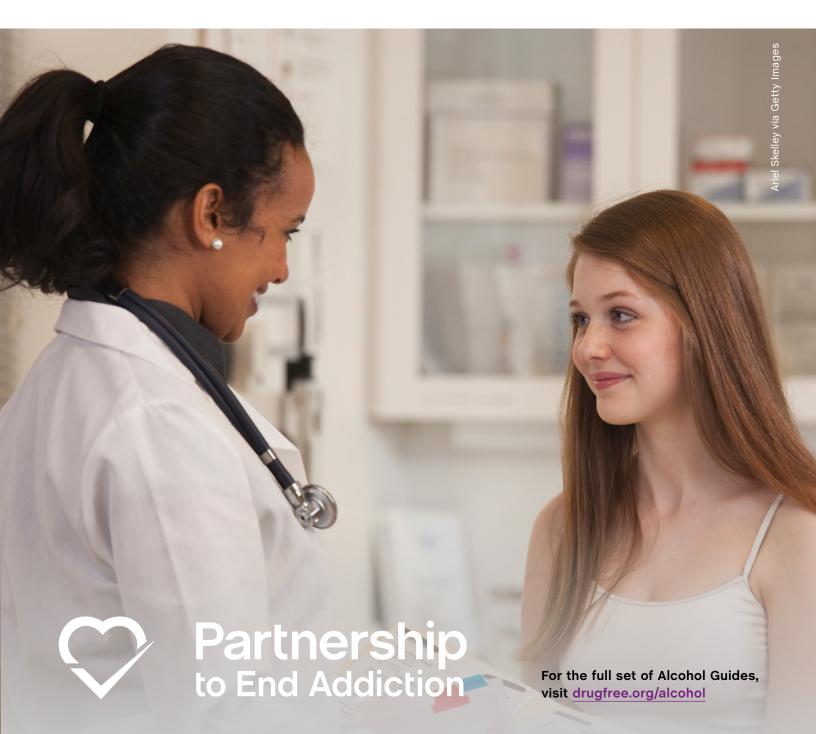
ALCOHOL

What Health Care Professionals Need to Know to Help Protect Young People



Introduction

In caring for our country's youth, health professionals strive to do all they can to reduce the negative effects of alcohol on the health and well-being of young people.

Whether a young patient has not yet tried drinking, has begun to drink or drinks regularly, this guide can help you. We break down the risks of youth drinking, why it appeals to youth, and what you can do to protect young people from its harms.

1 in 3

young people aged 12-20 reported drinking alcohol in 2019.¹ 21%

Of those reporting were aged 12-17.²

What is in this guide?

| The facts about youth drinking | 3 |
|--|----|
| Why do young people drink alcohol? | 5 |
| Peer influence | 5 |
| Mental health and stress | 5 |
| Parents' attitudes and behavior | 5 |
| Why be concerned about youth alcohol use? | 6 |
| Brain development | 6 |
| Risky behaviors | 6 |
| Impaired driving | 6 |
| Mental health | 6 |
| Physical health | 6 |
| Alcohol use can lead to poisoning and other injuries | 7 |
| Know the signs of alcohol poisoning | 7 |
| What you need to know about Blood Alcohol Concentration (BAC) | 8 |
| Substance use disorder | 9 |
| Genetics and biological vulnerability | 9 |
| What types of alcohol do young people use? | 10 |
| What health care professionals should know and do | 11 |
| Safeguard against youth drinking | 11 |
| Screening young patients for alcohol use and helping those who screen positive | 13 |
| Assessing and treating young patients for alcohol use disorder | 14 |
| References | 15 |

This work was funded with generous support from

The Conrad N. Hilton Foundation and The Goldberg Family Foundation



The facts about youth drinking

Alcohol is the most widely used substance among teens and young adults, and it poses substantial health and safety risks. Although young people tend to drink less often than adults do, when they do drink, they frequently drink more or more intensely compared to the average adult.³ That's because young people consume more than 90% of their alcohol by binge drinking.⁴

The good news is the number of teens drinking has dropped over the past few decades.⁵ However, when we consider the consequences of youth alcohol use — poor judgment, driving under the influence, accidents and alcohol poisoning, as well as damage to the developing brain or addiction — it's important for health professionals to be informed and involved when it comes to youth drinking.





