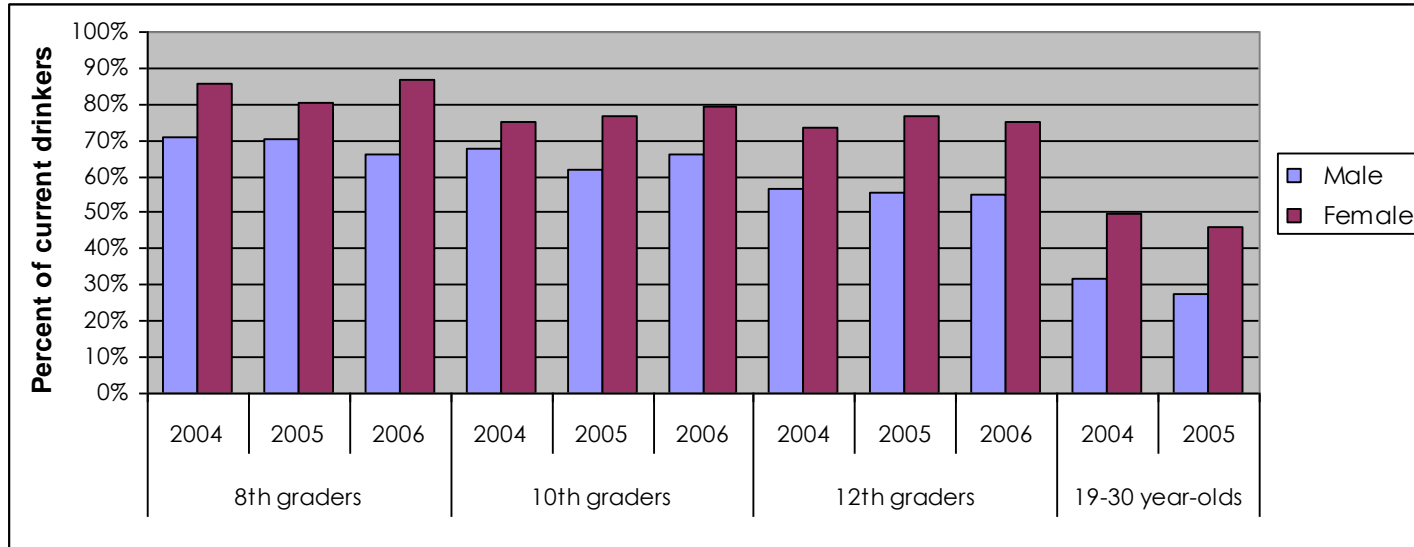


How popular are alcopops among kids?

- **Most popular with the youngest drinkers.**
- **78% of current 8th grade drinkers (past 30 days) drank alcopops in the past 30 days.**
- **71% of current 10th grade drinkers (past 30 days) drank alcopops in the past 30 days.**
- **65% of current 12th grade drinkers (past 30 days) drank alcopops in the past 30 days.**
- **42% of current drinkers, age 19 to 30, drank alcopops in the past 30 days.**

SMIRNOFF ICE™ Premium Malt Beverage

Alcopops most popular with females in every age group



The next step...

Research findings on effects of alcoholic energy drinks on the drinker:

- Subjective perceptions of intoxication decreased (i.e. headache, weakness, dry mouth, perception of impaired motor coordination) compared to effects of drinking alcoholic non-energy drink
- However, according to objective tests, motor coordination and visual reaction time were still just as impaired. (ACER 30:598-605, 2006)
- AED drinkers more likely to engage in dangerous activities



And then...



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Young people – and then...



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PRODUCT

Supersized Alcopops: “Binge in a Can”



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What do we know about these?

