

Alcohol and Health: Preventing Excessive Alcohol Use Among Adults

People choose to drink alcohol for many reasons and have different health and social consequences from it. The <u>2020-2025 Dietary Guidelines for Americans</u> do not recommend anyone start drinking alcohol for any reason and that drinking less is overall better for health. For adults who choose to drink, it is important to be aware of the risks associated with alcohol use, the amount of alcohol they drink, and how often. It is estimated that excessive alcohol use led to over 140,000 deaths every year from 2015-2019 in the United States and shortened the lives of those who died from alcohol-related causes by 26 years on average. In Rhode Island, it is estimated that excessive alcohol use contributed to approximately 500 deaths every year from 2015-2019, and shortened the lives of people who died from alcohol-related causes by nearly 25 years.

Alcohol does not improve health.² Excessive alcohol is associated with increased health risks including cancer, liver disease, injuries, decreased grey and white brain matter, and other harms.^{2,3}

For individuals who choose to drink, men are recommended to drink two or less drinks in a day and women one drink or less in a day. Excessive alcohol use includes binge drinking, heavy drinking, any drinking by pregnant women, or any drinking by people under age 21.4 Drinking recommendations are different for men versus women because women absorb and metabolize alcohol differently than men, and generally have less body water than men of similar body weights, increasing risk for higher blood alcohol concentrations.⁴

There is no safe amount or time for use of alcohol during pregnancy or while trying to get pregnant.⁵ All types of alcohol, including wine and beer, are equally harmful as alcohol in the mother's blood passes through the umbilical cord to the baby.⁵ Drinking alcohol during pregnancy can cause miscarriage, stillbirth, or lifelong disabilities (physical, intellectual, or behavioral). It is also recommended that people under age 21 do not drink alcohol. Teens and young adults go through significant changes related to social, emotional, and cognitive development in their brain and body until their mid-20s, which may increase vulnerability of alcohol exposure to the brain during this time.⁶

Alcohol Consumption Pattern Definitions

	Women	Men
Moderate drinking: Adhering to the Dietary Guidelines for Americans	One drink or less per day	Two drinks or less per day
Binge drinking: Drinking pattern that generally leads to a blood alcohol concentration above 0.08%	Four or more drinks on one occasion	Five or more drinks on one occasion (~ two hours)
<u>Heavy drinking:</u> High average weekly consumption	Having eight or more drinks per week	Having 15 or more drinks per week

Note: Table adapted from Chiva-Blanch & Badimon, 20197; Kloner & Rezkalla, 20078

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US Standard Drink Sizes



12 ounces beer 5% ABV



8 ounces malt liquor 7% ABV



5 ounces wine 12% ABV



1.5 ounces distilled spirits (gin, rum, vodka, or whiskey) 40% (80 proof) ABV

Alcohol by volume (ABV) refers to the strength of the alcoholic beverage.

Dietary Guidelines for Americans on Alcohol





1 drink or less in a day for women



2 drinks or less in a day for men

or nondrinking

Don't drink at all if you: • Are pregnant or might be

- Are pregnant or might be pregnant
- Are younger than 21.
- Have certain medical conditions or are taking certain medications that can interact with alcohol.
- Are recovering from an alcohol use disorder or are unable to control the amount you drink.



Immediate Effects of Alcohol

Within minutes of consuming alcohol, it is absorbed into the bloodstream from the stomach and small intestine. where it then travels to the brain and has intoxicating effects.9 The immediate effects of alcohol depend on how quickly and how much was consumed, the sex of the person, their body composition, and if they have eaten.9 Alcohol impacts impulse control and decision making and can also make a person feel relaxed or uninhibited.^{6,9} People who are intoxicated may also be clumsy, have slurred speech, feel tired, vomit, lose consciousness, or experience a lapse in memory known as a blackout.^{6,9} If a person drinks too much too quickly they can also experience alcohol poisoning, a potentially deadly consequence of alcohol use.10 If a person has alcohol poisoning, their heart rate, breathing, body temperature, and consciousness can be impacted and they need medical attention.10



Health Effects:

Injuries

Excessive alcohol use increases risk of injuries or violence.¹¹ This can include motor vehicle crashes, falls, burns, drownings, homicides, suicides, sexual violence, and intimate partner violence.¹¹ Approximately one-third of motor vehicle crash deaths involve alcohol-impaired drivers in the US.¹²

Cancer

Alcohol is a Group 1 carcinogen, according to the International Agency for Research on Cancer. Group 1 classification means it is known or confirmed to cause cancer in humans and is the classification group with the strongest evidence for things that are carcinogenic to humans when exposed.¹³ Other Group 1 carcinogens include cigarettes/tobacco, asbestos, solar/UV radiation, other radiation, human papilloma virus (HPV), coal emissions, and others.¹³ Drinking alcohol increases the risk of getting several types of cancers, including:

- Mouth and throat
- Voice box (larynx)
- Esophagus

- Colon and rectum
- Liver

• Breast (in women)