A common view is that youth drinking is the norm, **but most young people actually do not drink.** According to a national survey of nearly 50,000 teens, 41% of high school seniors said they never had a drink, and 70% reported that they had not consumed any alcohol in the month prior to the survey.⁶ In fact, youth drinking has declined steadily over the past decades, as has binge drinking.⁷

Recent data show that three-quarters of 12th graders report that they don't see great risk in having one or two drinks nearly every day.⁸ Another recent national survey found that 9% of teens would not be worried about a friend regardless of how frequently that friend drank alcohol.⁹



11%

of young people aged 12 through 20 reported binge drinking in the past 30 days.¹²



6 in 10

12th graders have had an alcoholic drink in their lifetime.¹⁴

25% have done so by 8th grade.¹⁵



Why do young people drink alcohol?

Regardless of whether a young person drinks "to feel good" or "to feel better," their environment often shapes their beliefs and attitudes toward alcohol.



Peer influence

Sometimes friends urge one another to have a drink, but it is just as common for youth to try drinking because alcohol is readily available. They see their friends or older siblings enjoying it and, to them, alcohol use is part of a normal teenage or young adult experience. Popular media reinforces this idea. Ads often glamorize alcohol use to attract new drinkers and rarely show the downsides of alcohol use.

Mental health and stress

Drinking can be seen as a way to self-medicate unhappy or uncomfortable feelings, thoughts or emotions, including those that accompany depression, anxiety or other mental health problems, especially if they are not adequately treated. If kids are feeling stressed, they may turn to alcohol seeking relief. Alcohol reduces inhibitions, making it tempting for a young person who wants to test limits or feel more confident in social situations.

Parents' attitudes and behavior

Numerous studies show that children of parents who are more lenient or permissive about youth drinking — allowing their children to drink on occasion, not monitoring the alcohol in the home or modeling alcohol use as a means of relaxing or having fun — are more likely to drink and to do so heavily than children of more restrictive and cautious parents.¹² When parents allow teens to drink with them (with the exception of small amounts for religious practices or rituals) or host parties for kids in which alcohol is allowed or served, they convey the message that underage drinking is okay and increase the risk that it will happen more frequently or intensely.

Why be concerned about youth alcohol use?

Drinking at a young age can impact the health and safety of young people, now and in the future.



Brain development

The human brain is not fully developed until early adulthood, usually the mid- to late-twenties. There is <u>rapid brain development in adolescence and</u> <u>young adulthood</u> — especially the parts of the brain responsible for decision making and judgment. Exposure to alcohol interferes with this development.



Alcohol slows down the nervous system. Drinking alcohol to soothe anxiety or other mental health problems may seem to help in the short term, but symptoms typically worsen in the long term when alcohol is involved.¹⁹ Alcohol use is a significant risk factor in youth suicide.²⁰



Risky behaviors

In addition to impairing judgment and decisionmaking, alcohol also affects the parts of the brain responsible for inhibition and impulse control, so teens who drink may do so in especially dangerous ways.¹³ Risky sexual behavior and property damage are more likely to occur when young people drink,¹⁴ as is the use of other substances that may have been avoided without the presence of alcohol.¹⁵



Physical health

Youth who drink are at higher risk for developing liver disease. Alcohol use during or before puberty can have adverse effects on hormones and interfere with healthy physical development.²¹ Heavy drinking in adolescence can also lead to chronic health problems such as anemia, liver cirrhosis and pancreatitis.²² Teens who drink generally self-report worse health and more overnight stays in hospitals.²³