- Despite an FTC-mandated label:
 - Consuming one can over the course of 2 hours can put youth and young adults well over .08 (Rossheim and Thombs 2018)
 - Even with the label, college students underestimate the number of drinks by 2 or more, with inaccuracy growing with potency (Rossheim et al., under review)
 - Sober young adults underestimated BAC following consumption of them compared to consumption of regular beer, and had 7 times greater likelihood of thinking they were below .08 when they weren't (Rossheim et al. 2018)
- The latest
 - They now come in a 14% version
 - YouTube is littered with videos of kids guzzling them
 - A mother and father were just killed in WA state this week in a car crash when they were hit by a woman who told police she'd "had a Four Loko"

| Alcohol Facts | |
|------------------------|------------------|
| Serving Size | 5 fl oz (148 ml) |
| Servings Per Container | 4 3/4 |
| <hr/> | |
| Alcohol By Volume | 12% |
| <hr/> | |
| Alcohol Per Serving | 0.6 fl oz |



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Hard Seltzer



Sparkling Water



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Policy response

- Feb 15, 2014: Olympia WA creates an “Alcohol Impact Area”
 - Bans sale of nine high alcohol products including Steel Reserve, Mickey’s, Four Loko
 - As of Oct 2016, banning as many as 64 specific products, including Colt 45, Joose, etc.



// **Sugar, rum, and tobacco,** are commodities which are no where necessaries of life, which are become objects of almost universal consumption, and which are therefore **extremely proper subjects of taxation.** //



Adam Smith

An Inquiry into the Nature and Causes of The Wealth of Nations,
1776

Also endorsed by recent Bloomberg Task Force on Fiscal Policy for Health

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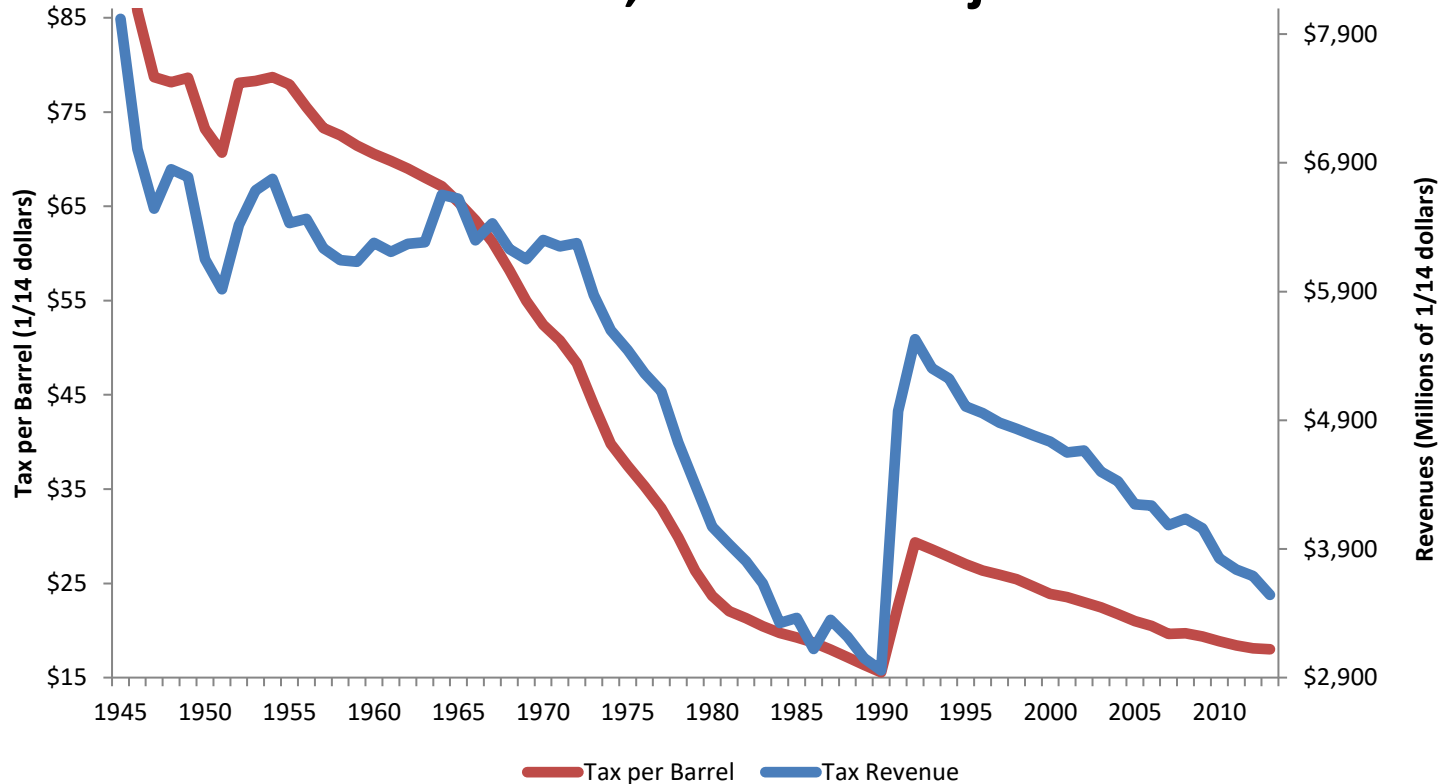
Evidence to support pricing policies

