



MONDAYS WITH
D R MARK & D R MICHAEL

Monday, October 30, 2023 | 1:00 – 1:30PM

TOPIC #12

Intoxicating Health & Benefits Costs:
The Insidious Price of Alcohol



Intoxicating Health & Benefits Costs: The Insidious Price of Alcohol

Dr Mark Cunningham-Hill
Medical Director NEBGH



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What is thought to be the oldest finding of alcoholic beverages?

- A. Ötzi the “Iceman” discovered on 19 September 1991, in the Ötztal Alps at the border between Austria and Italy had traces of alcohol in his stomach. Ötzi is thought to be 5,500 years old
- B. Evidence of wine making at archaeological sites in Georgia 8,000 years ago
- C. 9,000 years ago a fermented drink of rice, honey, and fruit was recovered from early pottery in China
- D. Cave paintings found in the Lascaux caves near Montignac, France showed images that experts believe depict early wine making. The paintings are about 17,000 years old.



On average how much alcohol do people in NYS drink per person per year?

- A. 17.7 gallons alcoholic beverages (1.36 gallons of ethanol)
- B. 27.4 gallons alcoholic beverages (2.22 gallons of ethanol)
- C. 34.5 gallons alcoholic beverages (2.63 gallons of ethanol)
- D. 59.5 gallons alcoholic beverages (4.83 gallons of ethanol)



Which statement is correct when comparing alcohol abuse vs other substance abuse?

- A. Alcohol abuse costs employers more than other substance abuse
- B. Alcohol abuse costs employers less than other substance abuse
- C. Alcohol abuse costs employers the same as other substance abuse
- D. Alcohol and illicit substance abuse are both declining



The CO\$T of Excessive Alcohol Use

A Drain on the American Economy



\$249
billion loss

www.cdc.gov/alcohol



- Excessive alcohol consumption cost the United States \$249 billion in 2010. This cost amounts to about \$2.05 per drink, or about \$807 per person.
- Costs due to excessive drinking
 - Losses in workplace productivity 72%
 - Health care expenses 11%
 - Other costs (17%) due to a combination of criminal justice expenses, motor vehicle crash costs, and property damage.
- Excessive alcohol use cost states and DC a median of \$3.5 billion in 2010, ranging from \$488 million in North Dakota to \$35 billion in California.
- Binge drinking was responsible for 77% of the cost of excessive alcohol use
- About \$2 of every \$5 of the economic costs of excessive alcohol use were paid by federal, state, and local governments.

<https://www.cdc.gov/alcohol/data-stats.htm>

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Drinking levels set by the NIAAA:

	WOMEN 	MEN 
Moderate Drinking	 / day	 / day
Low-risk Drinking	\leq  / single day or \leq  / week	\leq  / single day or \leq  / week
Binge Drinking	 / 2-hours	 / 2-hours
Extreme Binge Drinking	 + / 2-hours	 + / 2-hours
Heavy Drinking	Binge drink on 5+ days in the past 30 days	

 = 1 Drink

What Is a Standard Drink?

12 fl oz of
regular beer



8–9 fl oz of
malt liquor
(shown in a
12 oz glass)



5 fl oz of
table wine



1.5 fl oz shot of
distilled spirits
(gin, rum, tequila,
vodka, whiskey, etc.)



about 5%
alcohol



about 7%
alcohol



about 12%
alcohol



about 40%
alcohol

Underestimating Alcohol Consumption

- Studies vary but there is a high level of under reporting as what is said to be drunk doesn't match the amount of alcohol sold!
- Standard surveys asking about drinking habits alcohol consumption by approximately 40%-50%
 - Higher underestimation in young males and middle-aged women
- Other investigators found the level of under-reporting was:
 - Low-risk drinkers – 76%
 - Medium-risk drinkers – 62%
 - High-risk drinkers – 49%