Impaired driving

This is one of the most common concerns when it comes to youth alcohol use. Motor vehicle crashes are a leading cause of death among young people, who are more likely to be killed in an alcohol-related crash compared to adults.¹⁶ One out of five teen drivers involved in fatal crashes in 2016 were under the influence of alcohol.¹⁷ Alcohol interferes with the skills that are essential for safe driving, including vision clarity, motor coordination, reaction time, attention and concentration.¹⁸





Alcohol use can lead to poisoning and other injuries

Sadly, higher levels of car crashes, homicides, alcohol poisoning, falls, burns, drowning and suicide are associated with youth alcohol use. Binge drinking can lead to so much alcohol in the bloodstream that the parts of the brain that control basic life functions such as breathing, heart rate and temperature begin to shut down, resulting in severe symptoms and, in some cases, death.

Know the signs of alcohol poisoning

It's important to be informed about what to do should a young person experience alcohol poisoning and to let them know how to help a friend.

Recognizing the following signs and symptoms can save a life:



If a young person is experiencing alcohol poisoning — even if all of the symptoms aren't apparent — bystanders should seek medical care immediately. If they are conscious, **call the Poison Control Center at (800) 222-1222.** If unresponsive, call 911 for emergency services. While waiting for help, they should be positioned onto their side so they don't choke on their own vomit. CPR should be administered if needed and never leave the person alone. At its most severe, alcohol poisoning can lead to death.

Make sure you are informed about your state's Good Samaritan Law. While different states have different variations of this law, its general purpose is to help protect bystanders from legal consequences when they try to help someone in need who has engaged in illegal substance use.²⁴ Some Good Samaritan Laws apply to underage drinking, so that a youth who is drinking will not get in trouble (and neither will the underage victim) for calling 911 to get help for someone who may be experiencing alcohol poisoning and needs medical attention. Not every state's Good Samaritan Law applies to this situation, so it is important to do some research on your home state's law. Whether or not your state's law applies to underage alcohol use, however, make clear to patients that the priority in a dangerous situation is to protect their own and others' health and safety, regardless of the legal consequences.

It's not uncommon for teens and young adults to both drink and use marijuana or other drugs. Mixing alcohol with other substances, such as prescription medicine or marijuana, is especially dangerous and potentially deadly. It can cause nausea and vomiting, headaches, drowsiness, fainting, loss of coordination, internal bleeding, heart problems and breathing difficulties.²⁵

Using another drug can also make someone lose track of how much alcohol they've had, increasing the risk of alcohol poisoning. Likewise, alcohol use can impair thoughts and memory. It can prevent a teen from keeping track of how much of a drug they've used, increasing the risk of serious consequences, including overdose or death.

Marijuana, specifically, can prevent a person from vomiting. This increases the risk of alcohol poisoning in someone who drank a lot while under the influence of the drug. Many young people do not recognize this danger. They might drink alcohol to counteract or enhance the effects of other drugs, often with devastating consequences.





What you need to know about Blood Alcohol Concentration (BAC)

The more one drinks at a time, the higher one's <u>blood alcohol concentration (BAC)</u>. This increases the risk of impairment, especially when driving, and the risk of alcohol poisoning. A BAC level represents the percent of one's blood that is concentrated with alcohol. For example, a BAC of 0.10 means that 0.1% of the person's bloodstream is composed of alcohol. The legal intoxication level for adults in most states is a BAC of 0.08. For those who are under age, it is any measurable amount, such as 0.01 or 0.02, above zero.

There are considerable discrepancies among individuals in how much alcohol it takes to reach a specific BAC level. These discrepancies derive from genetic or biological differences in alcohol metabolism, body weight, sex, age, fat/muscle ratio, the type of alcoholic beverage consumed, how much food is in the stomach, the presence of medications in the system and a person's general state of health. Generally, young people who drink attain a higher BAC level after fewer drinks compared to adults, in part due to their lighter weights and differing body composition (e.g., water level).²⁶ In addition, biological females, on average, reach a higher BAC level after consuming less alcohol than biological males, in part because of their lower average weight, but also because females produce significantly less of an enzyme responsible for metabolizing alcohol.²⁷ Being aware of the factors that can influence BAC levels and informing your patients of them can help prevent them from assessing their level of impairment solely based on a BAC reading.