A person's risk for alcohol-related cancers is related to how much and how regularly they drink alcohol. The less alcohol a person chooses to drink, the lower their risk for cancer.¹⁴ The more alcohol a person chooses to drink, the higher their risk for alcohol-related cancers.¹⁵

Heart Disease and Stroke

Excessive alcohol consumption increases risk of high blood pressure (hypertension), which is an important risk factor for heart attack and stroke. 16,17 A large research study found that any alcohol consumption increased the risk of high blood pressure and coronary artery disease, with the risks being highest among those who drink alcohol excessively, after accounting for lifestyle factors. 18 Drinking excessively also increases risk of damage to the heart muscle (alcohol-related cardiomyopathy), which can lead to heart failure. 19

People who drink alcohol excessively are at higher risk for having a stroke and at younger ages compared to people who do not drink excessively.²⁰ A recent research study that followed over 500,000 people for about 10 years found that even drinking one to two alcoholic beverages per day increased risk of having a stroke by 10-15%, and drinking four or more per day increased stroke risk by 35%.²¹

Liver

Alcohol consumption increases risk for certain types of preventable liver disease. The liver helps digest food, filters waste from the body, helps make proteins that are used in the body, and breaks down alcohol in the body when consumed.²² Excessive alcohol consumption can cause damage to the liver, including fatty liver disease (even after short-term excessive alcohol use), alcohol-related hepatitis, and alcohol-related cirrhosis.²² People with liver disease are also at increased risk for developing liver cancer, gallstones, kidney problems, internal bleeding, and infections.²²

Other Health

Other health risks associated with excessive alcohol use include sexually transmitted diseases, alcohol poisoning, depression and anxiety, weakened immune system, miscarriage, and fetal alcohol spectrum disorders.¹¹



Preventing Excessive Alcohol Use

Excessive alcohol consumption has a high impact on communities in the United States every year, including in Rhode Island. Preventing excessive alcohol use is a public health priority, in order to reduce alcohol-related harms, fatalities, and other costs.²³

What can you do?

- 1) Choose to not drink excessively and encourage others to do the same
- 2) Check your drinking using an <u>online tool</u> like the one from the Centers for Disease Control and Prevention (CDC) and create a personalized plan for drinking less
- 3) Choose not to drink or drink in moderation by limiting intake to two drinks or less in a day for men or one drink or less in a day for women
- **4)** Do not serve or provide alcohol to people who should not be drinking (such as people who are under age 21 or already intoxicated)
- 5) If you drink too much or notice that drinking alcohol is a problem for you, talk with your healthcare provider and request counseling on how to address your alcohol consumption
- 6) Call 401-414-LINK (5465) to talk to a licensed counselor 24/7 to get information on treatment options for your individual needs
- 7) <u>Click here</u> for a list of licensed substance use agencies in Rhode Island

What can parents do?

Parents can help influence their children on when or whether they start drinking alcohol.

- 1) Choose not to drink or to drink in moderation
- 2) Be involved in your children's lives and encourage healthy/open communication
- 3) Encourage independence while also having age-appropriate limits
- 4) Get to know your kids' friends and parents of their friends
- 5) Set family rules about alcohol
- 6) Talk early and often to your children about the risks and benefits of alcohol and how to avoid dangerous situations with alcohol
- 7) Do not provide alcohol to your child or their friends²⁴

What can states and communities do?

The Community Prevention Services Task Force recommends several strategies to reduce excessive alcohol use, including:

- 1) Regulating of alcohol outlet density (the concentration/number of bars, restaurants, or liquor stores) in an area
- 2) Increasing alcohol taxes
- 3) Holding alcohol retail establishments liable for injuries or harms from illegal services to intoxicated or underage customers
- 4) Limiting the days and hours alcohol can be sold or served
- 5) Using or implementing electronic screening and brief intervention (e-SBI) (screens for excessive drinking; gives personalized feedback about risks and consequences of excessive drinking)
- 6) Increasing enforcement of alcohol policies, including compliance checks at bars, restaurants, and liquor stores

The Community Prevention Services Task Force also recommends against privatization of alcohol sales.²³ In Rhode Island, the state government licenses private retailers to sell all alcohol beverage types.

Additionally, states and communities can:

- 1) Enforce existing regulations/laws about alcohol sales and service
- 2) Build collaboration/relationships between various community organizations and public health to reduce excessive alcohol use²³
- 3) Get involved with the local Rhode Island Regional Prevention Task Force Coalition.

 They are a group of dedicated members and partners working together to provide substance use prevention strategies and mental health resources, and advocate for policies that support healthy and safe communities. Please click on the link to find the Regional Coalition in the local area: Regional Coalitions Rhode Island Regional Prevention Coalitions (riprevention.org).
- **4)** Provide evidence-based programs in communities and school settings to prevent alcohol or other substance use and promote mental health to children or teens struggling with substance use, like Rhode Island's Student Assistance Services program. To find a Student Assistance Counselor in your community, please click on the link: Participating Schools Rhode Island Student Assistance Services (risas.org).



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