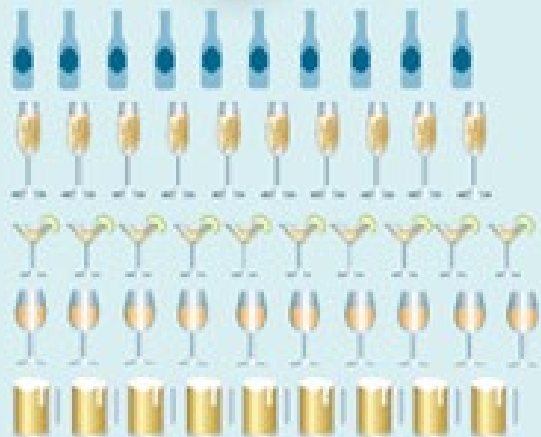
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A small percentage of U.S. adults who drink consume more than half the alcoholic drinks

92% consume

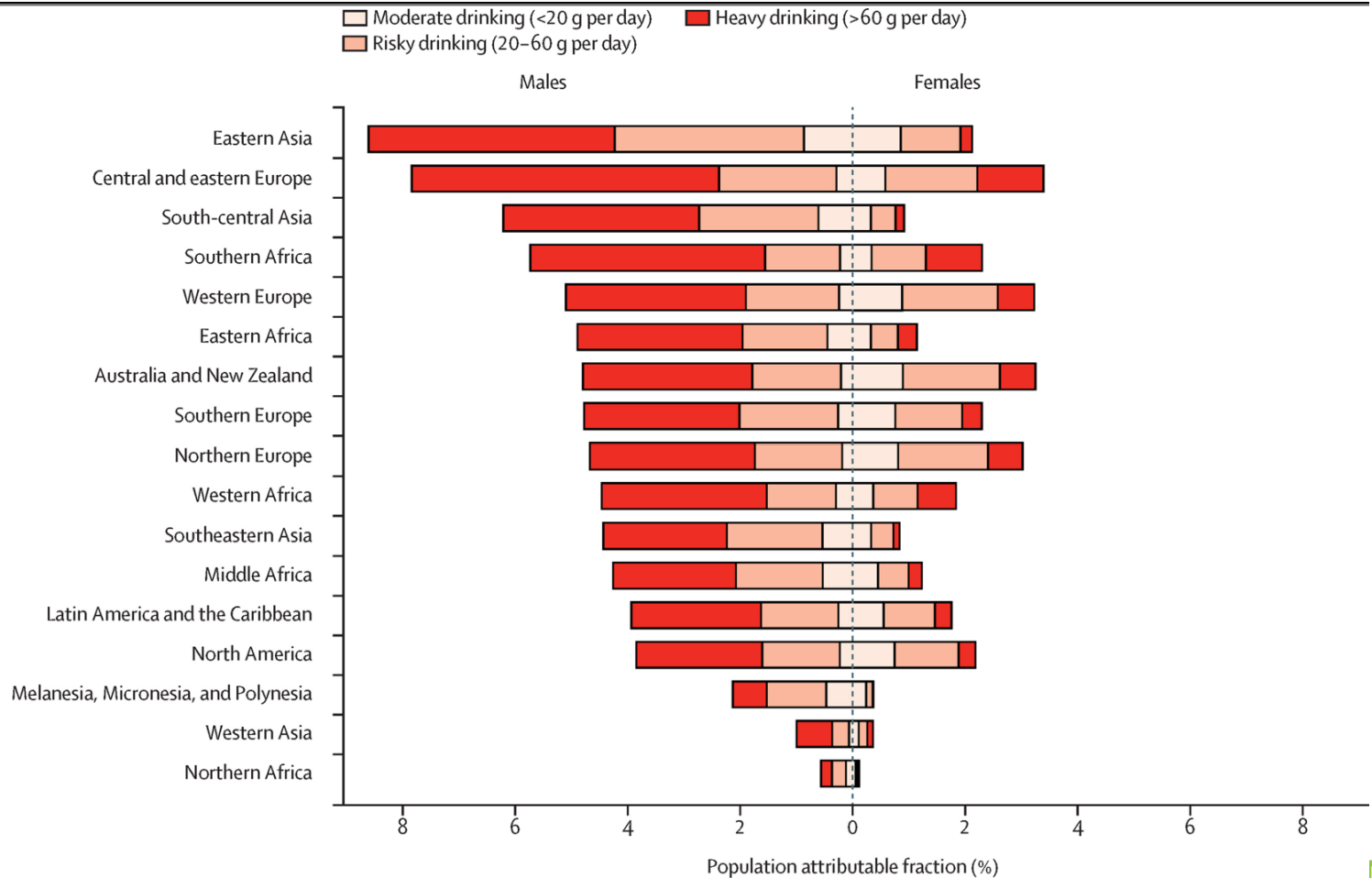
49%



8% consume

51%





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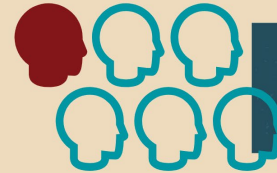


Short-Term Health Risks

- Excessive alcohol use, often binge drinking can result in many immediate adverse effects:
 - Injuries, such as motor vehicle crashes, falls, drownings, and burns
 - Violence, including homicide, suicide, sexual assault, and intimate partner violence
 - Alcohol poisoning