- Pricing policies based on sound economic theory – when the price of a product goes up, demand decreases
- Studies from around the world show that increased taxation on alcohol results in reduced rates of consumption, alcohol-related deaths, crime, violent assaults, traffic accidents.
- Minimum pricing in Canada has reduced alcohol harm: In British Columbia, 10% average price increase = 9% reduction in alcohol related crime, 9% reduction in hospitalizations
- Young people and heavy drinkers are particularly price sensitive
- Taxes on alcopops reduce consumption amongst young people
- Lower taxes on low alcohol products lead to product switching

Alcohol taxes and health

- Increases in prices (e.g., through raising taxes) are associated with reduced demand for alcohol consumption.
- Policies that raise alcoholic beverage taxes, and consequently prices, are effective in reducing alcohol use, abuse, and related health, economic, and social consequences:
 - Binge drinking
 - Drinking and driving
 - Violence and crimes
 - Reproductive outcomes (risky sexual behaviors, STI)
 - Liver cirrhosis mortality

Federal Beer Tax and Tax Revenues 1945-2013, Inflation Adjusted



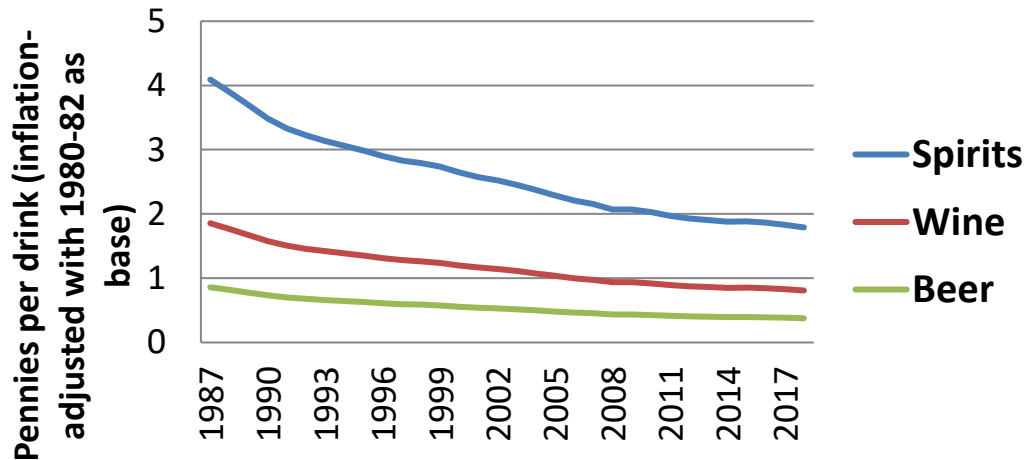
Source: *Brewers Almanac*, 2013, ATTB, 2014, and Chaloupka calculations

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Alcohol taxes in Massachusetts

- State alcohol taxes “poorly performing revenue source”

The Decline of Massachusetts State Alcohol Excise Taxes 1987-2018



Comparison:

In 2010, alcohol cost MA **\$1.93** per drink; **\$.77** of that paid directly by government. (Sacks et al. 2015)

