

# Avoiding the Lure of Tobacco, Alcohol and Marijuana

**By. Kathiann M Kowalski**

Devon started drinking at friends' houses at age 11. Soon, she was using marijuana, cocaine, and "whatever I could get my hands on." Before turning 16, Devon had been arrested twice for underage drinking use. Eventually, an overdose of alcohol and cocaine landed the Minnesota teen in a hospital.

Almost everyone who uses cocaine, heroin, and other drugs starts with tobacco, alcohol, or marijuana. In their 1998 Monitoring the Future Study, University of Michigan researchers asked teens what drugs they had used during the previous month. Among 12th graders, 35 percent said they had smoked cigarettes, 52 percent had drunk alcohol, and 23 percent had used marijuana. Misled by billions of dollars in advertising and images in movies, experts say, teens often don't realize where these substances can lead.

## Tobacco's Toll

Despite health warnings on each cigarette pack, about 3,000 young people start smoking every day. The Centers for Disease Control and Prevention (CDC), a U.S. government agency, says roughly 1,000 of them will become addicted to nicotine, one of tobacco's approximately 4,000 chemicals. Before turning 18, 70 percent of teen smokers regret starting. Yet many will remain addicted until they become ill with tobacco-related diseases.

Tobacco companies need young smokers. More than 400,000 Americans die each year from tobacco-related illnesses. These include lung cancer, chronic bronchitis, emphysema, heart attacks, high blood pressure, strokes, and arteriosclerosis (hardening of the arteries). Chewers risk cancers of the esophagus, mouth, and throat, and loss of teeth.

But teens don't have to wait decades to get sick from tobacco. Smoking reduces lung capacity soon after a person starts, causing shortness of breath and reduced stamina. That's bad for playing sports or even just climbing stairs between classes. Smokers suffer more from asthma, as well as colds, pneumonia, flu, and other infections. Add stained teeth and fingers, foul breath, and smelly clothes. No wonder most teens prefer dating nonsmokers.

And with all that negative stuff, no wonder the tobacco industry spends billions each year on advertising. Despite ads' attempts at "grown-up" images, few people start smoking after age 18. As a 1981 Philip Morris document said, "Today's teenager is tomorrow's potential regular customer."

Do you doubt the power of advertising on teens? The Campaign for Tobacco-Free Kids says 86 percent of youth smokers prefer Marlboro, Camel, and Newport, the three most advertised brands. Only one-third of adult smokers prefer those brands.

Even with the tobacco industry's billions of dollars in advertising, Florida's anti-tobacco stance has seen recent downturns in teen smoking rates. Teens in Florida have been clued in. Activist Christina Scelsi, age 17, credits a campaign to expose the tobacco industry by SWAT--Students Working Against Tobacco. "It encourages teens to positively rebel by not smoking and not letting the tobacco industry take them in and addict them to nicotine," says Christina.

## Alcohol--Not as Advertised

Like tobacco, alcohol is readily available to teens. Beavers and bar scenes in TV ads make alcohol seem fun. But for Keith Noble, Steven Donnelly, and Scott Krueger, alcohol was a killer. Many other teens have shared these college honor students' fate. Fifty college students die each year after "binge drinking"--consuming five drinks in a row for males or four for females.

Alcohol is illegal in every state for people under age 21. Yet 25 percent of eighth graders in the Monitoring the Future Study already had gotten drunk. For 12th graders, the figure was 62 percent.

Alcohol acts as a depressant in the body. It depresses, or slows down, the central nervous system, affecting judgment and coordination.

Alicia became aware of this effect early on. She began drinking when she was 15. Over time, Alicia grew to hate the out-of-control feeling she got from alcohol's blur. Now the Ohio teen no longer drinks alcohol. "I was not really big on drinking to get drunk, and a lot of people were," Alicia says. "Why would I do something so I wouldn't be in control?"

People react to alcohol differently. One drink relaxes many people. Two or three can make some people lose their inhibitions. Four or five can cause aggression.

On college campuses, most fights, property destruction, date rapes, sexually transmitted diseases, unwanted pregnancies, and accidents have some link to alcohol. Even if teens don't become violent themselves, drinking makes them more vulnerable to attacks. Devon, for example, was at a drinking party when she was attacked and raped.

Alcohol use--by the victim, the perpetrator, or both--is implicated in 46 to 75 percent of date rapes of college students, according to a new report by the National Center on Addiction and Substance Abuse (CASA) at Columbia University.

Sadly, people under alcohol's influence often don't realize it. "I felt like there was never an amount of alcohol that was too much for me," Jonathan recalls. After drinking all night, Jonathan crashed his car and killed his 18-year-old friend Justin. Jonathan wound up doing prison time in Georgia for vehicular homicide and driving under the influence.