There are many misconceptions about ways to "sober up" after drinking and reduce one's BAC, such as taking a cold shower, drinking coffee or eating food, but these do not actually work. The effects of alcohol only wear off over time. Be sure that your patients know this so that they don't falsely think that they can safely drive or do anything else that requires motor coordination or attention after drinking any alcohol.

As BAC increases, so does impairment Life Threatening Loss of consciousness 0.31-0.45% Danger of life-threatening **Severe Impairment** alcohol poisoning · Significant risk • Speech, memory, coof death in most ordination, attention, drinkers due to reaction time, balance suppression of vital significantly impaired life functions All driving-related skills dangerously impaired Increased • Blackouts (amnesia) Impairment Vomiting and other signs of alcohol Perceived beneficial poisoning common effects of alcohol, Loss of consciousness such as relaxation, give way to increasing intoxication Increased risk of aggression in some people Mild Impairment Speech, memory, attention, coordi- Mild speech, memory, nation and balance attention. coordinafurther impaired tion, balance Significant impairimpairments ments in all driving Perceived beneficial skills effects, such as Increased risk of relaxation injury to self and • Sleepiness can begin others Moderate memory impairments





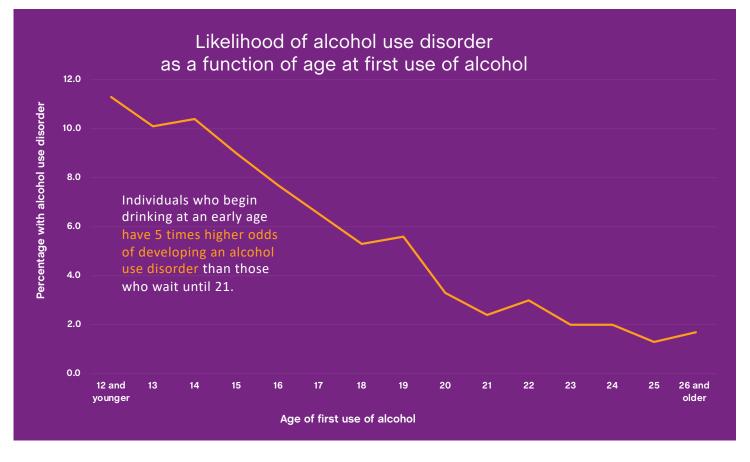
Substance use disorder

One important reason to understand more about youth alcohol use is to prevent the risk of addiction. Individuals who begin drinking during adolescence have significantly higher odds of developing an alcohol or other substance use disorder (addiction) than those who begin drinking at age 21 or later.²⁸ The earlier a person starts drinking, the more likely they are to have a problem with drinking later on.²⁹



Genetics and biological vulnerability

Having a family history of an alcohol use disorder puts individuals at approximately four times higher risk of developing an alcohol use disorder themselves.³⁰ Genetics play less of a role in a person's decision to use alcohol than environmental factors like peer influence or parents' attitudes in the home, still, genetic vulnerability is important to consider when determining the risk that one's alcohol use can lead to addiction. This means that some individuals have genes or other biological characteristics that put them at a heightened risk. It's important for children to know if they have a family history so that they can be more cautious about drinking.



Source: 2018 data from the National Survey on Drug Use and Health



What types of alcohol do young people use?

The reasons young people choose to drink a particular brand or type of alcohol are often influenced by advertising, the cost (the less expensive, the better) and accessibility and flavors, as they tend to prefer sweet flavors that mask the harsh taste of alcohol.

