



Drugs: The Straight Facts

ALCOHOL

Introduction

This Instructor's Guide provides information to help you get the most out of *Alcohol*, part of the five-part series *Drugs: The Straight Facts*. The contents of the guide will allow you to prepare your students before using the program and to present follow-up activities to reinforce the program's key learning points.

'Alcohol isn't a drug.' 'A cup of coffee will sober me up.' 'I'm always a safe driver, even after a couple of beers.' These statements are only a few of the myths this video skewers as it explores the history of alcohol; the effects of alcohol on the body and the short- and long-term health impacts; and teenage attitudes toward alcohol and trends such as binge drinking. The video also examines the prevalence of alcohol in American culture and discusses alcoholism — how to identify it and how to treat it.

Drugs: The Straight Facts correlates to National and State Educational Standards, including the NCLB Act. The series includes:

- *Marijuana*
- *Alcohol*
- *Cocaine and Crack*
- *Inhalants*
- *Narcotics*

Learning Objectives

After viewing the program, students will understand:

- The history of alcohol use, including Prohibition
- The difference between beer, wine, and liquor
- Blood Alcohol Concentration, and the factors that affect it

- How alcohol affects the brain's reward pathway
- Some short- and long-term effects of alcohol abuse

Main Topics

Topic 1: Introduction

The program begins by reminding viewers that alcohol is a drug, then provides a short history of alcohol use, including the American period of Prohibition.

Topic 2: What is Alcohol?

This section outlines the differences between beer, wine, and liquor, then discusses Blood Alcohol Concentration and factors that affect both getting drunk, and sobering up.

Topic 3: Short-term Effects of Alcohol

This section explains that, although its effects sometimes make it seem otherwise, alcohol is actually a depressant. The section outlines some of the physiologic and behavioral results of drinking, including drunk driving.

Topic 4: Alcohol and the Brain

The effect of alcohol on the brain as it influences dopamine, serotonin, and GABA production is presented in this section.

Topic 5: Long-term Effects of Alcohol

The program's final section warns of some potential dangers of chronic alcohol abuse, including disease and addiction.

Fast Facts

- In the United States, an alcohol-related motor vehicle accident kills someone every 40 minutes, and non-fatally injures someone every two minutes. Of all alcohol-related driving fatalities, 80% are caused by the consumption of beer.
- Men between the ages of 18 and 34 are responsible for the vast majority of drunk driving accidents, according to the National Highway Traffic Safety Administration (NHTSA). Many of the young men questioned for NHTSA's study did not believe themselves to be drunk, however, but only 'buzzed.' This led to an ad campaign designed to inform the public that 'buzzed' driving is drunk driving.

- Alcohol is by far the drug of choice among young people, with significantly more reporting usage of this than of any other drug including marijuana and tobacco. Over 60% of 12th graders polled for Monitoring the Future's 2008 national survey reported using alcohol within the past month, as did over 40% of 10th graders, and over 20% of 8th graders. Most young people report that booze is 'fairly easy' or 'very easy' to get.
- Why is underage drinking a concern? According to the U.S. Surgeon General's 2007 report, when teens drink, they usually consume about five drinks on a single occasion — enough to qualify it as binge drinking. Underage alcohol consumption claims approximately 5,000 young lives every year due to accidents, homicides, and suicide. Binge drinking also increases the likelihood of carrying out, or being the victim of, physical or sexual assault, and of unplanned pregnancy and sexually transmitted diseases.
- Another concern about underage drinking is the fact that the human brain does not stop developing until the mid-20s, so altering its chemical functioning with alcohol may affect cognition and other neural reflexes later on in life.
- Those who start drinking before the age of 15 are four times more likely to have a problem with alcohol dependence at some point in their life.
- Alcohol impairment is not determined by what you drink, but by how much you drink over a given period of time. Your weight, and whether or not you have food in your stomach, are other factors in impairment.
- The only way to sober up is by waiting for the body to metabolize the alcohol you've consumed — it takes about one hour per drink. Drinking coffee, exercising, or taking a cold shower may help you feel more alert, but technically, you are still drunk.
- Initially, alcohol produces feelings of relaxation, but eventually can also lead to irrational, risky, or violent behavior.
- A bottle of beer, a glass of wine, and a shot of whiskey or other spirits all contain the same amount of alcohol.

