WHAT ARE THE SIGNS OF ALCOHOL POISONING?

OFFICE OF PREVENTION & EDUCATION AT NORTHEASTERN

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INFORMED CHOICES

MAKING DELIBERATE DECISIONS IS KEY TO REDUCING YOUR RISK.

The safest option is to avoid alcohol altogether, however if you do make the decision to drink, there are some ways to reduce your risk:

- Keep track of the number of standard drinks you have. Set a drink limit before starting and try to stick to it.
- Eating before or while drinking will help slow down the rate of intoxication. It can also help reduce the effects of a hangover.
- When you're out, stay with friends and look out for one another. Set a predetermined meeting place in case you get separated.
- Take a break between drinks. Alternate alcoholic with non-alcoholic beverages.
- Mixing alcohol and drugs of any kind will likely intensify the side effects of both and can be fatal.

TOLERANCE AND BLOOD ALCOHOL CONCENTRATION (BAC)

What they mean to you and how to spot potential problems.

Having a high tolerance to alcohol – an increased ability to "handle your liquor" can seem like a good thing on the one hand. On the other, it's a misconception that people with a high tolerance get less intoxicated. In fact, Blood Alcohol Content (BAC) rises purely as a function of gender, weight, and how much alcohol you consume over what period of time.

"High tolerance" means that a body has become less sensitive to the effects of alcohol, and requires increased amounts of alcohol to produce the same effect.

This can pose two major risks:

1) A person might continue to drink because they don't feel as impaired. As a result, their BAC could reach dangerous levels without them being aware of it.

2) Our bodies weren't designed to sustain high doses of alcohol. So having a high tolerance poses an increased risk of running into more serious long-term problems, such as forming an addiction to alcohol.

The best way to decrease tolerance is to take a break from alcohol for several weeks to a few months.

ALCOHOL AND BIRTH SEX DIFFERENCE

- NU females who drink consume on average 4 standard drinks per occasion.
- NU males who drink consume on average 5-6 standard drinks per occasion.

Biologically, men and women process alcohol differently, which can have consequences for both genders.

Even at the same weight, women will always become more intoxicated than men, sometimes twice as intoxicated, with the same amount of alcohol.

Women's bodies process alcohol more slowly for a number of reasons:

- Men have a higher muscle content and hold more water in their bodies which dilutes the concentration of alcohol.
- Alcohol dehydrogenase is a metabolizing enzyme that helps the body get alcohol out of its system. Women have less of this enzyme than men, so more of what women drink enters their blood stream as pure alcohol.
- The intoxicating effect of alcohol sets-in faster when a woman's estrogen levels are higher. Also, because of the interaction of alcohol and hormone levels, birth control pills and other medications that contain estrogen will cause the intoxicating effect to set in at lower levels of BAC.

WHAT ROLE DOES ALCOHOL PLAY IN YOUR LIFE?

Consider these questions:

- Have you continued to drink alcohol despite legal, social, school, work or health related problems caused by drinking?
- Have you found that over time you have needed to drink more alcohol that you used to in order to achieve the same effects?
- Have you had blackouts (periods of time that you can't remember) from using alcohol?
- Does your alcohol use relieve stress, anxiety, depression, or other discomforts?
- Have you thought about cutting back or quitting?

If you answered YES to one or more of these questions, consider a confidential "check in" at O.P.E.N. to discuss the role that alcohol plays in your life.

"My check-in was eye-opening. Talking about issues related to alcohol without risk of getting in trouble was a great resource."

A PLACE TO CHECK IN

O.P.E.N. offers students confidential check-ins, non-judgmental conversations about drug and alcohol use. Check-ins may be in a small group with other NU students or with an individual staff member. You can get personalized feedback about your use of alcohol or other drugs. Check-ins are not about telling anyone what they should or 'shouldn't do. We encourage students to make informed decisions and strive to reduce harm that can be associated with alcohol and other drug use and abuse.

To learn more or to set up a check-in appointment visit **www.northeastern.edu/OPEN**

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We encourages students to make informed decisions about alcohol and other drug use and strives to reduce the harm and negative consequences that can be associated with substance use and abuse.

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Northeastern

ALCOHOL

GET SMART, CHOOSE SMART.

A confidential, non-judgmental resource for students.

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IT'S YOUR CHOICE

When it comes to making choices about alcohol, you're going to get a lot of input. Everything from the behavior and advice of family and friends, to images and advertising in the media — all of which can influence decision-making. This brochure is intended to help Northeastern students get some facts about alcohol in order to make informed decisions.

USE THIS BOOKLET TO:
1) Learn some objective facts about alcohol
2) Share with a friend
3) Get an overview of what O.P.E.N. has to offer

HOW WILL ALCOHOL AFFECT ME?

The effects of alcohol on the body vary by individual, and amount consumed.

Alcohol is a depressant: It slows brain activity and causes impairment to judgment, memory, vision, speech, and gross motor skills. These impairments can vary, based on how many drinks are consumed on a given occasion, as well as the frequency of consumption.[1] The effects of excessive alcohol use can have both short and long-term implications.

SHORT-TERM CONSIDERATIONS

Cognitive
When high levels of alcohol are consumed people can experience memory loss around events, or whole parts of an evening. These are called "blackouts." Blackouts occur when there is "a disruption of activity in the hippocampus, a brain region that plays a central role in the formation of new autobiographical memories."[2] This means that your brain is unable to convert short-term memories to long-term ones. This is different from passing out, since the person who is blacking out may still be awake and functioning, they will just have no recall of events. Alcohol-induced blackouts are dangerous as the intoxicated person is more likely to experience negative consequences that could potentially be life-threatening.