Aside from drinking, some youth consume alcohol in less traditional ways. Some can be more discreet (and therefore easier to hide from adults) compared to traditional alcohol beverages because their packaging resembles non-alcoholic products.

| Flavored beverages | Edible alcohol | Alcohol vaping | Powdered alcohol |
|---|---|--|--|
| | | | |
| Carbonated or malt- based drinks, which are often sweet, resembling soda or energy drinks. They have a high alcohol content, but don't look or taste like alcohol. Promoted as containing fewer calories than beer. | While the most familiar example may be Jell-O shots, kids find "rummy bears" and alcohol-soaked fruit to be appealing. | Inhaling or smoking the vapors of alcohol is dangerous because alcohol isn't metabo- lized in the stomach or liver. It increases how quickly someone becomes intoxicated and the risk of alcohol poisoning. | States banned sales due to its risk of overuse and because kids could access and use without being caught. |

There are other non-traditional and dangerous ways to use alcohol. For example, some young women have been reported to soak tampons in alcohol before inserting them — mostly to avoid the calories associated with drinking alcohol — which can damage the vagina and increase the risk of blood poisoning.³¹ Similarly, alcohol enemas (or "butt chugging") are very dangerous, frequently leading to hospitalization.³² Alcohol sprays and snorting alcohol are some other reported forms of alcohol consumption. There is a lack of research on how often these nontraditional methods are actually used, with at least one study suggesting that it is relatively rare.³³

What health care professionals should know and do

Most young people pay regular visits to health care professionals, who are seen by young patients and their parents as highly credible sources of information and advice about substance use. Therefore, you have a significant opportunity to reach young people and help protect their health by reducing youth alcohol use and its many adverse consequences.³⁴

Safeguard against youth drinking

In accordance with the <u>American Academy of</u> <u>Pediatrics</u> recommendations for pediatricians and other health care professionals who work with children and adolescents, the following are important steps to take to help prevent alcohol use and promote the health and well-being of young people.

Know the facts

Regardless of your specialty, it's important to understand the many ways in which alcohol use can compromise health and exacerbate existing physical and mental health conditions. The more young patients and their parents turn to you for information and support, the better informed the public will be about the risks of youth alcohol use and how best to intervene when it occurs. Knowing a patient's family medical and social history, whether the patient has co-occurring mental health disorders, and how alcohol is used and talked about in the home all are important for helping to protect youth who may be susceptible to drinking.

Support research and advocacy

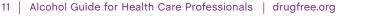
Health professionals have a significant role to play in supporting and advocating for policies and regulations that protect youth from alcohol use. This includes:

- Reducing youth exposure to alcohol advertising and marketing and expanding youth-focused treatment services.
- Support funding for quality research into effective prevention, screening, assessment, intervention and treatment services for youth alcohol and other substance use.
- Promoting family involvement in all aspects of care to ensure optimum outcomes for young patients.

Educate patients and their caregivers

You should be a credible source of information to families and play a critical role in educating all patients and their caregivers, on a routine basis and regardless of perceived risk level, about the danger of youth alcohol use and how best to prevent and reduce it. Messages should be clear, based in science and research rather than intuition or anecdote, and individualized for each patient and family's unique circumstances.







Screen and Intervene

Screening for alcohol use in adolescent and young adult patients should be a routine practice for health care providers, as it can help prevent youth alcohol use and offer opportunities to intervene if a young person has already begun to drink or is experiencing alcohol-related problems. Assess patients whose screening results are positive for frequency and intensity of alcohol use to determine the appropriate level of intervention. Use brief intervention techniques in the clinical setting and be familiar with motivational interviewing techniques for patients who do not need immediate referral to treatment.

Offer treatment including medications for alcohol use disorder or referral to treatment

Be familiar with quality treatment resources in the community and facilitate treatment access for patients and their families. Support patients with alcohol use disorders throughout their treatment and provide appropriate aftercare.





Screening young patients for alcohol use and helping those who screen positive

Screening youth for alcohol use and associated problems is one of the most important things that health professionals can do to help mitigate the risk of an alcohol use disorder. There are numerous resources available for health professionals to properly screen for problem alcohol use.

