

Alcohol Taxes and Public Health

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Why alcohol? Our favorite drug...

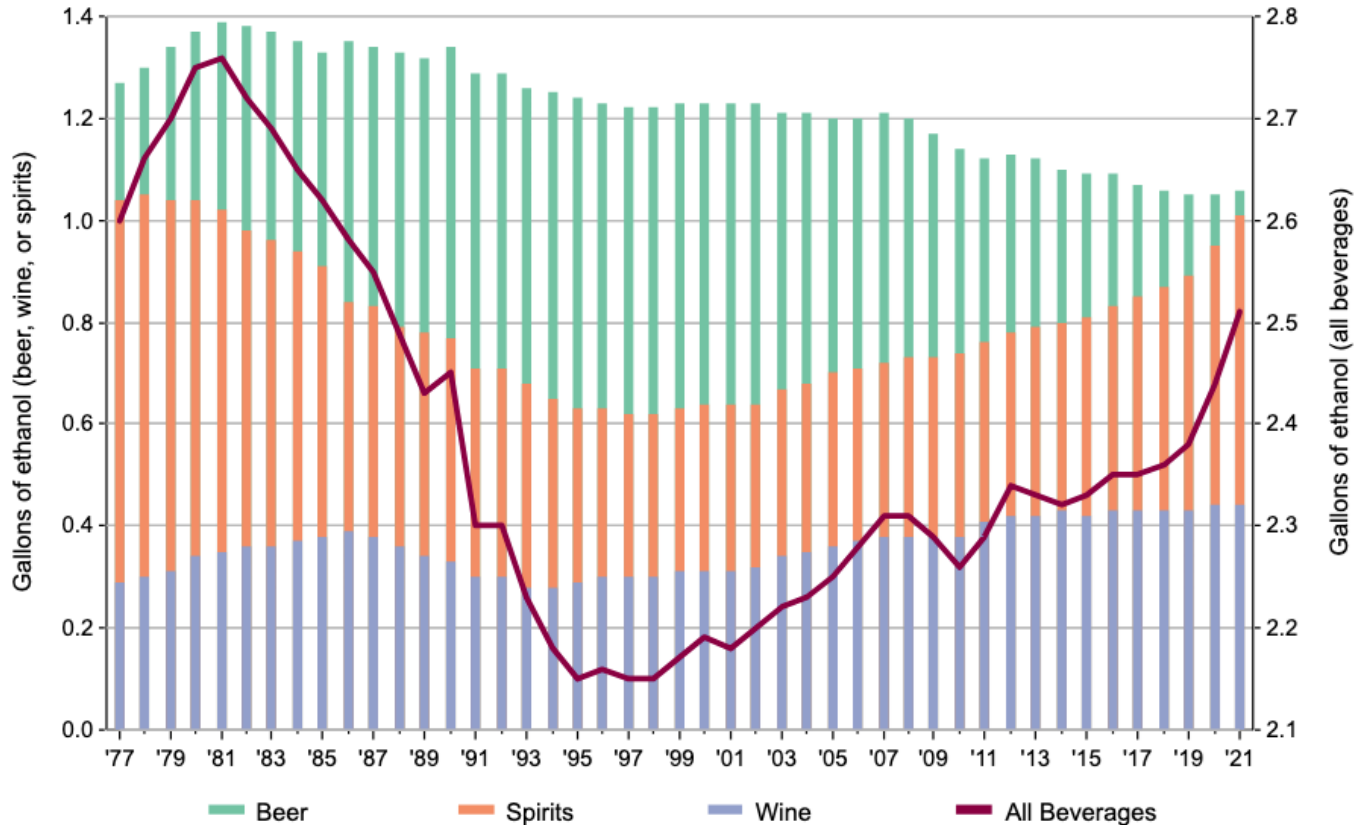
- Kills nearly 500 people per day in the U.S. (178,000 per year)
- 2,877 people per year in Oregon
- Number one drug among young people and adults
- Related to more than 200 disease and injury conditions, including seven cancers
- Major cause of social inequities:
 - Same amount of alcohol will cause much worse problems in a poor family, community, country
 - One study – alcohol causes more than a quarter of social inequities in mortality

Alcohol consumption on the rise

- Comparing 2001-2002 to 2012-2013, for the total population:
 - Alcohol use in the past 12 months grew 11.2%
 - High-risk drinking grew 29.9%
 - DSM-IV alcohol use disorders increased by 49.4%
- Increases were greatest among:
 - Women
 - Older adults
 - Racial/ethnic minorities
 - Individuals with lower educational levels and family incomes

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

Alcohol consumption on the rise



Rising Alcohol-Related Harms prior to the Pandemic (Nationwide)



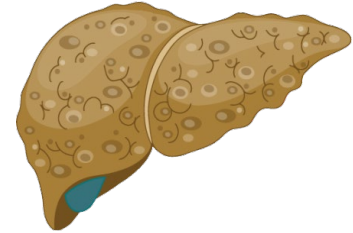
Alcohol-specific death rate 2000-2016

35%



Rate of ER visits per 100,000 population involving alcohol consumption, 2006-2014

47%



Age-adjusted death rate for alcoholic liver disease, 2000-2019

47%

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Rising Alcohol-Related Harms during the Pandemic (Nationwide)



Deaths involving alcohol,
2019-2020 (99,017)



25.5%



Age-adjusted death rate
from alcohol



25.9%



Largest increase of any
age group: 35-44 years old



39.7%

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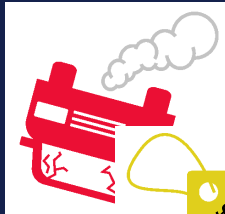
What happened during the pandemic?