Maryland's Experience

- Maryland 2011:
 - Increased the sales tax on alcohol by 3%
 - Raising close to \$70 million per year for dedicated causes
 - [Staras et al](#): led to 24% drop in gonorrhea cases, 1600 cases averted
 - Esser et al: 3.8% drop in alcohol sales ([American Journal of Drug And Alcohol Abuse, 2016](#))
 - Lavoie et al: 6% drop in alcohol-positive drivers on Maryland roadways ([American Journal of Preventive Medicine, 2017](#))
- Maryland 2020: seeking 1% increase in alcohol sales tax off-premises to fund health Equity Resource Communities

PLACE

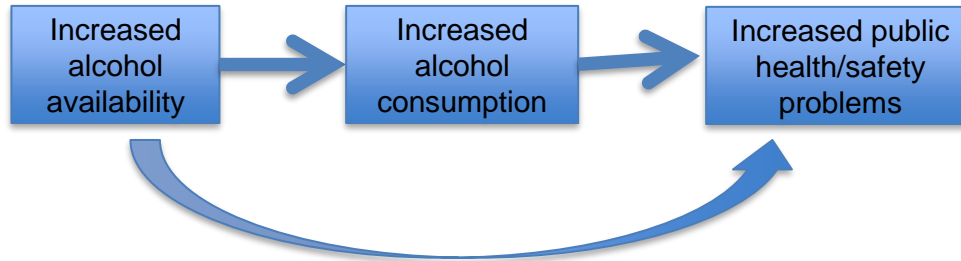


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PLACE: Number/Density of Alcohol Outlets

Outlet over-concentration:

A key public health and safety concern



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Density Affects Youth Drinking

- Long-term studies find the more alcohol ads kids see, they more likely they are to drink²⁰
- More outlets close to home can lead to early use, binge drinking, and drinking and driving²¹
- Retailers may be more likely to sell to underage customers due to competition²²
- Young adult injuries from accidents, assaults, and traffic crashes are related to off-premise density²³



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When the #
of alcohol
outlets
increases...



So do the
problems:

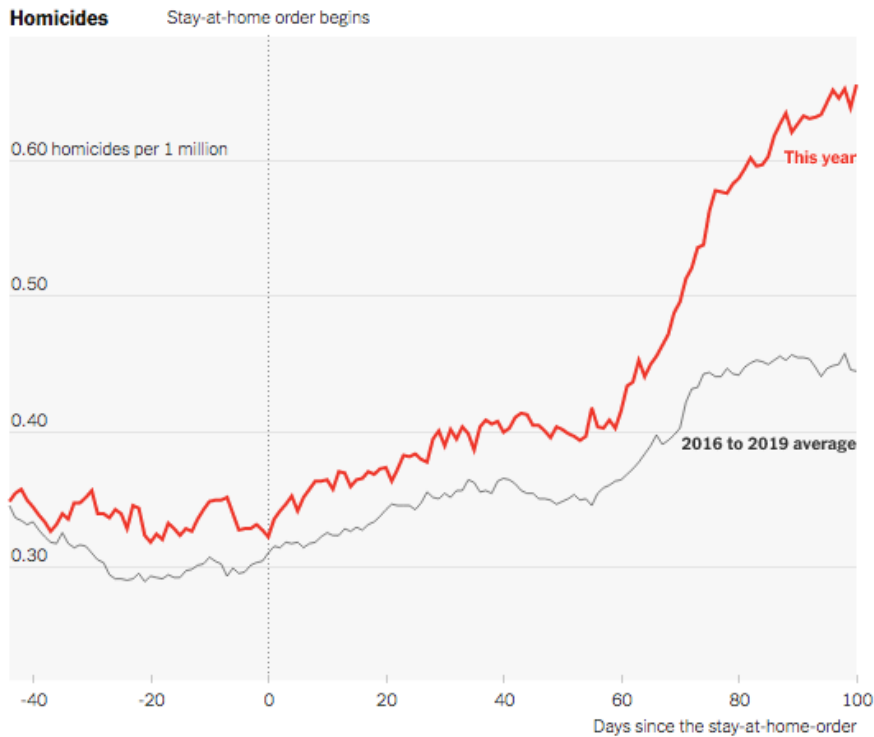
- violence/crime¹
- sexually transmitted infections²
- noise³
- injuries⁴
- property damage⁵



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WHO IS MINDING THESE STORES?