Alcohol screening tools generally include questions on personal use, friends' use and family members' use, as well as questions to assess risk. Given the high frequency of co-occurring mental health and substance use problems among adolescents and young adults, it is important for health professionals to ask questions related to their patients' psychological health. Even if a patient does not drink, it is helpful for health care professionals to positively reinforce this choice and provide assistance should their risk profile change over time. These resources also have information on what health care providers should do if a patient screens positive, in terms of how best to intervene or refer a patient to professional treatment as necessary.

National Institute on Drug Abuse has launched two brief online screening tools that providers can use to assess for risk among adolescents aged 12-17. With the American Academy of Pediatrics recommending universal screening in pediatric primary care settings, these tools help providers quickly and easily introduce brief, evidence-based screenings into their clinical practices.

The National Institute on Alcohol Abuse and Alcoholism has a tool to help health care professionals quickly identify youth at risk for alcohol-related problems.

<u>Mayo Clinic Proceedings</u> provides health care professionals with recommendations for alcohol-related screening, brief intervention and referral to treatment.

The United States Preventive Services Task Force (USPSTF) considers the evidence surrounding screening for adolescents to be inconclusive to recommend formally that the practice be part of routine care. However, the research base has grown stronger in recent years and the USPSTF still provides useful resources for screening youth for alcohol use.

<u>CRAFFT Screening Tool</u> consists of six questions developed to screen adolescents for high-risk alcohol and other drug use disorders simultaneously.



Assessing and treating young patients for alcohol use disorder

Some young people do develop an alcohol use disorder, diagnosed in accordance with the clinical criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM 5), which generally reflects continued use despite adverse consequences to life functioning or physical hazards.

Young people with alcohol use disorder require age-appropriate treatment. Family-based interventions, motivational enhancement therapy, and cognitive-behavioral therapy are just a few evidence-based treatment methods for youth with an alcohol use disorder.35 Although there is limited research related to the use of medications to treat youth with alcohol use disorder, there is reason to believe that certain medications might be beneficial for some patients. If medications do seem to be appropriate in the context of a young patient's treatment plan, there are several options that may be effective, including disulfiram (Antabuse[®]), which produces an unpleasant reaction to alcohol; naltrexone, which decreases the perceived positive effects of alcohol, reducing incentive to use it; and acamprosate (Campral®), which reduces withdrawal symptoms. Considering how effective medication

treatment can be for some adults with alcohol use disorder, and that there is no evidence suggesting that it is unsafe for older adolescents and young adults, medications certainly can be considered a viable option for patients exhibiting more severe symptoms of alcohol use disorder.

Regardless of the intervention employed, one consistent finding in research on adolescents is that <u>family involvement</u> in whichever ways possible enhances the outcomes of the intervention.

Resources for parents and other caregivers:

Partnership to End Addiction offers a family version of this alcohol guide.

Parents and caregivers can learn the importance of modeling healthy attitudes and behaviors related to drinking and their considerable power to influence their children's decisions regarding alcohol.