- States termed alcohol sales “essential” - closed many other services, kept alcohol outlets open
- States liberalized carryout cocktails and home delivery, and have mostly left this in place
- Cities and states permitted more outdoor dining/alcohol consumption
- All of these are increases in alcohol availability – not surprising things got worse

Alcohol and health in the U.S.

- Causes 178,000 deaths per year (CDC)
 - 1 in 8 deaths among people of working age (18-64)
- Playing 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

\$249 billion



Motor vehicle
crashes



Criminal justice



Healthcare

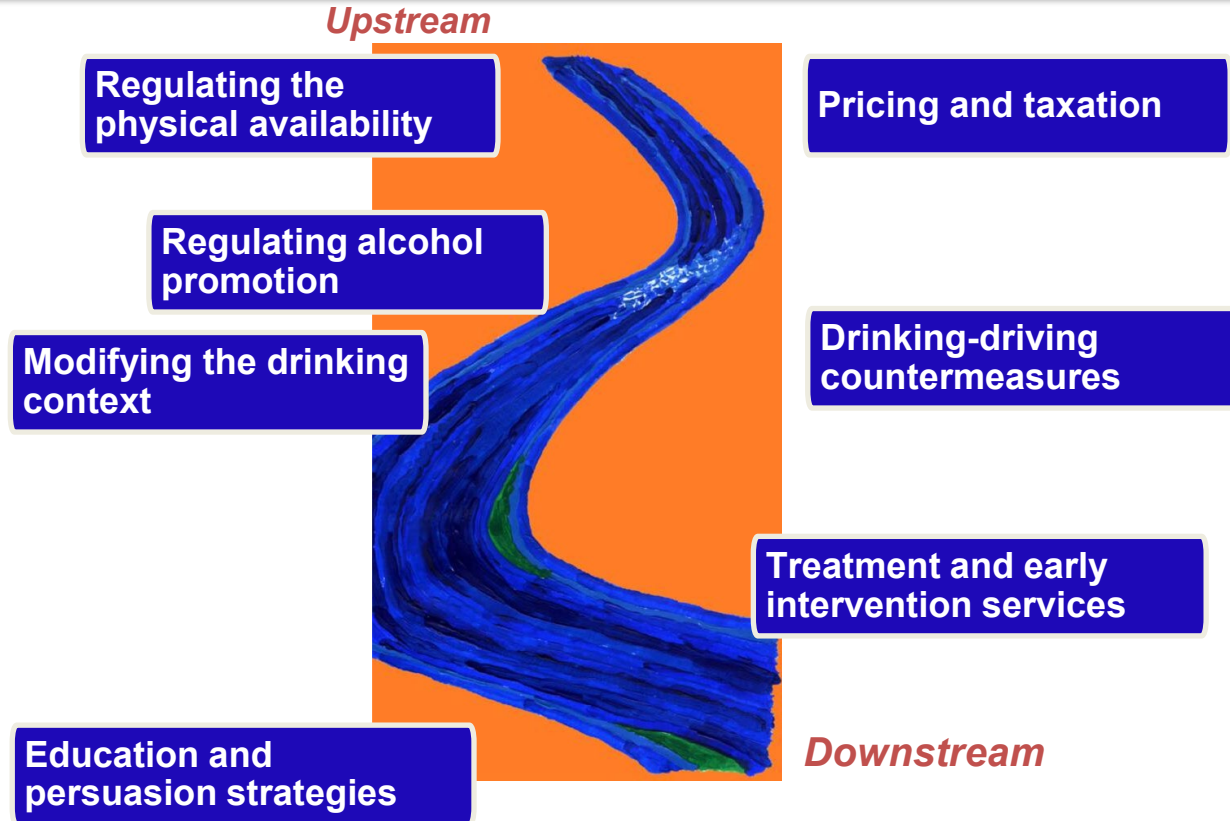


Lost productivity

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

Strategies and interventions to reduce alcohol-related harm upstream and downstream



What works: Community Guide Recommendations for Preventing Excessive Drinking

- 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

What works: WHO list of most effective and cost-effective interventions

- Alcohol taxes and other price controls
- Regulate physical availability through restrictions on time, place, and density of alcohol outlets
- Regulate alcohol advertising and other marketing

Each additional US\$1 invested in these will yield \$9.13 by 2030 (more than tobacco control [\$7.43] or prevention of physical inactivity [\$2.80])

Taxes

“**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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Bloomberg Task Force on Fiscal Policy for Health, April 2019

“If all countries increased their excise taxes to raise prices on tobacco, alcohol, and sugary beverages by 50 percent, over 50 million premature deaths could be averted worldwide over the next 50 years while raising over US \$20 trillion of additional revenues in present discounted value. Raising taxes and prices further in future years would save additional lives and raise even more revenues.”