- Another “natural experiment”
- 47% of homicides attributable to alcohol use (CDC)
- Domestic violence calls may be canary in the coal mine
- Largely being ignored



Homicides -
37-city
average
(NYT
10/6/20)

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The importance of alcohol advertising and promotion

- Marketing plays a key role for the industry nationally and globally
 - Functions as significant barrier to entry
 - AB Inbev's cost of advertising per barrel sold significantly lower than its competitors – same is likely true of Diageo
 - Helps to generate oligopoly profits, which in turn support more marketing spend
 - Alcoholic beverages are the 8th most profitable industry – more profitable than soft drinks, less so than tobacco
 - Counters increasingly bad health news



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Alcohol ads on subways – a victory in NYC!

- 2009 Boston study: Alcohol ads viewed 18,269 times by BPS student transit passengers on average weekday
- 2012 – MBTA bans alcohol ads after youth-led campaign
- 2017 – MBTA rescinds the ban to remedy revenue shortfall
- 2017 – MTA in NYC bans alcohol ads on NYC buses, subway cars and stations



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Facebook

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Four Loko

15 hrs · 🌟

If this isn't you after Thanksgiving you're doing it wrong



Drink Responsibly // Phasex Projects

👍 Like

💬 Comment

➦ Share



👍 🤔 🍷 158

Top Comments ▾

69 shares

12 Comments



Write a comment...



H Cohen Baker this is me after four, four lokos haha

Like · Reply · 🍷 4 · 14 hrs · Edited



David Menso Fat one there

Like · Reply · 12 hrs

View 10 more comments

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Fireball Whiskey added a new photo.

May 22, 2014 · 🌐



Like · Comment · Share

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Instagram

DJ Khaled's Alcohol Advertising Past



One of DJ Khaled's deleted Instagram posts. Instagram

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DJ Khaled is not alone...

- Study by VicHealth in Melbourne, Australia released last year:
 - Looked at top 70 Australian Instagram influencers and their alcohol-related content
 - 73% of the top influencers featured alcohol brands in their Instagram accounts in the past year
 - 39% of these were undisclosed (did not feature a hashtag such as #sponsored #ad #collab or use the “Paid partnership” option)

Twitter

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Four Loko  @fourloko · 20h
This one... this one hits home



 **sarah of house stigs** @s_stigsxo · 21h

Where y'all sitting???

[Show this thread](#)



 34

 96

 482



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Snapchat

“Diageo pulls Captain Morgan Snapchat ads over age concerns” (2018)



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YouTube

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YouTube viewship

| Brand | Video | Number of Views |
|----------------|---|-----------------|
| Absolut | Swedish House Mafia-Greyhound Music Video | 63,122,693 |
| Michelob Ultra | The Pure Experience Pure Gold Super Bowl | 16,881,544 |
| Heineken | The Date | 10,527,900 |
| Michelob Ultra | Robots-Super Bowl 2019 | 8,591,159 |
| Bud Light | Game of Thrones X Bud Light | 7,477,604 |
| Budweiser | A Dream Delivered - Folds of Honor | 6,683,049 |
| Captain Morgan | Captain, Captain | 2,207,355 |
| Aviation Gin | The Process | 2,042,168 |
| Bacardi | Dance Floor | 1,275,194 |

Exposure on YouTube: What do we know?