Vocabulary Terms

addiction: Compulsive physiological and psychological need for a habit-forming substance, characterized by tolerance and by well-defined physiological symptoms upon withdrawal.

BAC: Blood Alcohol Concentration, or the concentration of alcohol in the blood. A BAC of 0.20% indicates very serious intoxication, and 0.35% to 0.40% would be fatal for 50% of all adults.

beer: An alcoholic beverage made by brewing and fermentation from cereals, usually malted barley, and flavored with hops. Beer is about 6% alcohol.

binge drinking: Consuming five or more drinks (for a male), or four or more drinks (for a female) in about two hours for a typical adult.

depressant: A substance that slows the activity of vital bodily organs, or lowers the rate of physiological activity.

dopamine: A neurotransmitter that causes euphoric feelings.

endorphin: A naturally occurring opioid peptide. Endorphins react with the brain's opiate receptors to raise the pain threshold.

ethanol: A colorless liquid having an etherlike odor and pungent, burning taste, it is the intoxicating principle of fermented liquors, produced by yeast fermentation of carbohydrates such as grains, molasses, starch, or sugar, or obtained synthetically; whiskey, gin, vodka, or any other intoxicating liquor containing this liquid. Also called ethyl alcohol, grain alcohol, and fermentation alcohol.

French Paradox: The idea that the French suffer a relatively low incidence of coronary heart disease, despite having a diet relatively rich in saturated fats. The paradoxical discrepancy was attributed to the consumption by the French of red wine. It has since been noted that the French may have more heart disease than was previously thought; and that consumption of saturated fats is not as closely linked to heart disease as was previously believed.

GABA: A neurotransmitter that inhibits excitatory responses. GABA reacts to alcohol by inhibiting many brain activities, both cognitive (such as judgment) and physical (such as breathing).

liquor: A distilled or spirituous beverage such as whiskey, gin, and vodka, as distinguished from a fermented beverage, such as wine or beer. Liquor is about 40 to 60% alcohol.

neurotransmitter: A chemical released by neurons used to transmit nerve impulses across a synapse (that is, to allow neurons to communicate with each other).

Prohibition: The period of time beginning in 1920 when the 18th amendment to the Constitution banned the sale of alcohol in the U.S. without a doctor's prescription. Prohibition ended in 1933.

serotonin: A neurotransmitter involved in the regulation of mood, appetite, sleep, memory, and learning, among other physiological processes.

wine: An alcoholic beverage made by fermenting grapes, berries, or other fruit (though it can also be made from plants). Wine is about 10% alcohol.

Pre-Program Discussion Questions

1. How do you think a person can sober up after drinking too much?
2. Do you think it's a good idea to have a legal drinking age?
3. Is there a difference in the alcohol content of wine, beer, and liquor?
4. Do you think that getting drunk a lot in high school can have any lasting negative consequences?
5. How would you know if you had a drinking problem?

Post-Program Discussion Questions

1. How do you think a person can sober up after drinking too much?
2. Why is underage drinking a concern?
3. Was Prohibition a good idea?
4. How does alcohol affect the brain?
5. Is alcohol a stimulant or a depressant?
6. What do you think is the most important aspect of understanding alcohol and its use?

Student Projects

- As a class project, gather evidence that refutes the following myths about alcohol. Use the information you find to create a series of illustrated flyers, with one myth per flyer, that can be distributed throughout your school.
 - Myth # 1: Drinking isn't that dangerous — it's not like I'm using drugs.*
 - Myth # 2: I can drink without it affecting me.*
 - Myth # 3: I can sober up quickly with a cup of coffee or a cold shower.*
 - Myth # 4: I have to drink to hang out with my friends.*
 - Myth # 5: Beer isn't as dangerous as stronger drinks.*
 - Myth # 6: I'm a good driver, even if I've had something to drink.*
 - Myth # 7: Alcohol gives me energy.*
 - Myth # 8: So what if I drink? I'm only hurting myself.*
- Write a report on women and alcohol, researching the idea that young women face more health and social problems due to alcohol abuse than do young men. Include information on the increasing rate of teen girls' drinking, and what factors may be contributing to this.
- Using resources such as 'Alcohol Marketing and Youth' (<http://camy.org>), write a report on the ways in which alcohol companies target teens, and what the consequences to young people might be. Present your findings to the class, along with examples of alcohol advertising. What are some common themes and images of ads for beer? Wine? Liquor? Include information on alcopops, the sweet, brightly colored alcoholic drinks that seem to be aimed at underage drinkers.
- Participate in a class discussion / debate about teen alcohol use and abuse, considering some of the following questions:
 - What are some reasons that young people drink to excess? Does loneliness, stress, or depression play a role?
 - How many beers, glasses of wine, and/or shots can you drink and still be able to drive?
 - Is someone who has a few beers while watching TV every night an alcoholic?
 - How would becoming dependent on alcohol change your daily life?
 - How might alcohol abuse affect families?
 - Is alcoholism really a disease?
 - Given the amount of health problems, social problems, and deaths that alcohol causes, why do you think that Prohibition has not been reinstated?
 - Why do some people consider being drunk to be cool? Why do people make so many jokes about drinking and being able to get drunk as a response to stress?
 - Do the media, the entertainment industry, and the arts community glamorize drinking and getting drunk?