Price

- Theoretical assumption: Increasing the economic cost of alcohol relative to alternative commodities will reduce demand
- Pricing policies include:
 - Increased taxes
 - Minimum pricing
 - Bans on ‘below cost’ sales and “happy hour” drink discounts
 - Low alcohol tax incentives/special taxes on certain products, e.g., alcopops

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 not an exception
- Taxes on alcopops reduce consumption amongst young people
- Lower taxes on low alcohol products lead to product switching

CPSTF Findings for Effects of Increasing Alcohol Taxes

- Experts in systematic review methodology and alcohol consumption reviewed 73 studies assessing the relationship between either tax rates or total price and excessive alcohol consumption or related harms
- Expected percentage change in alcohol consumption when the **price increases** by 1%:
 - Beer: 0.50 decrease (18 studies)
 - Wine: 0.64 decrease (22 studies)
 - Spirits: 0.79 decrease (21 studies)
 - Total alcohol: 0.77 decrease (11 studies)
- 6 studies reported that higher alcohol prices were associated with reduced youth drinking; three studies reported mixed results (9 studies)

CPSTF Findings for Effects of Increasing Alcohol Taxes

- Higher alcohol prices or taxes were consistently related to
 - Fewer motor vehicle crashes and fatalities (10 of 11 studies)
 - Less alcohol-impaired driving (3 of 3 studies)
 - Less mortality from liver cirrhosis (5 of 5 studies)
 - Less all-cause mortality (1 study)
- Effects also were demonstrated for measures of violence (3 studies), sexually transmitted diseases (1 study), and alcohol dependence (1 study)

2022 Systematic Umbrella Review: Impact of Taxes and Price on Alcohol Use

- Assessed all reviews that included studies of the relationship between alcohol prices or taxes and alcohol use: identified 30 reviews
- Higher alcohol taxes and prices were consistently related to lower total alcohol consumption
- Expected percentage change in alcohol consumption when the price increases by 1%:
 - Beer: 0.30% decrease
 - Wine: 0.60% decrease
 - Spirits: 0.65% decrease
- Very strong evidence for the effectiveness of alcohol taxes in targeting heavy drinkers and heavy episodic drinking

Health effects of alcohol taxes: specific studies

- Reduce:
 - Liver cirrhosis
 - Delirium tremens
 - Male suicide
 - Criminality
 - Hospitalizations
 - Alcohol-related disease mortality
 - Workplace injuries
 - STDs
 - IPV
 - Rape
 - Robbery
 - Severe violence towards children
- No impact on possible health benefits among moderate drinkers

Fairness

Alcohol taxes do not cover the costs of additional governmental services used by heavy drinkers. Costs include:

- Medical care
- Long-term care
- Criminal justice services



Alcohol taxes can be seen as a “user fee” or an “insurance premium” to cover the costs and risks incurred by consumers of alcohol.