 - Risky sexual behaviors, including unprotected sex or sex with multiple partners. These behaviors can result in unintended pregnancy or sexually transmitted diseases, including HIV
 - Miscarriage and stillbirth or fetal alcohol spectrum disorders (FASDs) among pregnant women
 - Sleep disturbance

Deaths Involving Alcohol Are Increasing

Death certificates listing alcohol **increased 25.5%** from 78,927 in 2019 to 99,017 in 2020, the first year of the pandemic. And **10% more** to 108,891 in 2021.



Alcohol was listed in **1 in 6 (16%) of drug overdose deaths** in 2020 and 2021.

Alcohol-related traffic fatalities **increased by 14% to 11,654** in 2020—the highest since 2008.



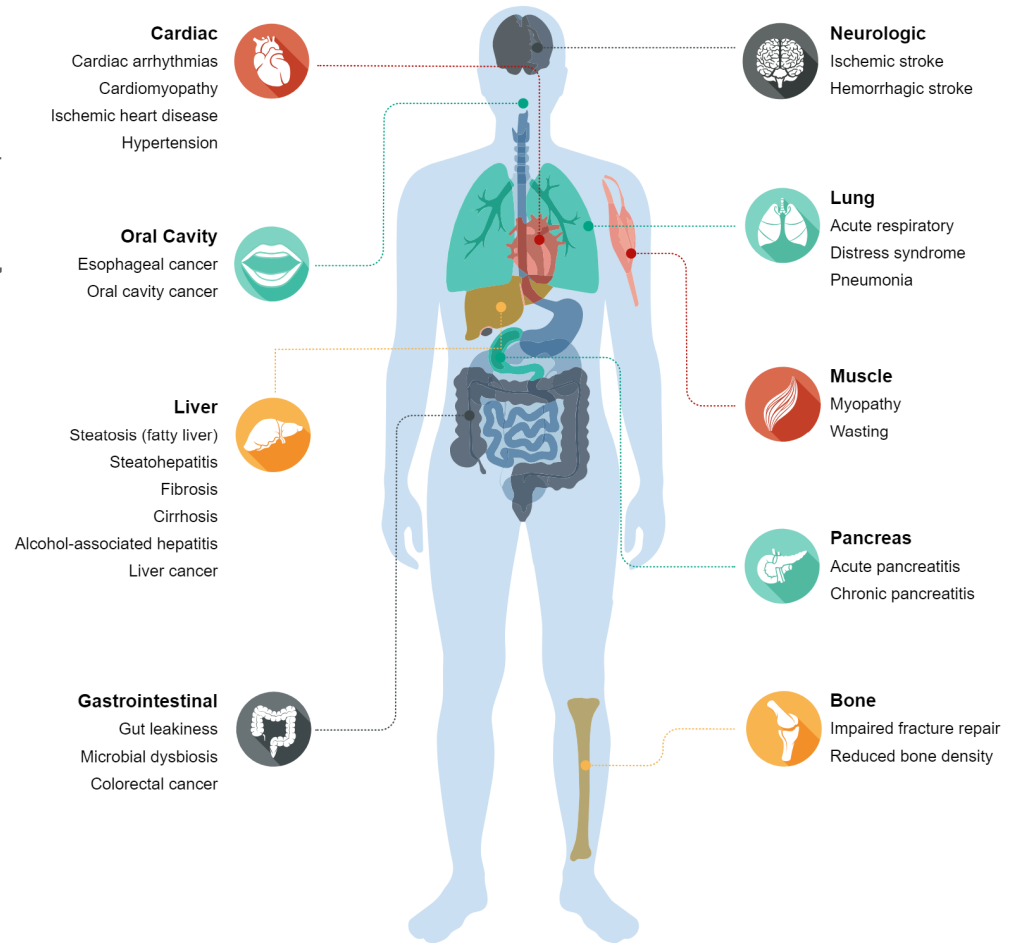
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Longer-Term Risks