- With other students, participate in role-playing exercises in which you find yourselves in the following situations:
 - Being offered alcohol after school
 - Being offered alcohol at a party
 - Being offered alcohol while on a dateRehearse responses to these situations that seem realistic, especially if the 'offerer' downplays the danger, tries to embarrass you via peer pressure to be cool, or is especially persistent.
- In the form of a poster, brochure, or Web page, develop a resource to help students who are having problems with drinking — either their own, or a family member's. The resource could include contact information for addiction treatment centers, Web sites, books, hot-lines, and even guidance counselors and other helpful people in your school and community.

Assessment Questions

1. The prohibition of alcohol in 1920 resulted in all of the following, except _____.
 - a) illegal bars where people secretly gathered to drink
 - b) the rise of criminal organizations dedicated to smuggling and bootlegging liquor
 - c) the illegal brewing of liquor
 - d) the cessation of drinking and drunkenness

2. Liquor, such as whisky, gin, and vodka, contains about _____% alcohol.
 - a) 6
 - b) 10
 - c) 40 to 60
 - d) 80

3. True or False? Beer, wine, and liquor all act on the body in the same way, but they do so at different rates.

4. Your Blood Alcohol Concentration dictates how drinking affects you, and depends on _____. (Choose all that apply.)
 - a) what you drink
 - b) how much alcohol you consume within a given period of time
 - c) whether you have food in your stomach
 - d) how much you weigh
 - e) your age

5. The following methods help drinkers to metabolize alcohol, i.e., sober up: _____. (Choose all that apply.)
 - a) exercise
 - b) eating
 - c) drinking coffee or caffeinated cola
 - d) taking a cold shower
 - e) any of these
 - f) none of these

6. Alcohol is in a class of drugs called _____.
 - a) stimulants
 - b) depressants
 - c) sedatives
 - d) opiates

7. An alcohol-related motor vehicle crash kills someone in the U.S. approximately _____.
 - a) every day
 - b) every hour
 - c) every 30 to 40 minutes
 - d) every 2 minutes

8. True or False? Although getting drunk does not kill brain cells, it does damage dendrites — meaning that the way in which neurons communicate information is impacted. The damage is temporary, except in cases of chronic alcohol abuse.

9. Like other drugs of abuse, alcohol increases dopamine levels, but it also affects the neurotransmitter GABA. This is of particular concern to teens drinking, because _____.
 - a) it could lead to depletion of GABA levels
 - b) the mix of alcohol and GABA could cause seizures
 - c) it makes alcohol particularly addictive
 - d) GABA works in the frontal cortex, which is not fully developed until the late 20s

10. According to the French Paradox, drinking _____ of red wine can be good for you.
 - a) 1 to 2 glasses per day
 - b) up to a bottle per day
 - c) up to half an ounce per day
 - d) a bottle or two

Assessment Questions Answer Key

1. The prohibition of alcohol in 1920 resulted in all of the following, except _____.
 - a) illegal bars where people secretly gathered to drink
 - b) the rise of criminal organizations dedicated to smuggling and bootlegging liquor
 - c) the illegal brewing of liquor
 - d) the cessation of drinking and drunkenness