#### No Safe Limit

The more a person drinks, the higher his or her blood alcohol concentration (BAC) is. Alcohol's absorption into the body depends on gender, weight, and various other factors. In many states, an adult over 21 is legally drunk if his or her BAC is 0.8 or above. Some states have a limit of 0.5.

Despite these numbers, even a single drink impairs the rapid-fire responses needed for safe driving. Generally, exceeding any detectable BAC--0.02 or less--is illegal for all drivers under age 21.

Beyond its immediate effects, alcohol can cause anemia, sleep disorders, liver disease, heart disease, damage to the esophagus and pancreas, and cancer. Alcohol abuse also can have a detrimental effect on school performance and personal relationships.

Of course, none of these effects show up in ads for beer or other alcoholic beverages. After all, how much alcohol would people buy if they saw ruined lives instead of smart-alecky lizards?

Alcohol and tobacco are legal drugs for adults, and they are easily available. But another drug, marijuana, is illegal for everyone. Yet it's accessible to everyone--adults and teens.

#### Marijuana--Don't Buy the Hype

Marijuana goes by many names: pot, grass, reefer, roach, smoke, dope, joint, Mary Jane, and others. Because marijuana is illegal, it's not advertised directly. But at least a half-dozen movies last year portrayed marijuana as cool. Real life is nothing like the movie hype.

Derived from a hemp plant called cannabis sativa, marijuana contains hundreds of chemicals. A main ingredient responsible for marijuana's "high" is delta-9-tetrahydrocannabinol, or THC.

Most people who smoke or eat marijuana want to get "high." Some users feel relaxed or detached. Others get giddy or silly. But marijuana's health effects are anything but silly.

Marijuana is at least as bad for your lungs as tobacco. Smoking marijuana can cause lung cancer and other respiratory diseases. It causes temporary increases in heart rate. And it can affect the immune system--the body's defenses against disease.

Beyond this, marijuana affects the brain. Studies of college students showed decreased ability to concentrate and remember things. Even after highs wore off, marijuana users consistently scored lower on various tests. With college admissions or job interviews ahead, the last thing any teen needs is something that interferes with memory, reasoning, and even understanding simple ideas. Marijuana also blunts coordination and concentration, making driving, sports, and other activities very dangerous.

Marijuana alters users' moods. Even if a user avoids paranoia and hallucinations, marijuana's "high" hinders good judgment. "That puts you at risk for making poor life decisions," stresses Alan Leshner, director of the National Institute on Drug Abuse (NIDA). Unprotected sexual activity (with risks of AIDS and sexually transmitted infections), use of other drugs, and impaired driving are just a few dangerous behaviors that correlate with marijuana use.

As if that's not enough, marijuana is illegal. Getting high isn't worth the risk of jail time, a huge fine, and a criminal record. Nor is it worth the risk of getting knocked off a sports team or being rejected for a job. Since traces remain in the body for a long time, many schools and businesses use testing to screen out people who use marijuana and other drugs.

Last year CASA announced that more teens and children entered treatment for marijuana abuse than for all other drugs--more than 87,000 in 1996. Movie makers wouldn't pull in such huge profits if they replaced silly stoned characters with real-life suffering teens.

### Opening the Door to Other Addictions?

Why do so many teens keep using tobacco, alcohol, and marijuana? And might they lead to use of other drugs?

"The truth is, if you don't use alcohol, tobacco, or marijuana by the time you're 21, the probability of ever becoming addicted to anything is virtually zero or is tremendously reduced," says NIDA's Leshner. "And the earlier you use substances, the greater the probability of becoming addicted to other things."

It's not necessarily a direct causal connection, notes Leshner. For example, many teens addicted to nicotine, alcohol, or marijuana have other emotional and psychological problems. Those problems, genetics, or other factors could explain the high correlation.

Nonetheless, the statistics are startling. "Among teens who report no other problem behaviors, those who used cigarettes, alcohol, and marijuana at least once in the past month are almost 17 times likelier to use another drug like cocaine, heroin, or LSD," says CASA's president, Joseph A. Califano, Jr.

### The Brain's Response

How are these drugs linked to harder drugs? Important clues lie in how nicotine, alcohol, and THC affect the brain. At first the substances produce pleasant feelings. The body's response reinforces, or rewards, continued use. Over time, users develop a tolerance. They need more and more to get the same feeling. Soon, users become addicted to the substance.

Nicotine, for example, travels to the brain within 8 seconds. There it mimics effects of a neurotransmitter called acetylcholine. Neurotransmitters travel from nerve cell to nerve cell and cause responses. Acetylcholine affects muscle movement, breathing, heart rate, learning, memory, and hormone levels.