- High blood pressure, heart disease, stroke, liver disease, and digestive problems
- Cancer of the breast, mouth, throat, esophagus, voice box, liver, colon, and rectum
- Weakening of the immune system, increasing the chances of getting sick
- Learning and memory problems, including dementia and poor school performance
- Mental health problems, including depression and anxiety
- Social problems, including family problems, job-related problems, and unemployment
- Alcohol use disorders, or alcohol dependence

Alcohol-Associated Organ Damage



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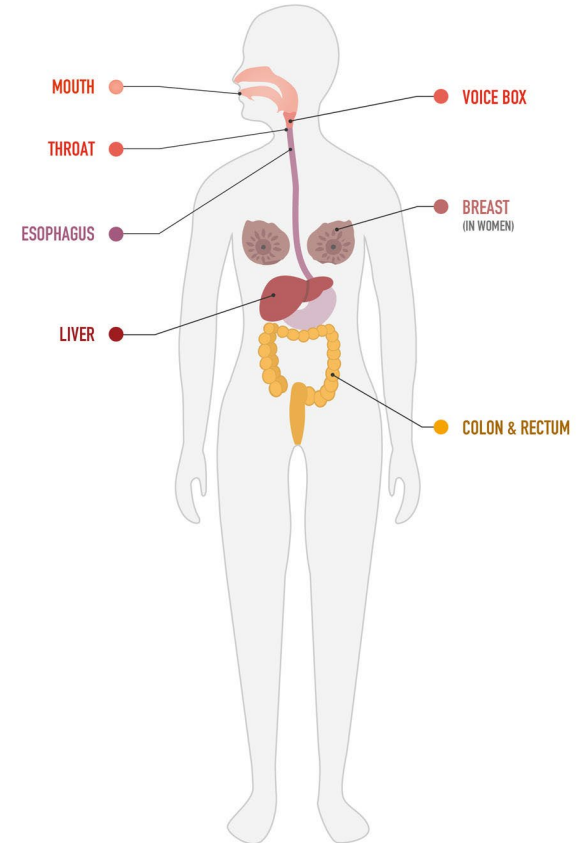
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Alcohol Consumption and Cancer

- Worldwide 4% of cancers are alcohol related
- 75% of those are in men
- The most common types of cancer attributable to alcohol consumption were:
 - Esophageal cancer (31.6%)
 - Liver cancer (17.3%)
 - Breast cancer (4.4%)
- Amount of alcohol consumed;
 - Heavy drinking accounted for 46.7% of the alcohol-attributable cancers
 - Risky drinking (defined as 20–60 g/d), accounted for 29.4%
 - Moderate drinking accounted for 13.9% of cases of alcohol-attributable cancers
- People who use both alcohol and tobacco have much greater risks of developing cancers of the oral cavity, pharynx (throat), larynx, and esophagus than people who use either alcohol or tobacco alone. The risk is multiplicative