Physical
When someone's Blood Alcohol Concentration (BAC)–or the amount of alcohol in their system — reaches dangerous levels, alcohol poisoning can occur. Likely physical effects can include; vomiting, shallow breathing, slow irregular heartbeat, and limited control over body movements, which can lead physical injury.

Alcohol Myopia
Similar to visual myopia, perception and emotions of someone under the influence of alcohol are restricted to obvious and immediate cues in the environment. Sometimes, students wonder why they make certain decisions after drinking that they wouldn't make if they were sober. Alcohol myopia may help explain this phenomenon of acting "in-the-moment" rather than weighing consequences or thinking through decisions/actions.[4]

LONG-TERM CONSIDERATIONS

Physical and Mental Health
Heavy alcohol consumption can lead to liver damage which has long- term effects on the body and brain. The liver is the organ that processes alcohol and breaks down the toxins alcohol produces in the body. Over time, liver cells can become damaged and unable to process the alcohol induced toxins.

Sleep related
Alcohol reduces REM (rapid eye movement) sleep. REM sleep allows people to feel rested and alert after waking up. REM sleep also facilitates the development of long-term memory and muscle rebuilding and repair. While some find that alcohol helps with falling asleep, it actually prevents individuals from getting the necessary rest and deep sleep the body needs. These effects can last for several days and create disruption in the body's natural sleep rhythm.

"ISN'T EVERY ONE DOING IT?"

NO. One popular misconception around college drinking is that "everyone does it." In fact, 16% of Northeastern students do not drink at all. And 24% have not consumed in the past month.[3]

"My meeting at O.P.E.N. was very helpful and interesting. I didn't feel like I needed to withhold information because they weren't going to get me in trouble or scold me for my habits. Definitely a good program."

WHAT IS A "STANDARD DRINK"?

The body can typically process one standard alcoholic drink per hour. If you make the decision to drink, know what you're consuming.

The following chart provides some guidance around common drinks and their alcohol content:

A STANDARD DRINK

12oz beer
10oz malt liquor
4-5oz wine
1.5oz 80 proof liquor
1oz 100 proof liquor
0.5oz Bacardi 151

NUMBER OF STANDARD DRINKS IN SOME COMMON CONTAINERS:

BEER
Pint = 1⅓ standard drinks
Tall Boy = 2 standard drinks
Forty = 3⅓ standard drinks

MALT LIQUOR [e.g. Colt 45, Smirnoff Ice, Mike's Hard Lemonade]
Forty = 4 - 5 standard drinks

WINE OR CHAMPAGNE
Bottle = 5 standard drinks
Jug (e.g. Carlo Rossi) = 29 1/2 standard drinks
Box (e.g. Franzia) = 42 standard drinks

LIQUOR AND MIXED DRINKS
Shot (1.5 oz.) = 1 standard drink (80 proof)
1 1/2 drinks (100 proof)
Fifth = 16⅔ standard drinks

SOBERING UP?

- **The only thing that will sober you up is time**–not food, water, exercise, a shower, or caffeine.
- Caffeine (coffee, Red Bull, Monster, etc) masks some of the intoxicating effects of the alcohol, but it doesn't change your Blood Alcohol Concentration (BAC). Once the alcohol is in your system, it needs to be metabolized by your body in order to sober you up. This takes time and will depend on how much you consume and how fast you consume it.

When alcohol effects are masked (e.g. by combining drugs or caffeine and alcohol), people tend to over-consume. A recent study found that people who mix the two have twice as many negative consequences when they drink than those who do not mix the two.[5]

"GREEN ZONE" DRINKING

At low levels, alcohol can produce a feeling of relaxation and what some describe as a "good buzz." **As amounts increase, the depressant effects of alcohol become pronounced.**

These effects can include:
- **loss of coordination and motor control**
- **memory loss**
- **impaired judgment**
- **blackouts**
- **vomiting**
- **alcohol poisoning**

Higher blood alcohol content (BAC) = higher risk of unintended consequences.

These consequences can include:
- **feeling embarrassed by something that was said or done**
- **decisions about having sex and/or not using protection**
- **hangovers**
- **fights/assaults**
- **missing class or work**
- **memory loss**
- **getting into trouble**

To calculate your BAC, go to www.northeastern.edu/open/AlcoholDrugs101/green_zone.html

FOOTNOTES: **1** NIAAA (2004). Alcohol's Damaging Effects on the Brain **2** NIAAA (2004). What Happened? Alcohol, Memory Blackouts, and the Brain **3** Northeastern University 2014 National College Health Assessment **4** Steele, C & Josephs, R., (1990), American Psychologist, Vol. 45, No 8, 921-933 **5** M. Pereau, Loma Linda University Medical Center (2010)

SIGNS OF ALCOHOL POISONING

- Inability to answer basic questions such as; Name? Date? Location?
- Inability to remain conscious
- Inability to control their own body
- Inability to get around on their own (Need to be carried or helped up by others.)
- Vomiting
- Slow or shallow breathing
- Pale, bluish, or cold skin
- Slow or irregular heartbeat

Do not leave a person alone to "pass out" or "sleep it off" as their BAC can continue to rise and they can become increasingly intoxicated even while passed out.

If you suspect alcohol poisoning or aren't sure:
CALL FOR HELP!
On campus, call 617.373.3333
Off campus, call 911

O.P.E.N. is here for you

Alcohol and drug "check-ins"– confidential, non-judgmental (We don't tell you what you "should" or "shouldn't" do.)

Personalized feedback about your use, including how you compare to other students

Resources, information and tips – drawn from facts and evidence