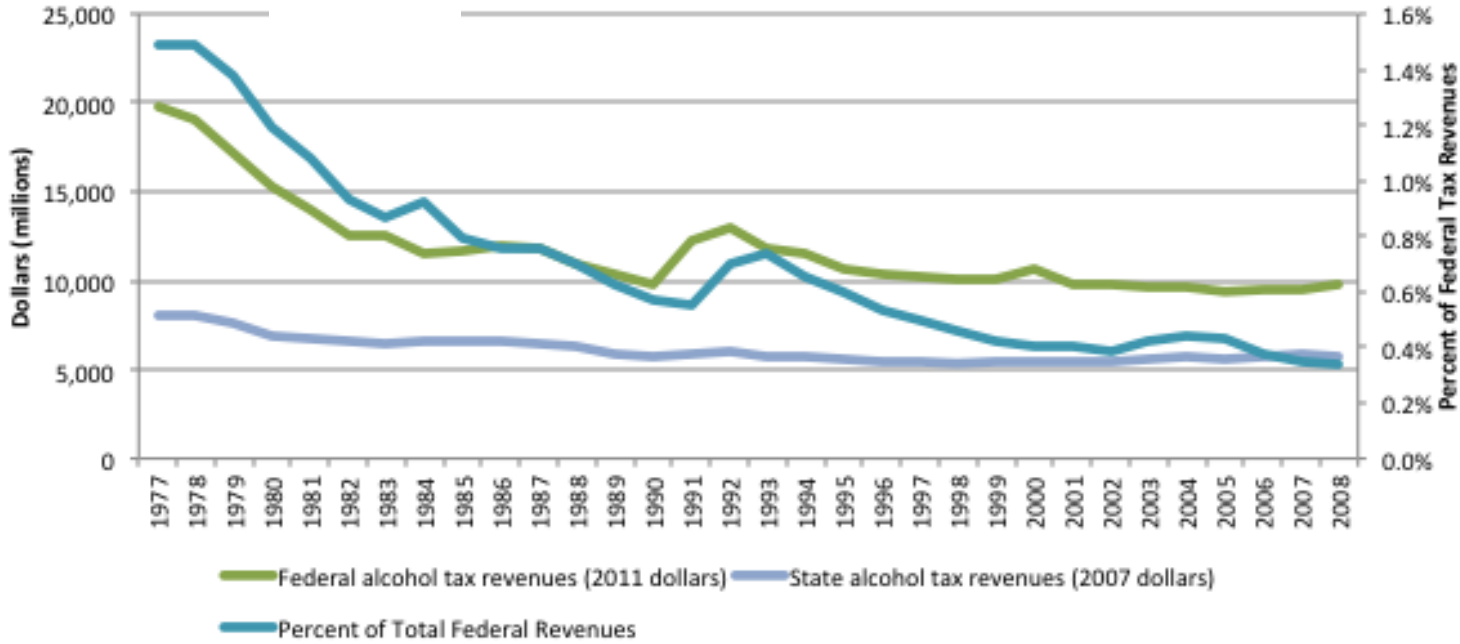
Economic Efficiency

Alcohol taxes correct for “negative externalities” of alcohol use - bad things that happen to others because of the drinker’s drinking (make consumers pay for the damage / costs they incur)

Alcohol taxes can also correct for inefficiencies of the alcohol marketplace - Alcohol producers are an oligopoly – two beer companies control more than 80% of the US market – enabling them to artificially manage prices.