Nicotine also affects levels of another neurotransmitter called dopamine, which is associated with feelings of pleasure and reward. The pleasant feelings encourage the smoker to use tobacco again. Alcohol and marijuana likewise affect levels of dopamine and other neurotransmitters.

Cocaine, heroin, and other drugs also change levels of dopamine and other chemicals in the brain. These changes in brain chemistry suggest a link between tobacco, alcohol, and marijuana and other drugs. "While scientists have not yet discovered the smoking gun," says Califano, "they have certainly found the trigger finger."

"Adolescence is a particularly important period of life because of all the social, emotional, and physical development going on," notes Harvard Medical School's Elena Kouri. Beyond their effects on thinking and emotional functions, drugs can interfere with teens' motivation to develop to their full potential. "All drugs that have reinforcing properties (the ones that make you feel good) have the potential to become addictive," says Kouri. "Every time a person uses a drug or alcohol, the likelihood of the person becoming addicted to it increases."

Addiction becomes harder to escape when withdrawal symptoms hit. Cigarette smokers feel restless, hungry, depressed, or suffer headaches. Problem drinkers get shaky, anxious, nauseous, and sweaty when they can't drink.

With heavy marijuana use, "the withdrawal syndrome is subtle, and oftentimes individuals don't associate it with marijuana," says Kouri. "Instead, they feel cranky, irritable, a little anxious." Even if withdrawal doesn't interfere with daily activities, Kouri says, "it is often severe enough to drive individuals to smoke marijuana again."

Hormones associated with the withdrawal response might make some teens crave something stronger. Or, while they're drunk or stoned, teens may experiment with other drugs. But it's a delusion for anyone to think they can control their use of addictive substances.

"The determinant of whether you become addicted is unknown," stresses NIDA's Leshner. Genetics, for example, may make you vulnerable without your knowing it. "Therefore, nobody is immune ... and you need to protect yourself from the risks."

### Far-reaching Effects

Tobacco, alcohol, and marijuana don't affect just the people who use them. They affect family members and all the people with whom users come in contact. "A lot of my family members smoke," says 14-year-old Brittany from Runnemede, New Jersey, "and I have a hard time because I have asthma." Secondhand smoke also leads to other lung problems and increased infections.

Tobacco, alcohol, and marijuana strain relationships. Users may lie about use, steal from family members to support their habit, or become abusive to people they should love and trust.

Strangers get hurt too. Driving under the influence of alcohol or marijuana kills and injures thousands each year. And all of society suffers from the costs of higher health care expenses, destruction from violence, and lost opportunities from what users might have achieved.

Teens face enough challenges without the health hazards of tobacco, alcohol, and marijuana. "Nobody thinks they're going to get addicted. Nobody thinks they're going to get in trouble," says Alyse Booth, CASA's director of communications. "But on the other hand, why take the risk if you really value yourself and your future?"

### Thinking Ahead

Tobacco, alcohol, and marijuana all affect the brain. Use your brain to think about the answers to the following questions, and be prepared to discuss the answers in class:

1. Why do you think teens start using tobacco, alcohol, and marijuana? Why are those reasons shortsighted from a health standpoint?
2. If cigarettes cost \$3.50 a pack, how much would a pack-a-day habit cost each year? How long would it take you to earn that money? What else could you do with it?
3. Although it's unlawful, stores sometimes sell tobacco or alcohol to teens. What's in it for them?
4. Buying and selling marijuana is a crime. Find out what the penalties are in your state.
5. Who profits if you use tobacco, alcohol, or marijuana? Who benefits if you keep your money and protect your health?
6. How good is a friend who pressures you to do something that's bad for your health?
7. List four ways to say no if someone offers you tobacco, alcohol, or marijuana.

### Getting Help

Devon was one of the lucky ones. After her hospital stay, she got treatment for her drug and alcohol addiction. Then Devon enrolled at Sobriety High, an alternative school in Edina, Minnesota, for recovering teen substance abusers.

Even for less serious substance abuse problems, it's never too early to get help. "We're not against smokers; we're against the tobacco industry," says SWAT's Christina Scelsi. At a program in her county, teens can get counseling and classes to help them stop smoking. With parental permission, they can also use patches to wean themselves away from nicotine. Ask your doctor or contact the American Lung Association to find out about programs in your area.

Alcoholics Anonymous sponsors special teen meetings across the country. Narcotics Anonymous uses a similar approach to address addiction to marijuana and other drugs.

Other programs to combat alcohol and marijuana addiction are available, including both inpatient and outpatient programs. Ask your teacher for help if you need it!