NATIONAL CANCER INSTITUTE

Cancers Associated with Drinking Alcohol

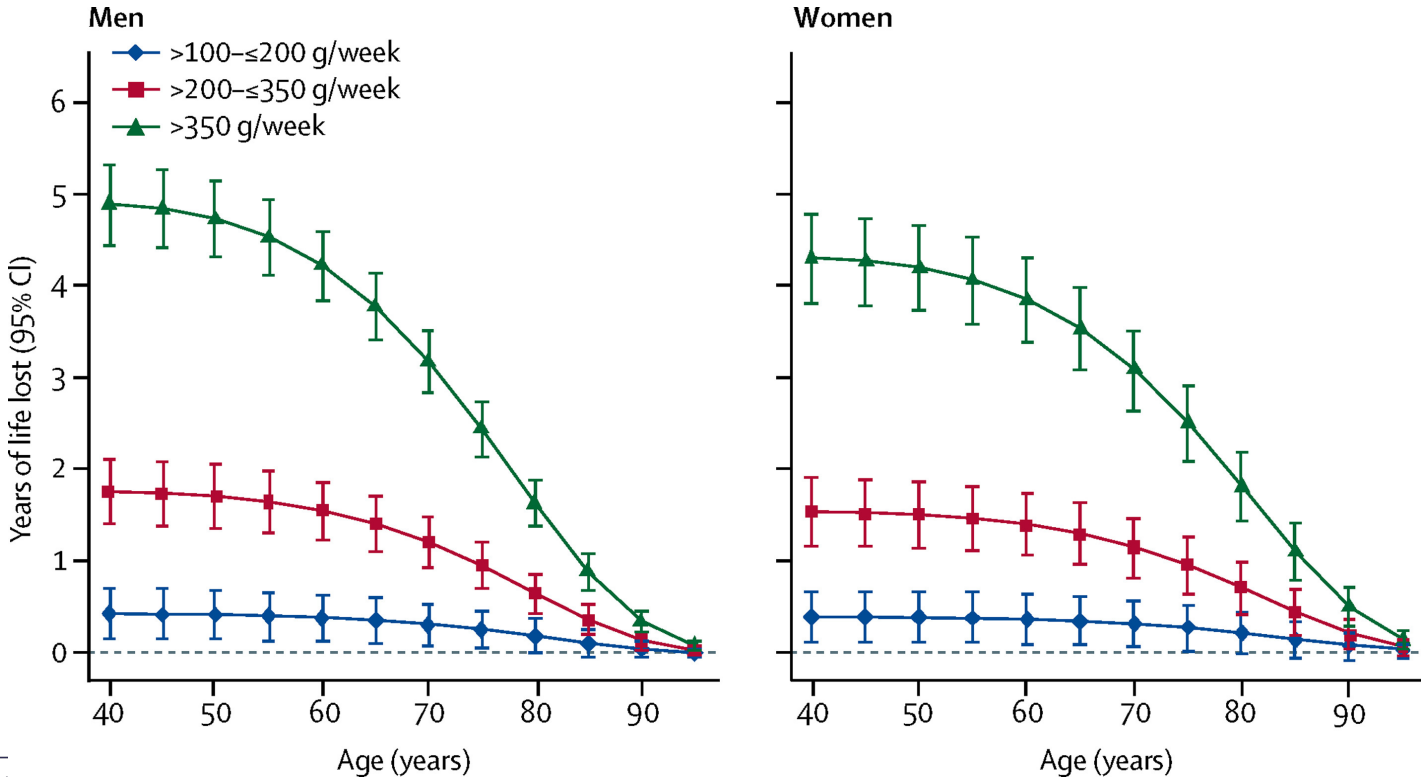


cancer.gov/alcohol-fact-sheet

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Life-expectancy



Underage drinking

- The 2021 Youth Risk Behavior Survey found that among high school students, during the past 30 days:
 - 23% drank alcohol.
 - 11% binge drank.
 - 5% of drivers drove after drinking alcohol.
 - 14% rode with a driver who had been drinking alcohol.
- Impact:
 - Excessive drinking is responsible for more than 3,900 deaths and 225,000 years of potential life lost among people under age 21 each year
 - Underage drinking cost the U.S. \$24 billion in 2010
- There is a relationship between underage drinking behaviors and the drinking behaviors of adult relatives



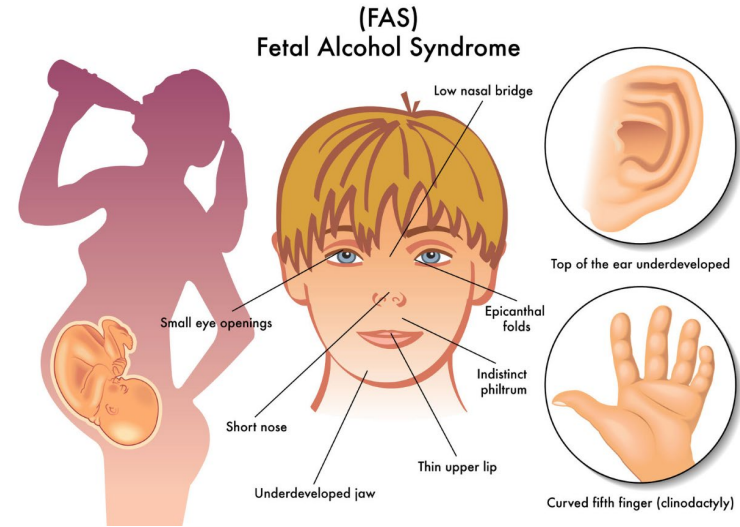
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Drinking in Pregnancy



- Fetal Alcohol Spectrum Disorder:
 - Abnormal facial features, such as a smooth ridge between the nose and upper lip (this ridge is called the philtrum)
 - Small head size
 - Shorter-than-average height
 - Low body weight
 - Poor coordination
 - Hyperactive behavior
 - Difficulty with attention
 - Poor memory
 - Difficulty in school (especially with math)
 - Learning disabilities
 - Speech and language delays
 - Intellectual disability or low IQ
 - Poor reasoning and judgment skills
 - Sleep and sucking problems as a baby
 - Vision or hearing problems
 - Problems with the heart, kidney, or bones



Workplace Issues

