

# HEALTH RISKS OF DRINKING

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## Abstract

I investigated how heavy drinking affects the human body. I hypothesized that there are numerous health risks from drinking. According to the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)), more than 14 million Americans are alcoholics and about 85,000 die each year from excess alcohol consumption. These deaths are caused by major health diseases including cirrhoses of the liver, cancer, coronary heart diseases, loss of memory, obesity, hypertension, pneumonia, chronic obstructive pulmonary disease, depression, anxiety disorders, and major psychoses. My data comes from evaluated websites and peer-reviewed journal articles. I present statistics on the percentage of diseases mentioned above caused by alcohol consumption alone. Based on my research, my conclusion offers advice to individuals who consume alcohol in excess, to reduce unnecessary, hazardous intake (binge drinking) and be more aware of the long-term health risks involved with alcohol consumption.

## Introduction

Of the 85,000 alcohol related deaths each year, an estimated 34,800 deaths are disease specific (Table 1). On the personal level, heavy drinking can take a toll on the body. The active ingredient in alcoholic beverages, a simple molecule called ethanol, affects the body in many different ways. It directly influences the stomach, brain, heart, gallbladder, and liver. It affects levels of lipids (cholesterol and triglycerides) and insulin in the blood, as well as inflammation and coagulation. It also alters mood, concentration, and coordination of an individual. It can cause inflammation of the liver (alcoholic hepatitis) and lead to scarring of the liver (cirrhosis), a potentially fatal disease. Heavy drinking can increase blood pressure and damage heart muscle (cardiomyopathy). It has also been linked with several cancers, particularly those of the mouth, throat, esophagus, colon, and breast. Figure 1 shows the long-term risks involved with drinking excessively.

## Method

My research and data comes from using peer-reviewed journal articles and evaluated websites on health risks of alcohol. Table 1 is a consolidated version of the full table at the referenced website.



12 ounces of Beer = 5 ounces of wine = 1.5 ounces of liquor

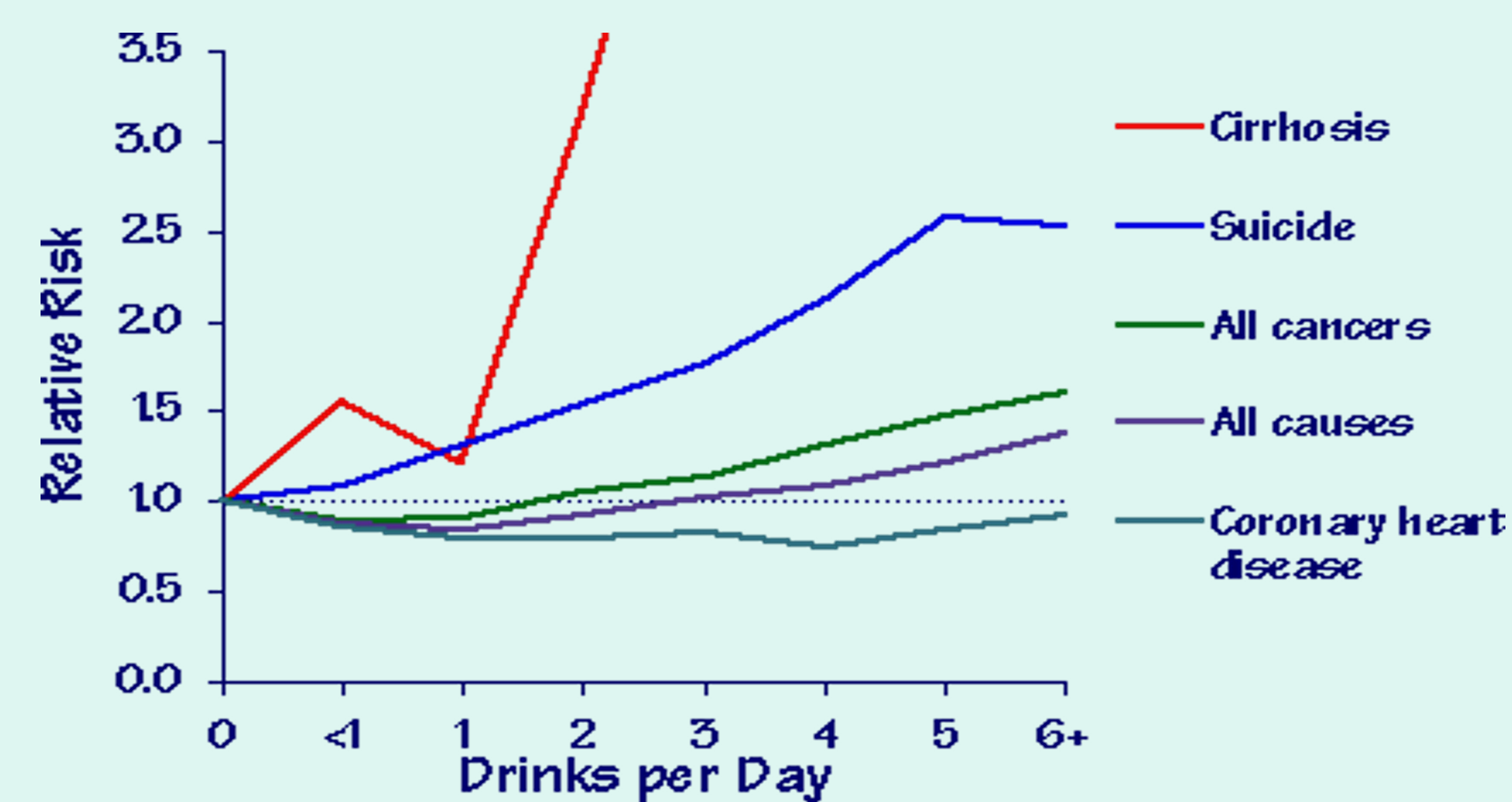
Source: <http://www.med.unc.edu/alcohol/education/benefits.html>