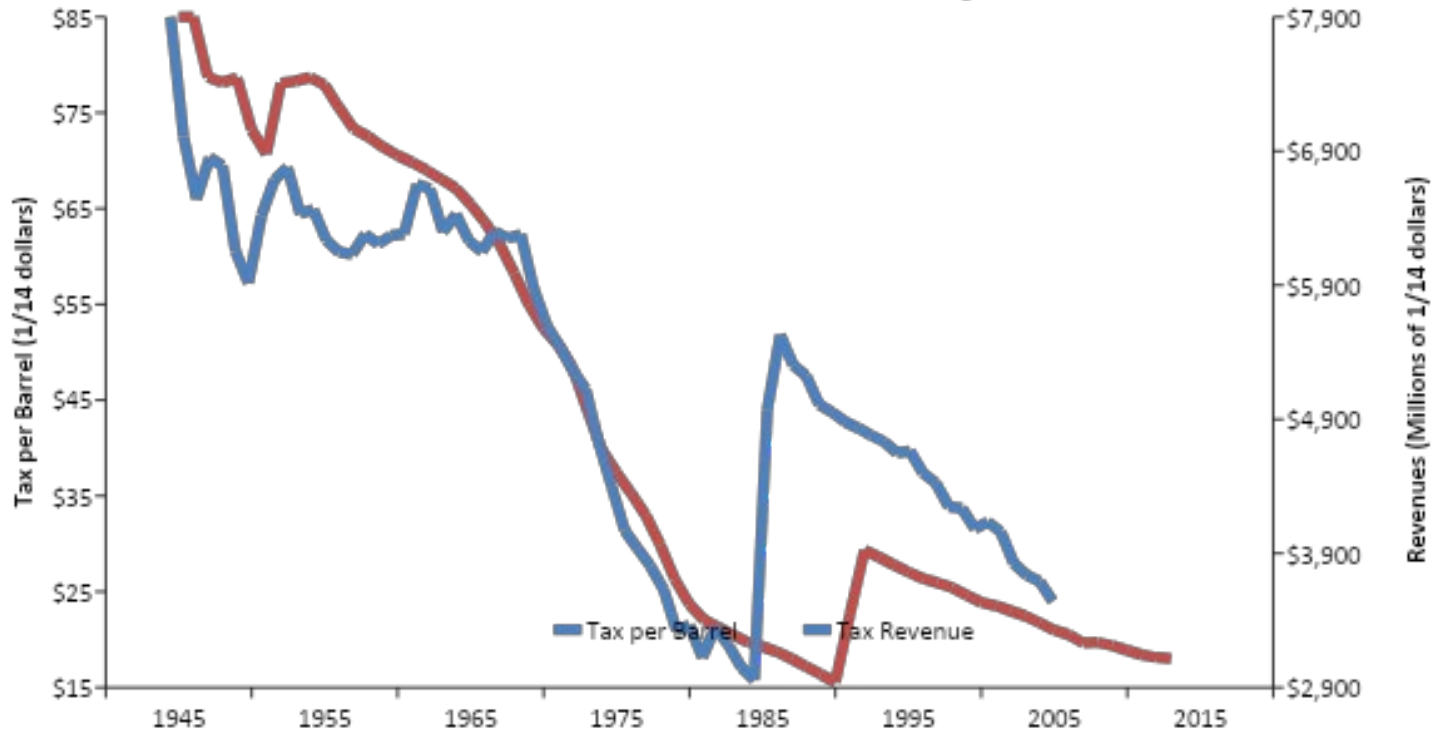
Revenue Needs

Figure 2: Decline in Federal and State Alcohol Excise Tax Revenues, 1977-2008



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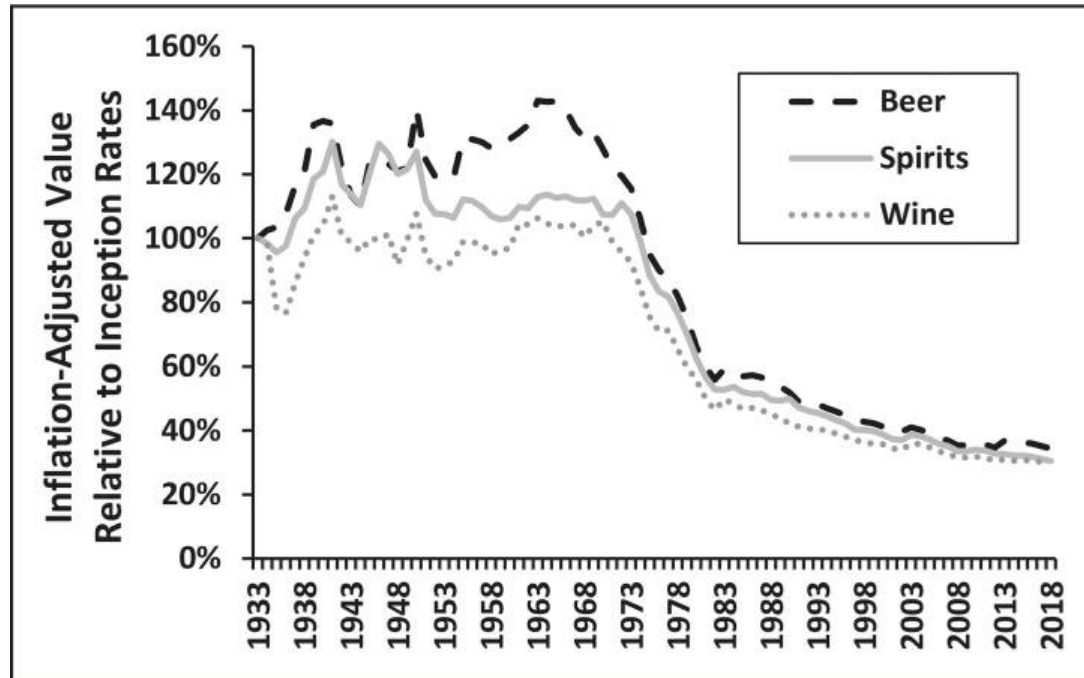
Federal Beer Tax and Tax Revenues 1945-2013, Inflation Adjusted



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

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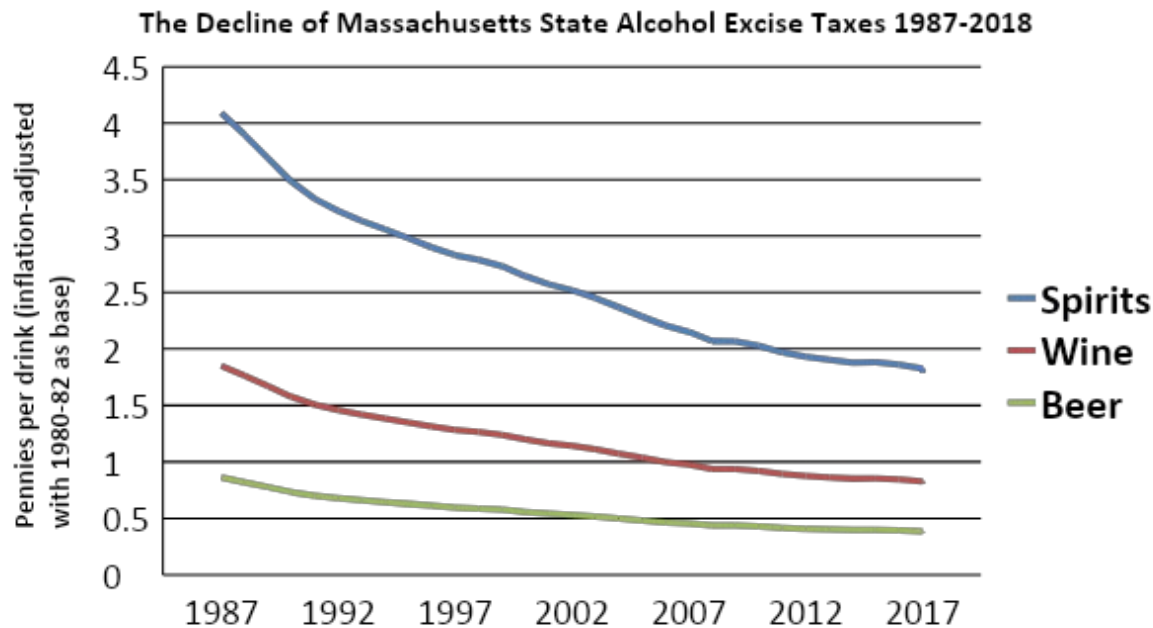
State Excise Taxes for Beer, Distilled Spirits, and Wine, U.S., 1933–2018