References

| 1 | https://www.samhsa.gov/data/report/2019-nsduh-detailed-tables |
|----|--|
| 2 | https://www.samhsa.gov/data/report/2019-nsduh-detailed-tables |
| 3 | https://pediatrics.aappublications.org/content/144/1/e20191356 |
| 0 | https://www.samhsa.gov/data/report/2019-nsduh-detailed-tables |
| | https://www.samisa.gov/auta/iepor/2019 isdan detailed tables https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/underage-drinking |
| 4 | https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/underage-drinking |
| 5 | https://cdn.ymaws.com/www.fadaa.org/resource/resmgr/files/resource_center/mtf-overview2019.pdf |
| 6 | http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2019.pdf |
| 7 | https://www.drugabuse.gov/related-topics/trends-statistics/infographics/monitoring-future-2019-survey- |
| 1 | results-overall-findings |
| | https://jamanetwork.com/journals/jamapediatrics/article-abstract/2771635 |
| 8 | https://cdn.ymaws.com/www.fadaa.org/resource/resmgr/files/resource_center/mtf-overview2019.pdf |
| 9 | https://drugfree.org/reports/teen-insights-into-drugs-alcohol-and-nicotine-a-national-survey-of-adolescent-attitudes- |
| 9 | toward-addictive-substances/ |
| 10 | https://drugfree.org/parent-blog/parents-need-know-college-binge-drinking/#3 |
| 11 | https://drugfree.org/parent-blog/parents-need-know-college-binge-drinking/#3 |
| 12 | https://www.samhsa.gov/data/report/2019-nsduh-detailed-tables |
| 12 | https://www.samhsa.gov/data/report/2019-nsduh-detailed-tables |
| 13 | http://www.monitoringthefuture.org//pubs/monographs/mtf-overview2019.pdf |
| 14 | http://www.monitoringthefuture.org//pubs/monographs/mtf-overview2019.pdf |
| 16 | https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3504-0 |
| 10 | https://pubmed.ncbi.nlm.nih.gov/31185534/ |
| 17 | https://www.mcleanhospital.org/news/what-you-need-know-about-alcohol-and-developing-teenage-brain |
| 18 | https://www.ncleannospital.org/news/what-you-need-know-about-alconol-and-developing-teenage-brain https://www.ncbi.nlm.nih.gov/books/NBK37591/ |
| 19 | https://www.nebi.nini.gov/books/NBK37391/ https://www.samhsa.gov/underage-drinking/parent-resources/consequences-underage-drinking |
| 20 | https://www.samisa.gov/underage-uniking/parent-resources/consequences-underage-uniking https://www.nhtsa.gov/road-safety/teen-driving |
| 20 | https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_06-508.pdf |
| | https://www.cdc.gov/motorvehiclesafety/impaired_driving/impaired-drv_factsheet.html |
| 21 | https://www.nhtsa.gov/road-safety/teen-driving |
| 22 | https://www.cdc.gov/motorvehiclesafety/impaired_driving/impaired-drv_factsheet.html |
| 23 | https://childmind.org/article/mental-health-disorders-and-substance-use/ |
| 23 | https://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm |
| 25 | https://pubs.niaaa.nih.gov/publications/AA67/AA67.htm |
| 26 | https://www.ncbi.nlm.nih.gov/books/NBK37591/ |
| 27 | https://pubmed.ncbi.nlm.nih.gov/11869924/ |
| 28 | https://www.ncbi.nlm.nih.gov/books/NBK542176/ |
| 29 | https://drugfree.org/article/how-to-address-underage-drinking/ |
| 20 | https://pubmed.ncbi.nlm.nih.gov/26682472/ |
| 30 | https://pubmed.ncbi.nlm.nih.gov/19482748/ |
| 31 | https://www.ocrsm.umd.edu/files/Alcohol_&_GenderDifferences.pdf |
| 01 | https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/underage-drinking |
| 32 | https://pubmed.ncbi.nlm.nih.gov/26682472/ |
| 33 | https://www.cdc.gov/ncbddd/fasd/features/teen-substance-use.html |
| 00 | https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health |
| 34 | https://www.niaaa.nih.gov/alcohols-effects-health/alcohol-use-disorder/genetics-alcohol-use-disorder |
| 35 | https://goaskalice.columbia.edu/answered-questions/vodka-tampons |
| 00 | https://pubmed.ncbi.nlm.nih.gov/24928406/ |
| 36 | https://www.cnn.com/2012/09/26/health/alcohol-enemas/index.html |
| 37 | https://www.sciencedirect.com/science/article/abs/pii/S0376871614009107 |
| 38 | https://books.google.com/books?id=jxaGDwAAQBAJ&pg=PT120&lpg=PT120&dq=richter+kunz+foster+%22A+public#v= |
| 00 | onepage&q=richter%20kunz%20foster%20%22A%20public&f=false |
| 39 | https://pubmed.ncbi.nlm.nih.gov/18381498/ |
| 00 | https://www.drugabuca.gov/citas/dofault/filos/padata_1_17_14.pdf |