- Workers with alcohol problems are **2.7 times** more likely than workers without drinking problems to have injury-related absences.
- A hospital emergency department study found that **35%** of patients with an **occupational injury** were at-risk drinkers.
- Breath alcohol tests detected alcohol in **16% of emergency room patients injured at work.**
- Analyses of **workplace fatalities** showed that at least **11%** of the victims had been **drinking.**
- Large federal surveys show that **24% of workers** report drinking **during the workday** at least once in the past year.
- **20% of workers and managers** report that a **coworker's on- or off-the-job drinking jeopardized their own productivity and safety.**
- **14.7% of at-home workers** and **3.3% of other employees** admit to being impaired on the job every week



Employer Actions

Policy & Procedures:

- Alcohol and Drug Free Workplace Policies
- Substance Abuse Testing
- Legal Compliance
- Tracking absenteeism

Education and Awareness

- Employee education
- Supervisor Training

Company Events:

- Moderate alcohol and provide non-alcoholic beverages
- Designated driver or taxi/Uber options
- Limit or not cover alcohol expenditure

Support:

- EAP
- Behavioral health coverage
- Referral mechanism
- Flexible work options for treatment
- Return to work support
- ERG
- Supportive culture
- Employee wellbeing programs



A bottle of red wine and a glass of red wine are the central focus, set against a background of red grapes. The text is overlaid on the right side of the image.