¹All rates were inflation-adjusted to 2018 dollars

The declining value of state alcohol taxes

- State alcohol taxes “poorly performing revenue source”

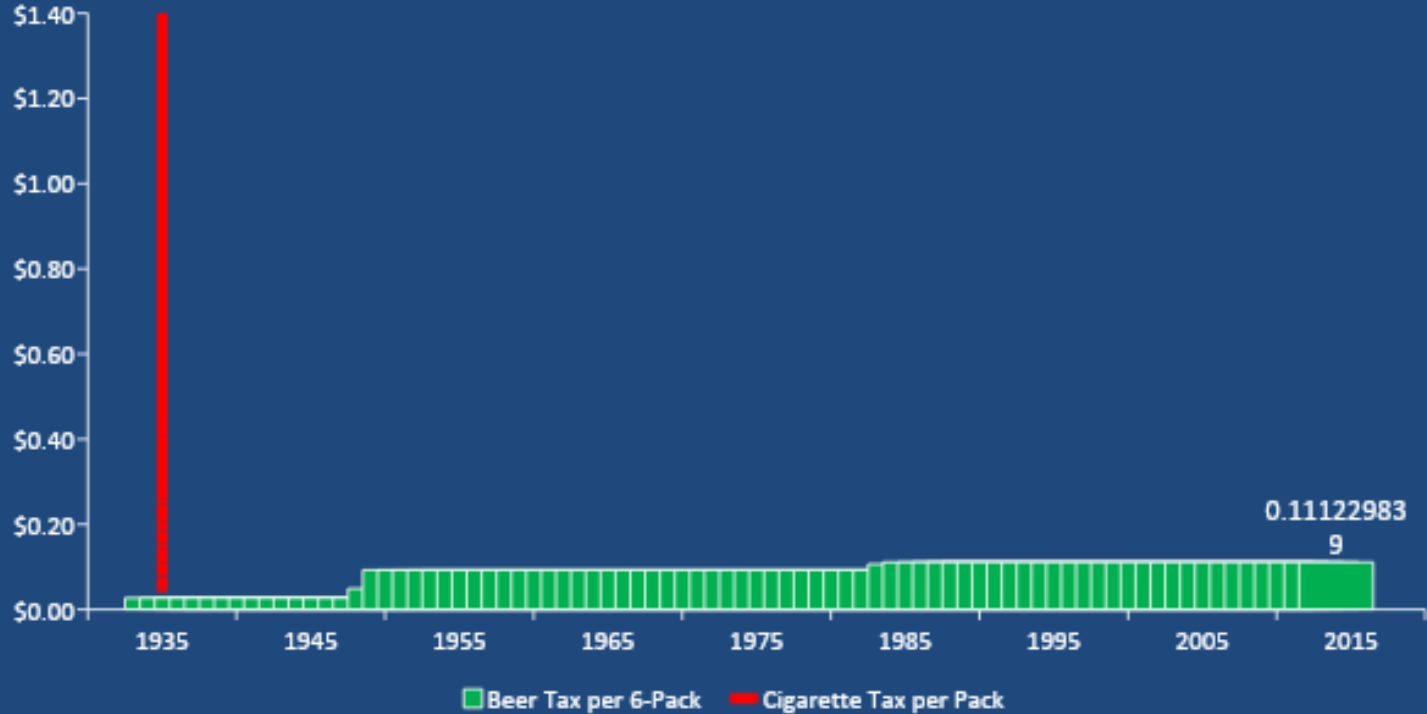


Comparison:

In 2010, alcohol cost OR **\$2.08** per drink; **\$.88** of that paid directly by government. (Sacks et al. 2015)

From 1991 to 2015, across all 50 states, average inflation-adjusted state alcohol tax rate fell 30% for beer, 32% for distilled spirits, 27% for wine. (Naimi et al. 2018)

Cigarette & Beer Excise Taxes Texas, 1935-2014



Sources: *Tax Burden on Tobacco*, *Brewer's Almanac*, and Chaloupka calculations

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Who Pays for Alcohol Taxes?