A: (d) the cessation of drinking and drunkenness

2. Liquor, such as whisky, gin, and vodka, contains about _____% alcohol.
 - a) 6
 - b) 10
 - c) 40 to 60
 - d) 80

A: (c) 40 to 60

3. True or False? Beer, wine, and liquor all act on the body in the same way, but they do so at different rates.

A: True

4. Your Blood Alcohol Concentration dictates how drinking affects you, and depends on _____.
(Choose all that apply.)
 - a) what you drink
 - b) how much alcohol you consume within a given period of time
 - c) whether you have food in your stomach
 - d) how much you weigh
 - e) your age

A: (b) how much you consume within a given period of time; (c) whether you have food in your stomach; (d) how much you weigh

5. The following methods help drinkers to metabolize alcohol, i.e., sober up: _____.
(Choose all that apply.)
 - a) exercise
 - b) eating
 - c) drinking coffee or caffeinated cola
 - d) taking a cold shower
 - e) any of these
 - f) none of these

A: (f) None of these. Although methods such as coffee or a cold shower help you feel more alert, the only way to get rid of excess alcohol is by waiting for it to metabolize.

6. Alcohol is in a class of drugs called _____.
a) stimulants
b) depressants
c) sedatives
d) opiates

A: (b) depressants

7. An alcohol-related motor vehicle crash kills someone in the U.S. approximately _____.
a) every day
b) every hour
c) every 30 to 40 minutes
d) every 2 minutes

A: (c) every 30 to 40 minutes

8. True or False? Although getting drunk does not kill brain cells, it does damage dendrites — meaning that the way in which neurons communicate information is impacted. The damage is temporary, except in cases of chronic alcohol abuse.

A: True

9. Like other drugs of abuse, alcohol increases dopamine levels, but it also affects the neurotransmitter GABA. This is of particular concern to teens drinking, because _____.
a) it could lead to depletion of GABA levels
b) the mix of alcohol and GABA could cause seizures
c) it makes alcohol particularly addictive
d) GABA works in the frontal cortex, which is not fully developed until the late 20s

A: (d) GABA works in the frontal cortex, which is not fully developed until the late 20s

10. According to the French Paradox, drinking _____ of red wine can be good for you.
a) 1 to 2 glasses per day
b) up to a bottle per day
c) up to half an ounce per day
d) a bottle or two

A: (a) 1 to 2 glasses per day

Additional Resources

Stop Underage Drinking: Portal of Federal Resources

www.stopalcoholabuse.gov

Mothers Against Drunk Driving

www.madd.org

We Don't Serve Teens

www.dontserveteens.gov

The Center on Alcohol Marketing and Youth

<http://camy.org>

National Institute on Drug Abuse

The Science of Drug Abuse & Addiction

www.drugabuse.gov

NIDA for Teens

Facts, Stories, Brain Games

<http://teens.drugabuse.gov>

U.S. Department of Health and Human Services

Substance Abuse & Mental Health Services Administration

Alcohol & Drug Information

<http://ncadi.samhsa.gov>

National Institute on Alcohol Abuse and Alcoholism

www.niaaa.nih.gov

www.streetdrugs.org

www.streetdrugs.org

Monitoring the Future: A Continuing Study of American Youth

www.monitoringthefuture.org

Additional Products from Films Media Group

Available from Films Media Group • www.films.com • 1-800-257-5126

Teen Danger Zone: Teens at Risk (DVD/VHS)

Combining hard-hitting personal stories with cold facts, the first six segments of this chaptered program report on some of the most common drugs currently being abused by teens: OxyContin, PMA, Special K (ketamine), the methamphetamine Ice, inhalants, and, in the form of binge drinking, alcohol. The final segment focuses on hazing, a frequently outlawed form of initiation that, like substance abuse, speaks directly to the teenage desire to fit in with peers — sometimes at any cost. Recommended for high school. (46 minutes) © 2006 (# 36248)

Women and Alcohol (DVD/VHS)

Binge drinking is traditionally a young man's 'sport,' but now many college-age women are doing their best to keep up. Why? And how does such a staggering level of alcohol consumption affect a woman physically? This ABC News program explores those questions, documenting one young woman's quest to systematically determine the impact of regular, heavy drinking — four drinks every two hours for a month, to be specific — on her physiology. The results can be described as horrific. The program also shows how binge drinking can turn women into targets of sexual assault, although these tragedies are often not remembered by the victims. (17 minutes) © 2006 (# 36237)