**Table 1:** Number of deaths due to the harmful effects of excessive alcohol use, by cause and sex, United States of America, 2001

CAUSE	DEATHS (MALE)	DEATHS (FEMALE)	TOTAL
Acute pancreatitis	370	364	734
<b>Alcohol abuse</b>	<b>1804</b>	<b>517</b>	<b>2321</b>
Cardiomyopathy	443	56	499
<b>Alcohol dependence syndrome</b>	<b>2270</b>	<b>750</b>	<b>3520</b>
Chronic pancreatitis	350	177	527
Gastritis	6	2	8
<b>Cirrhoses of the liver</b>	<b>3917</b>	<b>2802</b>	<b>6719</b>
<b>Liver disease</b>	<b>8927</b>	<b>3274</b>	<b>12201</b>
Psychosis	564	178	742
Breast cancer	NA	352	352
Nervous system breakdown	93	21	104
Epilepsy	96	81	177
<b>Hypertension</b>	<b>632</b>	<b>552</b>	<b>1184</b>
<b>Different forms of cancer</b>	<b>1651</b>	<b>498</b>	<b>2149</b>
Heart disease	635	273	908
<b>Strokes</b>	<b>1919</b>	<b>481</b>	<b>2400</b>
<b>Total</b>	<b>23677</b>	<b>10378</b>	<b>34055</b>

Source: <http://www.cdc.gov/MMWR/preview/mmwrhtml/mm5337a2.htm#tab>

**Figure 1:** Level of drinking increases health risks



Source: Bofetta, P, and Garfinkel, L. "Alcohol drinking and mortality among individuals enrolled in an American Cancer Society prospective study." *Epidemiology* 1:342-348, 2001.

<http://www.med.unc.edu/alcohol/education/benefits.html>

## Results

Table 1 outlines the major health risks of drinking. More than 18,900 Americans die each year due to liver diseases and cirrhoses of the liver caused by excessive alcohol intake, accounting for more than half of the deaths from those causes. Further, about 2,150 individuals suffer from esophageal cancer, laryngeal cancer, liver cancer and oropharyngeal cancer because of drinking. About 300 men suffer from prostate cancer and 250 women suffer from breast cancer each year and a total of 5,800 die simply of alcohol abuse and dependence. Lastly, more than 3,500 deaths are caused due to alcohol-induced hypertension and strokes each year. These statistics reflect the cost of use of alcohol in American society.

## Discussion

Throughout the 10,000 or so years that humans have been drinking fermented beverages, they have also been arguing about their merits and demerits. The debate still simmers today, with a lively back-and-forth over whether alcohol is good for you or bad for you. In my opinion, backed by research and statistics discussed in this poster, alcohol is hazardous to one's health. Numerous research studies have emphasized the serious health effects of long-term heavy drinking. However, there are also studies that state that moderate drinking is good for one's health. The U.S. Department of Agriculture and Department of Health and Human Services define moderate drinking as no more than one drink a day for a woman or two drinks a day for a man. Figure 2 shows the quantity of "one drink." That is 12 ounces of beer, 5 ounces of wine or 1.5 ounces of liquor, because the human brain receives the same amount of alcohol from any of these. Hence, keeping in mind the long-term health risks of alcohol, individuals, especially college students, should quit binge drinking and if at all, stick to moderate drinking.

## References

- 1) 'Alcohol attributable deaths and years of potential life lost – United States, 2001'. MMWR Recommendations and Reports, 24th September 2004. [www.cdc.gov](http://www.cdc.gov)
- 2) 'But I heard drinking was good for my health!' Bowles Center of Alcohol Studies, University of North Carolina at Chapel Hill. [www.med.unc.edu](http://www.med.unc.edu)
- 3) 'Alcoholism and substance abuse' [http://alcoholism.about.com/od/health/Health\\_Effects\\_of\\_Alcohol.htm](http://alcoholism.about.com/od/health/Health_Effects_of_Alcohol.htm)
- 4) 'Alcoholism and how it affects health & working capacity'. [www.pubmed.gov](http://www.pubmed.gov)
- 5) 'Risks of excess consumption of alcohol' Marburger, John. [www.asns.org](http://www.asns.org)