Distribution of Alcohol Consumption Among Adults (age 18+) in Oregon's Population



Average Additional Cost for Alcohol per Adult (18+) Per Year as a Result of the Tax Increase, by Drinking Category

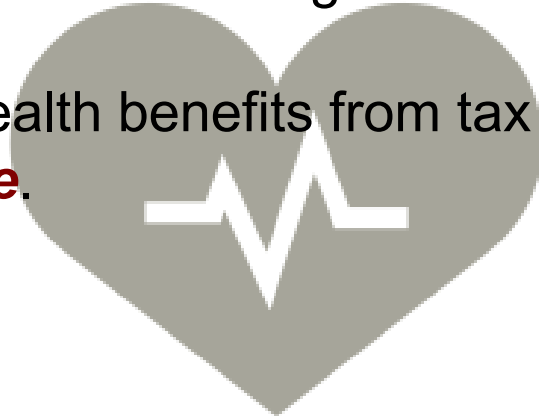
Tax/Drink	Excessive Drinkers	Non-Excessive Drinkers
\$0.05	\$12.60	\$2.48
\$0.10	\$23.76	\$4.67
\$0.25	\$48.54	\$9.54
Sales Tax		
5%	\$18.27	\$3.59

Impact on the Poor

Alcohol tax increases can also be *progressive*.

Persons with lower incomes are more price sensitive. Lower income persons will reduce alcohol use more than higher income persons.

Thus, the health benefits from tax increases are *progressive*.



Gross vs. Net Employment Impact

- **Gross Impact:**
 - Alcohol excise tax increases will lead to decreased consumption of alcoholic beverages
 - Loss of jobs in alcohol-dependent/related sectors
- **Net Impact:**
 - Money not spent on alcoholic beverages will be spent on other goods and services
 - Gains in jobs in other sectors
 - Increased tax revenues spent by government
 - Additional job gains in other sectors

Net Employment Impact

Potential Impact of Alcohol Tax Increases on Jobs

Tax/Drink	General Fund	Healthcare
\$0.05	824	390
\$0.10	1593	753
\$0.25	3650	1720
Sales Tax		
5%	754	302

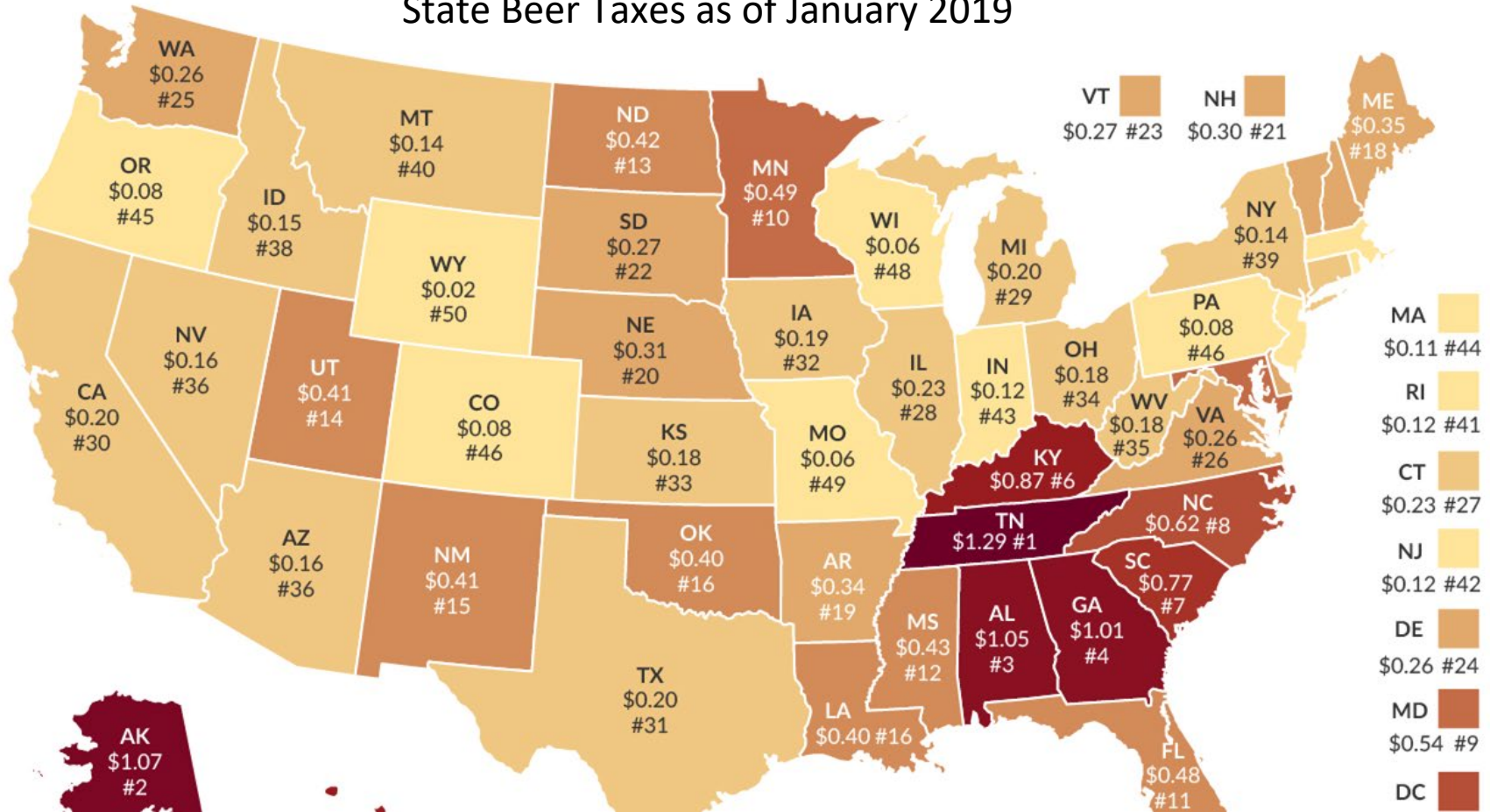
Public health goals: alcohol taxation

- Equalize based on alcohol content
- Index for inflation
- Set minimum price

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](#))