Drug Dangers: Medical, Legal, and Social (DVD/VHS)

What causes addiction? Is experimenting with drugs just a dangerous gamble or an expressway to the gutter? Can common sense override the urge to rebel and the yearning to fit in? This four-part series reveals the pitfalls of substance abuse in terms of health threats and psychological problems as well as the many ways an addict can run afoul of the law and society. Featuring commentary from medical and legal experts and candid testimonials from current and former users, the series shows how easily addiction can occur and explores ways to help those afflicted break their deadly habits. Viewable/printable educational resources are available online. The series includes *Introducing Cannabis: Risks, Laws, and Habits* | *Introducing Tobacco: Risks, Laws, and Habits* | *Stuff You Need to Know about Party Drugs* | *Drink Spiking: Awareness and Avoidance*. (25-30 minutes each) © 2008 (# 40380)

Twelve: Young Addicts Speak from the Heart (DVD/VHS)

Kat grew up in an alcoholic home. John made drinking the center of his life at a young age. Rene's parents divorced when he was five, while Chris and Dante both seemed to have everything they wanted—but all became substance abusers. Through detailed, candid conversations, this program goes inside the childhood memories and emotional lives of recovering addicts who started their habits at, or close to, age 12. Their stories reveal unique qualities and experiences as well as patterns seen over and over again among alcoholics and drug abusers—often involving crime and social isolation. In addition to their pain and regret, the participants also discuss the most daunting challenge of all: the ongoing process of recovery. (45 minutes) © 2008 (# 40034)

Addiction: The HBO Series (DVD/VHS)

Featuring valuable case studies and expert commentary, this 14-part series offers a wide-ranging look at the science and the human face of addiction. Personal stories from drug users and their family members are combined with in-depth perspectives from leading psychologists, drug counselors, and other experts on substance abuse. Educators will find the series format — beginning with a comprehensive overview followed by 13 short documentaries — helpful for both group discussions and lectures. Contains mature themes, occasional explicit language, and some graphic injury footage. An HBO Production.

The series includes *Addiction: A Comprehensive View* | *What Is Addiction?* | *Understanding Relapse* | *The Search for Drug Treatment: A Challenging Journey* | *The Adolescent Addict* | *An Interview with Nora D. Volkow, M.D.* | *An Interview with Mark L. Willenbring, M.D.* | *An Interview with Michael L. Dennis, Ph.D.* | *An Interview with Kathleen T. Brady, M.D., Ph.D.* | *Getting an Addict into Treatment: The CRAFT Approach* | *Treating Stimulant Addiction: The CBT Approach* | *Opiate Addiction: Understanding Replacement Therapy* | *South Boston Drug Court* | *A Mother's Desperation: Resorting to the Law*. (21-87 minutes each) © 2006 (# 39791)

Straight Talk: Alcohol and Other Drugs (DVD/VHS)

This reality TV-style docudrama is made up of the candid comments of 19 teens and young adults who have taken a wrong turn into dependency and have survived to enter recovery. Section one addresses pre-addiction issues: dysfunctional home life, negative early school experiences, low self-esteem in early childhood, and special education placement. Section two addresses addiction issues: drugs of choice, abusive relationships, sexual acting out, and suicidality. And section three addresses recovery issues: fighting to stay straight, coping with relapse, dealing with the past, and regaining a vision of a brighter future. A 95-page discussion guide with interview transcripts, interviewee profiles, a glossary of “the language of recovery,” and more is included. (90 minutes) © 2005 (# 40113)

Drugs: A Destructive Force (Eight 17" x 22" posters)

How can substance abuse educators combat the allure of cocaine, LSD, tobacco, and other killers? By communicating the downside of drugs in no uncertain terms. This eight-poster series speaks directly to young people about the alarming risks and all-too-frequent tragedies linked with drug abuse. In addition to several types of dangerous substances — including prescription and over-the-counter medication — the deadly pitfalls of drunk driving are also examined. A Cambridge Educational Product. The set includes: *Cocaine* | *Alcohol* | *Marijuana* | *Smoking* | *Prescription/OTC Drugs* | *Hallucinogens* | *Inhalants* | *Drunk Driving*. © 2007 (# 37035)



Please send comments, questions, and suggestions to custserv@films.com