- Assessment of 16 brands associated with highest underage past 30-day prevalence
 - Created fake profiles age 14, 17 and 19
 - Every profile was able to subscribe to each of the 16 official alcohol brand YouTube channels; on average 2/3 of the brands' channels were successfully viewed (Barry et al. 2015)

Alcohol advertising and youth

- **Jernigan et al. systematic review 2017:**
 - 12 longitudinal studies published since 2008
 - 9 unique cohorts containing 35,129 participants not previously reported on
 - Cohorts from Europe, Asia and North America
 - Range in duration from 9 months to 8 years
 - All found significant associations between levels of exposure to alcohol marketing and subsequent levels of drinking among youth



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US research on youth alcohol consumption by brand

- 2011 on-line survey of 1,031 young people ages 13-20
- Refuted common myths:
 - Kids drinking the same brands as adults - FALSE
 - Kids drink the cheapest brands - FALSE
 - Kids drink the brands that are easiest for them to obtain – FALSE
- Associated brand and type of alcohol with consequences
 - Kids who drink eight specific brands more likely to experience fights and injuries
 - Kids who drink supersized alcopops exclusively six times more likely to suffer injuries
- Found significant effects from exposure:
 - Kids with self-reported exposure to a brand three times more likely to drink that brand
 - Population-level exposure (Nielsen data) associated with five times greater likelihood of youth consuming that brand
 - Alcohol brands popular among underage drinkers more likely than other brands to advertise in magazines with high underage readerships, resulting in the disproportionate exposure of underage youth

Alcohol marketing: The case for causality

- “Bradford Hill” criteria for assessing causal relationships between environment and disease (Sargent and Babor 2020):
 - ✓ Strength of the association
 - ✓ Dose-response relationship
 - ✓ Temporal association (does the cause precede the effect?)
 - ✓ Consistency (across locations, populations, circumstances)
 - ✓ Specificity (one type of exposure leads to one specific outcome)
 - ✓ Plausibility (biological or psychological)
 - ✓ Experimental evidence
 - ✓ Coherence (is there evidence youth drinking goes up without exposure or goes down without it?)
 - ✓ Analogy (similar to findings on tobacco marketing?)

How does the effect work?

- Davis et al. 2019, followed 4840 young people from age 12 to 22
- Measured exposures:
 - (a) videos on the internet showing someone who is drunk or high;
 - (b) pictures or comments on a social networking site (e.g., Facebook) showing or talking about someone who is drunk;
 - (c) movies showing someone who is drunk or high;
 - (d) television programs showing someone who is drunk or high;
 - (e) alcohol advertisements on billboards, magazines, or somewhere else;
 - (f) songs that talk about getting drunk or high; and
 - (g) video games that show someone getting drunk or high

How does the effect work?

- Greater exposure to substance-related media can increase normative beliefs for peer alcohol use, which then predicts greater alcohol use during adolescence
- Social media is a SUPER PEER
- Implications for action:
 - Normative feedback integrated into interventions
 - Media literacy
 - “...effective public policies (e.g., buy-in from local, state, and federal government as well as from the platforms that provide access to content)”

The Super Peer




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DISCUS code: The content of beverage alcohol advertising and marketing materials should not primarily appeal to individuals below the legal purchase age.

Smirnoff Ice
January 24

Blend in by standing out ;)



Like · Comment · Share

792 12 105

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Effectiveness of industry self-regulation



- Review of over 100 articles from multiple countries
- Of the 19 studies evaluating marketing codes and 25 content analysis studies, all detected potentially harmful content
- 57 studies found high levels of youth exposure to alcohol advertising
- The current self-regulatory systems that govern alcohol marketing practices are not meeting their intended goal of protecting vulnerable populations

Alcohol marketing in the age of COVID-19

- "I think now, if there's still someone doing marketing and doing self-serving campaigns, these times were officially over and officially gone." -- Marcel Marcondes, AB Inbev U.S. C.M.O.
- AB Inbev says it has shifted its sports spending and is:
 - Converting its breweries to produce hand sanitizer for health care workers
 - Donating \$5 million to the Red Cross to convert 20 stadiums into blood drive donation centers
 - Creating “Open for Takeout”, subscribed to by 160,000 bars and restaurants, to help people locate outlets open in their zip code
 - Under the Natural Light brand, launching a student loan relief program to help students pay off loans in April
 - Under the Michelob Light brand, sponsoring streaming workouts
 - Under the BonV!V spiked seltzer brand, donating \$100,000 (matched by UN Women) to women helping their local communities during the pandemic



