Myths and Facts About Alcohol
By Dr. Gerald Thomas, Senior Research and Policy Analyst, Canadian Centre on Substance Abuse.

1. “Most people drink responsibly.”
While this statement is true and often repeated in defence of people’s right to drink, what is not said is that the majority of alcohol is consumed by the minority of the population who drink well above recommended levels to reduce risk. This chart shows that the top 10% of drinkers consume just over half of alcohol (this is by self report) while the top 20% of drinkers consume over 70% of alcohol, again by self report, which likely underestimates the true concentration of drinking.

2. “Drinking alcohol is healthy.”
Large scale epidemiological studies have documented a “protective effect” for light alcohol consumption especially related to coronary heart disease and diabetes. Newer studies which better distinguish lifetime abstainers from those who used to drink are now suggesting that the protective effect from alcohol has likely been overstated. Considering these recent findings of a much smaller effect, researchers estimated that alcohol caused 8,356 deaths in Canada in 2002, compared with 1,037 deaths prevented (Stockwell, Chikritzhs, Bostrom, Fillmore, Kerr, Rehm, et al., 2007). This is a ratio of lives lost to lives saved of approximately 8 to 1. Using older methods that incorporate much larger estimates of the protective health effects from light alcohol use, the number of lives lost due to alcohol were estimated at 8,103 and the number of lives saved were 3,845 in 2002 (Rehm, et al., 2006). Thus, the ratio of lives saved to lives lost using more traditional methods increases to approximately 2 to 1 (see left).


3. “Alcoholics are the problem.”

There is a perception that society’s problems with alcohol stem largely from people who are physically dependent on drinking (alcoholics). Alcoholics make up about 2.5% of the population and number approximately 750,000 people. This is a very small number especially when you consider that there are about 20 million “current drinkers” in Canada with about 9 million of these categorized as moderate risk drinkers. What is not well known is that about half the costs of alcohol are associated with acute consequences (those related to intoxication) and about half are associated with chronic consequences (those related to long-term heavy drinking). The key understanding is that a large number of people exposed to a small risk can create many more cases of harm than a small number exposed to a high risk. This phenomenon is known as the prevention paradox. A prominent epidemiologist once labelled situations where risk was spread over large portions of the population in this way as “public health disasters” because it is very difficult to get people to change their behaviour due to the fact that their chances of personally experiencing a serious harm are actually quite small. However, because so many people in society engage in risky drinking, the number of actual cases of harm is large. The distribution of alcohol-related risk in society is a textbook example of the prevention paradox as shown in the figure on the right.

![Distribution of alcohol-related risk, Canada, 2009](image)

Source: Canadian alcohol and drug use monitoring survey (CADUMS).

4. “Governments make a lot of money from alcohol.”

This is another statement that on the surface is true. The government of Ontario, for example, netted $1.9 billion from the control and sale of alcohol in FY2009-10. What is not as well known is that the direct alcohol-related costs for health care, enforcement and other expenses in most jurisdictions exceed direct revenue from alcohol sales. While all jurisdictions carefully track revenue generated from alcohol and report this annually, no jurisdiction regularly monitors the costs of alcohol so that revenue and costs can be compared in decision making. This is like an accountant who only pays attention to the revenue column! We do have one set of numbers we can compare, however, and these come from a study done by the Canadian Centre on Substance Abuse in 2006 using 2002 data. The figure on the left shows the direct costs and direct revenue from alcohol for Ontario for the years 2002-2003.

![Comparison of Direct Alcohol-related Revenue and Costs, Ontario, 2002-2003](image)

Sources: Statistics Canada; Rehm et al., 2006.
5. “Regular heavy drinking by young adults is a harmless phase that most people outgrow.”

Again, this statement is partially true in that a large majority of people decrease their drinking significantly after the age of 25. However, from ages 18/19-24 over half of the population engages in risky drinking (5+ drinks on a single occasion for men and 4+ for women) once a month or more (see right) and these behaviours contribute significantly to the harms and costs of alcohol in society. The relative risk of incurring a serious motor vehicle injury increases by 500% (5 times) at five drinks and the relative risk of experiencing a non-motor vehicle related injury increases by over 200% as shown in the chart on the right. Given that unintentional injuries are the leading cause of death and disability among young adults and that alcohol is the leading contributing cause to these injuries, regular heavy drinking by young adults is not a harmless phase even if most will indeed outgrow it.

6. “We spend enough on prevention and research.”

The CCSA Cost of Substance Abuse study catalogued expenditures across Canada on alcohol-related prevention and research for 2002. In total we spent an estimated $53 million nationally to prevent and conduct research into the causes, consequences and treatment of alcoholism. While this may seem like a lot of money, when compared to both the direct revenue generated from alcohol for all governments and the cost associated with alcohol misuse across Canada, we spend very little to prevent and study alcohol misuse.
7. “Self regulation of alcohol advertising works.”

In Canada the promotion and advertising of alcohol is regulated by the CRTC (nationally) and by legislation in some jurisdictions. Up until 1997, the CRTC had a system of “pre-screening” where all ads had to be approved by regulators before they were aired. In 1997, this system was replaced by a code of conduct set out by the CRTC and the pre-screening function was handed over to Advertising Standards Canada (ASC), an advertising industry trade group. The advertisement I showed during my talk with the by-line: “less limits is more fun” passed the ASC pre-screening process, was aired and then pulled due to complaints from the public. As well, most standards and guidelines regarding alcohol advertising relate to the content of the ads and not to the level of alcohol promotion we see in society. The reality is that our society is saturated with pro-drinking messages and this helps create a culture that is fixated on the good side of alcohol but tends to ignore or downplay the costs and harms.

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