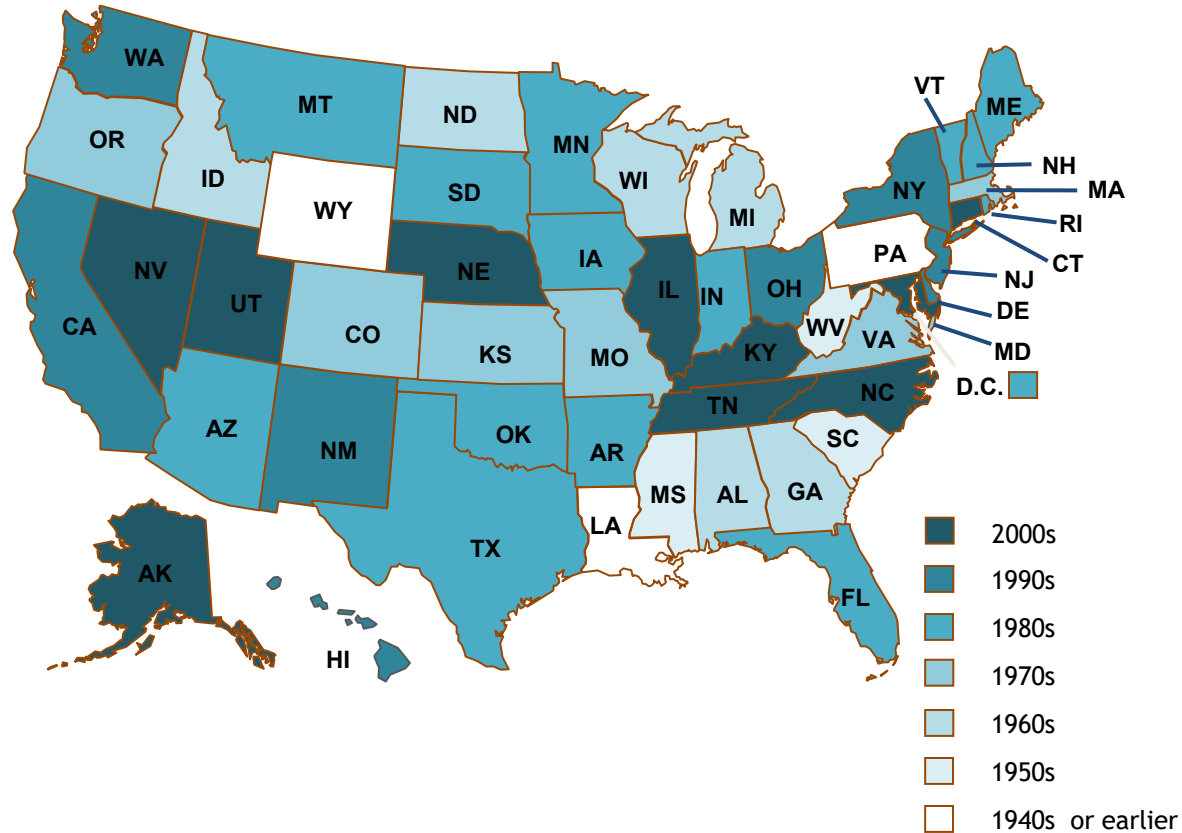
State Beer Taxes as of January 2019



Source: DISCUS, Tax Foundation

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Decade of Last Permanent Beer Tax Increase



Bottom Line

- Alcohol taxes are a win-win-win
 - Raise revenues that can be devoted to health care access, prevention, etc.
 - Reduce consumption and problems
 - Popular with the public
- IF, they are raised sufficiently often so that affordability does not increase
 - States needs to raise them more often
 - Illegal market tends to move with the tax increase

Summary

- Economic cost: \$2.08 per drink (2010)
- Increases in price reduce consumption and alcohol-related harms
- Tax erosion: 36% erosion in federal tax since 1991
- Industry argues taxes hurt the poor, kill jobs
 - Taxes much more targeted – heaviest drinkers pay the most, poor drinkers and their families reap the biggest benefit
 - Net jobs impact is positive
- 2017 federal alcohol tax cut:
 - Cut federal alcohol tax revenues by 16%
 - Brookings estimates
 - 281-569 more motor vehicle deaths
 - 1,550 additional alcohol-related deaths
 - 2/3 of the benefit went to the largest companies (DOT report)
- Alcohol taxes are an under-utilized and under-appreciated PART of a comprehensive approach to reducing alcohol-related harm

THANK YOU!

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