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Alcohol and COVID-19

- Short-term:
 - Alcohol suppresses multiple aspects of the body’s immune system response, with particular effects on the lungs’ ability to fight infection
 - Off-premise sales are up considerably, accompanied by an increase in police calls for domestic violence and emergency room presentations of child abuse
- Long-term:
 - People are putting in place now patterns of “drinking to cope” which will get them in trouble
 - Studies of the aftermath of SARS, the World Trade Center disaster, and Hurricanes Katrina and Rita show increases in alcohol use disorders and youth drinking 1-2 years after the event, associated with proximity to the event

AB Inbev COVID-19 ad



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Marketing and the new platforms

- BIG difference between traditional marketing and social media (Facebook, Instagram, YouTube, etc.):
 - Digital marketing is participatory
 - Digital marketing is algorithmic and data-driven
 - Digital marketing is dark and ephemeral
 - Digital marketing is material – creating in the moment experiences
 - Digital marketing is logistical – seamless flow from identification of preferences, to targeting of ad, to presentation of purchase opportunity

Source: Carah 2020

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WHO IS MINDING THESE STORES?

- The “stores” of data currently being collected are perhaps the most challenging area of alcohol marketing currently
- Current regulatory and self-regulatory codes are all about content and exposure – they don’t touch what digital marketing does (e.g. DARE kids)
- No longer dealing with content, volume and placement of advertising – now have data-optimized engagement with consumers


Counter-ads



Works Every Time

B.A.R.F
Beer and Alcohol Ruin Futures

Youth who drink alcohol are more likely to experience physical problems such as hangovers or illnesses.

 Oliver Youth Counter Ad Workshop @CounterAdWrkshp

This counter-ad was created by Baltimore City youth and students at the Maryland Institute College of Art during a workshop about underage drinking prevention.



Works Every Time

B.A.R.F
Beer and Alcohol Ruin Futures

In 2010, there were approximately 189,000 emergency room visits by persons under age 21 for injuries and other conditions linked to alcohol.

 Oliver Youth Counter Ad Workshop @CounterAdWrkshp

This counter-ad was created by Baltimore City youth and students at the Maryland Institute College of Art during a workshop about underage drinking prevention.

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What can be done?

- PRODUCT: alcohol impact areas, banning specific products
- PRICE: alcohol tax increases, minimum unit pricing
 - PLACE: licensing/zoning reform
- PROMOTION: local ad bans (billboards, public transit), retail signage restrictions and counteradvertising

What is to be done: social media

- Take on the platforms
 - We have given our democracy away to unregulated, highly profitable giants
 - Efforts at conversation with Facebook etc.
- Use local powers to address the marketing “bubble”
 - Outdoor advertising
 - Retail advertising
 - Others?

What is to be done: social media

- Transparency is crucial – must require disclosure of partnerships with influencers and peer-generated content
- Must disclose and permit regulation of “stores” that support data-optimized engagement with consumers, including young people
- BUT digital and social media are global platforms
- Global action is needed
- Who is taking the lead?

A WORLD FREE FROM ALCOHOL-RELATED HARMS

SAFER

Strengthen
restrictions
on alcohol
availability

Advance &
enforce drink
driving
counter-
measures

Facilitate
access to
screening,
brief
interventions
& treatment

Enforce bans/
comprehensive
restrictions on
alcohol
advertising,
sponsorship &
promotion

Raise prices
on alcohol
through
excise taxes
& pricing
policies

SAFER
A WORLD FREE FROM ALCOHOL-RELATED HARMS



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What is to be done: social media

- Framework Convention on Alcohol Control
 - Model is the global Framework Convention on Tobacco Control
 - 168 countries have signed it
 - Sets a floor for national action on tobacco control – countries can do more but sets the minimum
 - Has the ability to address global and cross-border actions
 - Could be a vehicle for limiting alcohol marketing in social media
 - We (USA) can't do this alone

HOPE

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Parting thoughts

“Hope is like a road in the country; there was never a road, but when many people walk on it, the road comes into existence.”

-- Lu Xun

THANK YOU!

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