Is a glass or two of red wine
good for me?



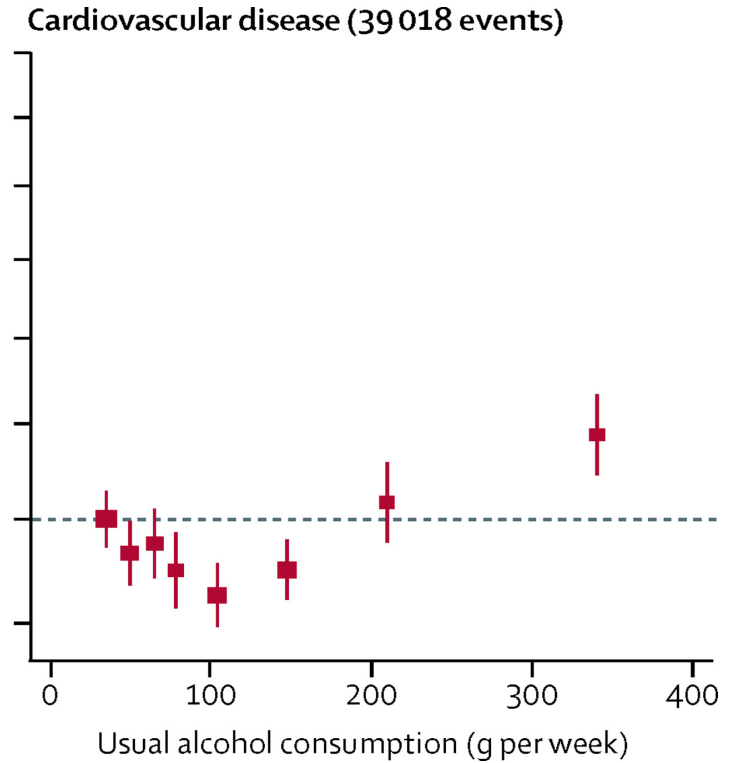
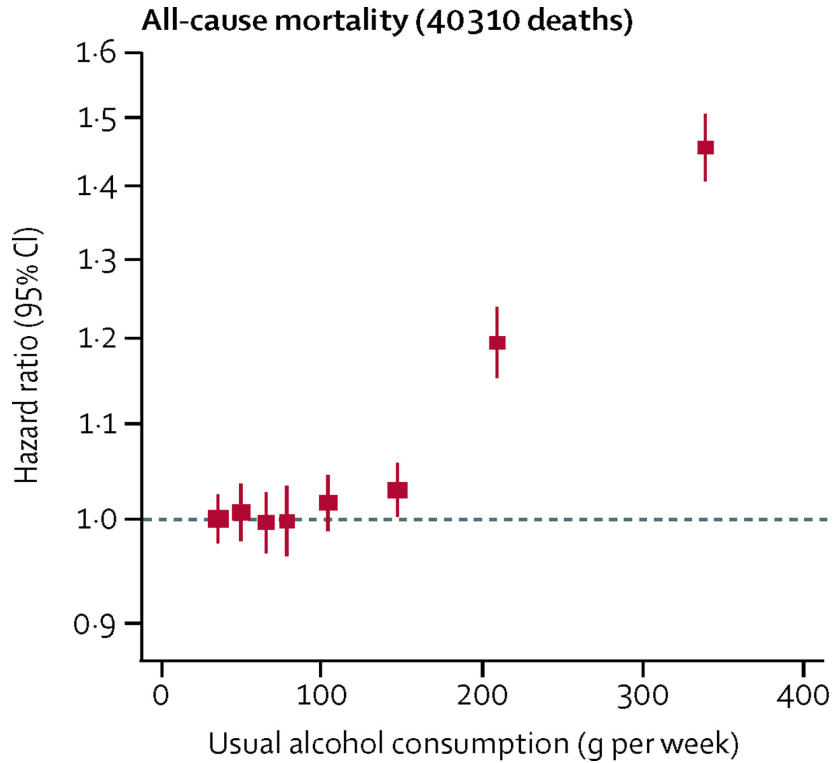
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Red Wine

