

Helping you live
well to learn well

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Why Sex & Gender Matter When it Comes to Alcohol

Did you know there are important physiological and social differences that impact the way alcohol affects people of different sexes and genders?

- **Sex assigned at birth:** People metabolize alcohol differently and can experience different health effects depending on their sex assigned at birth (male, female, intersex).
- **Gender:** Women and transgender people experience higher rates of alcohol-related sexual assault than male-identified people.

Read on for more details, as well as tips for consuming alcohol more safely.

Effects of alcohol based on your sex assigned at birth

Cisgender women and other people assigned female at birth (AFAB) process alcohol differently than cisgender men and other people assigned male at birth (AMAB).

Women/AFAB typically reach a higher Blood Alcohol Concentration (BAC) – meaning **they often get drunk faster** – when consuming the same amount of alcohol as men/AMAB.

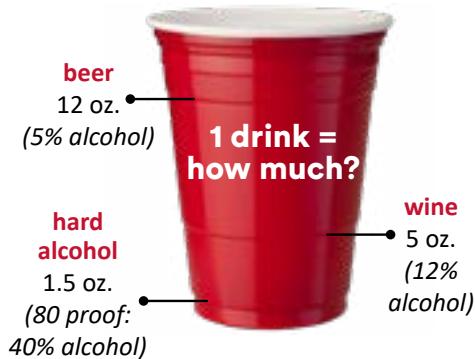
There are several reasons why....

- **Body size:** Generally, men/AMAB have larger skeletal frames and muscles than women/AFAB, so alcohol is diluted over a larger mass.
- **Body composition:** Women/AFAB usually have a higher percentage of body fat and less body water than men/AMAB. Alcohol is diluted in water, so will be more diluted for men/AMAB, resulting in a lower BAC.
- **ADH enzyme:** Men/AMAB typically have higher levels of an enzyme called alcohol dehydrogenase (ADH) that aids the metabolism of alcohol. Having more ADH enables men/AMAB to more effectively break down alcohol in the stomach before it reaches the blood stream and impacts their BAC.
- **Hormones:** Research shows that a week prior to menstruating, people experience greater intoxication for longer periods of time than at other times in their cycle. This same pattern of prolonged peak intoxication is also found among people taking oral contraceptives.

For example:

- **A 150-pound woman/AFAB** who drinks four 12-oz. beers in two hours would have an estimated BAC of about .10 – and would likely feel “drunk.”
- **A 150-pound man/AMAB** who drinks the same amount over the same time would have an estimated BAC of about .08, and would experience fewer intoxicating effects.

What's a standard drink?



Know what you're drinking:

- **the STRENGTH (proof)**
- **the AMOUNT (oz.)**
- **the TIME (consumption rate)**

In fact, in this scenario a woman/AFAB would experience the same effects after **four** drinks that a man/AMAB would after **five**.

Long-term health effects:

Additionally, women/AFAB who drink heavily over time develop alcohol-related organ damage more easily than men/AMAB.

Women/AFAB appear to be more vulnerable to developing cirrhosis of the liver, alcohol-induced damage to the heart, and nerve damage after fewer years of heavy drinking.

Effects of alcohol on transgender & intersex people

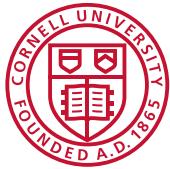
The vast majority of alcohol research has been conducted with cisgender men and women, which means we don't know as much about how alcohol affects transgender and intersex bodies. But consider the following:

For transgender people, your sex assigned at birth will impact how your body processes alcohol (see column 1). However, gender-affirming hormones can also alter body fat and water, potentially changing the way your body absorbs and metabolizes alcohol (and potentially increasing intoxication risk for those taking estrogen).

For intersex people, even less research has been conducted to understand how alcohol may impact intersex bodies. We always recommend that you consult your own health care provider(s) for individualized information about your body and the potential impacts of alcohol or other drug use.

Alcohol & sexual functioning

Alcohol can reduce inhibitions, but when consumed in larger doses, it can also interfere with sexual pleasure and performance



(e.g., difficulty with erection, vaginal lubrication, ability to orgasm or ejaculate).

FUN FACT: In a 2025 survey ...

84% of Cornell students said they consumed NO alcoholic drinks before their best sexual experience.

Alcohol, gender, and sexual assault

Alcohol is involved in as many as 75% of sexual assaults that occur on U.S. college campuses.

While anyone can be a victim or perpetrator of sexual assault, research shows that **the majority of victims are women and transgender people, and the majority of perpetrators are male-identified**.

Perpetrators often perceive someone who's drinking to be a vulnerable target. Some use alcohol strategically, intentionally getting someone drunk in order to take advantage sexually. Studies show that individuals who are even a little intoxicated are more likely to be victimized than those not drinking.

To be clear: alcohol use does not cause, or excuse, sexual assault. While drinking less may help reduce your risk, drinking more *never* excuses harm. The perpetrator of sexual violence is *always* responsible, no matter what choices were made by the person targeted.

Watch out for others, and take action to help prevent assault. Pay attention and intervene when you see someone acting inappropriately or about to take advantage of someone. Step in if you are worried that an intoxicated individual may be making a choice they might regret in the morning or that might hurt themselves or someone else.

Tips for lower-risk drinking

If you drink alcohol, consider these tips to enjoy the buzz while minimizing the risks.

Before drinking:

- Eat before you start drinking. This is **especially important for women/AFAB**, who have less stomach enzyme and absorb alcohol faster (see page 1). Having food in your stomach helps slow down the absorption of alcohol.
- Set a low drink limit for yourself.
- Consider bringing condoms / safer sex supplies when you go out.
- Make a plan for how to get home safely.

While drinking:

- Space and pace your drinks to no more than one per hour.
- Try alternating between alcoholic and non-alcoholic drinks (preferably water).
- Stick to beer and avoid hard alcohol, the cause of nearly all alcohol emergencies.
- Avoid shots, funnels, and chugging.
- Concerned about getting home safely? Connect with a "virtual escort" through Cornell's Rave Guardian app.

Get help in alcohol emergencies

Alcohol emergencies can be fatal. Know the signs of an alcohol (or other drug) emergency, and call 911 if someone needs help.

Good Samaritan Protocol / Law protects those who call 911 for help, and those needing medical assistance, in an alcohol or other drug emergency: *goodsam.cornell.edu*.

More information

Visit these resources:

- Alcohol & Other Drug Resources: health.cornell.edu/AOD
- Signs of Alcohol Emergencies: health.cornell.edu/AOD-emergencies
- Good Samaritan Protocol: goodsam.cornell.edu