- Various studies that have suggested that drinking red wine in moderate amounts may be cardio-protective and have other health benefits.
- Causal link not proven but may be because of its antioxidant, anti-inflammatory, and lipid-regulating effects.
 - Antioxidants reduce oxidative stress in the body. Oxidative stress has clear links with many diseases, including cancers and heart disease
 - Grape polyphenols might improve gut microbiota
 - Resveratrol may reduce blood pressure and increase high-density lipoprotein (HDL) cholesterol levels
 - Procyanidins help keep the blood vessels healthy.

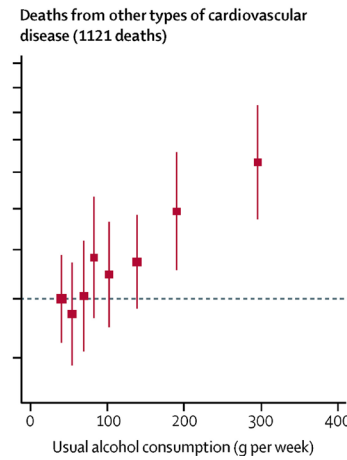
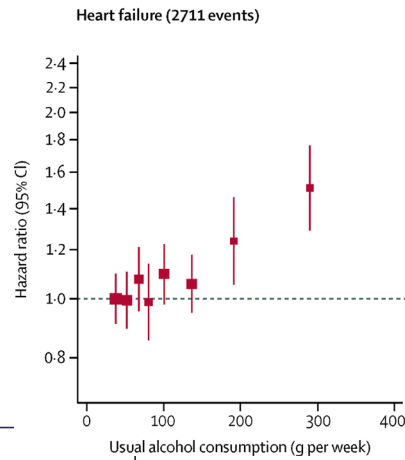
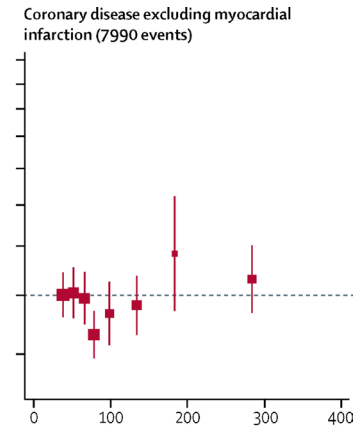
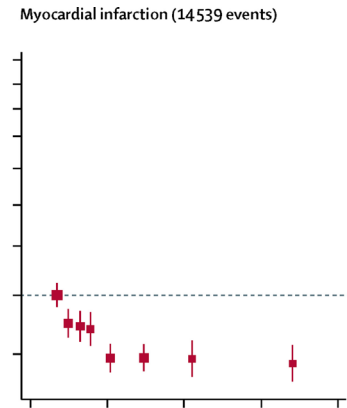
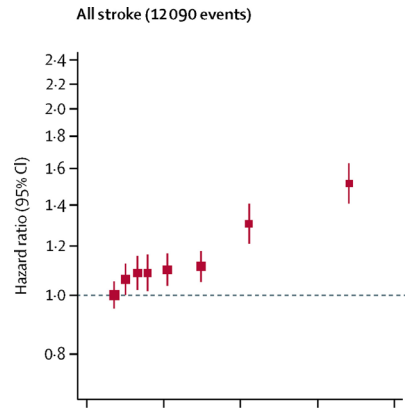




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Questions?

Upcoming NEBGH events

- **Nov. 13** - Help for Employers: Navigating the Challenging Landscape of Gender-Affirming Care
- **Nov. 15** –Driving Cultural Change at Work: Annual Membership Meeting
- **Nov. 27** – Mondays with Dr. Mark and Dr. Michael
- **Dec. 14** – 29th Annual Tribute to Leadership