



# DRUGS: SHATTER THE MYTHS

**NIDA**  
NATIONAL INSTITUTE  
ON DRUG ABUSE

## **What does the National Institute on Drug Abuse do?**

NIDA is part of the National Institutes of Health. We are the largest supporter of the world's research on drug abuse and addiction. Our goal is to better understand who uses drugs and why, and how drugs work in the brain and body, so we can develop and test new ways to prevent and treat drug abuse and addiction.

This publication is in the public domain and may be used or reproduced in its entirety without permission from NIDA. Citation of the source is appreciated.

NIH Publication No. 10-7589

Printed October 2010, Revised April 2011



FROM THE DESK OF:  
**SARA BELLUM**

**Hi, SARA BELLUM HERE.**

NIDA (aka the National Institute on Drug Abuse) has a blog for teens that is named after moi. NIDA is the leading research institute on drugs and drug abuse, so they are pretty much the experts on the topic (check out [www.teens.drugabuse.gov](http://www.teens.drugabuse.gov)). I'll be your "guide" for this booklet, so **READ ON...**

TOPIC

## Marijuana

# Is marijuana **ADDICTIVE?**

**Yes.** The chances of becoming addicted to marijuana or any drug are different for each person. For marijuana, around **1 in 11** people who use it become addicted. Could **you** be *that* one?





A TRUE  
STORY

From age 13 to 18, **Alby** got high several times a day to help him cope. He went to school high and eventually dropped out. “I was losing focus. My attention went from 100 to zero. I was depressed,” he says. Now, after getting substance abuse treatment, Alby has been able to face his problems by talking them out with counselors and making new friends he describes as “positive.” As he puts it, “I feel a lot better about myself. I feel a lot sharper. I don’t feel lazy anymore.”



**MARIJUANA—  
YOU CAN GET ADDICTED.**

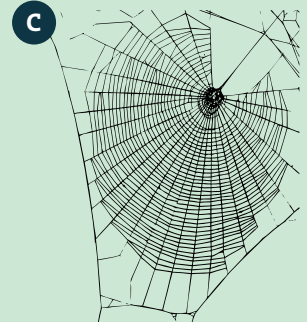
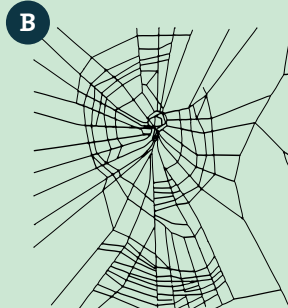
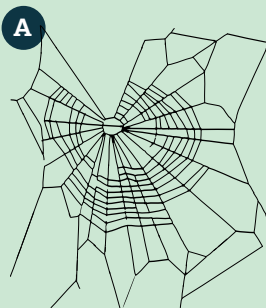


# QUIZ

**Marijuana can affect learning and memory by acting in which part of the brain?**

- A. Hippocampus
- B. Brain stem
- C. Visual cortex
- D. All of the above

**Which of these webs is made by a spider that is NOT on drugs?**



**“Spice” (also known as K-2):**

- A. Is considered to be a “fake marijuana”
- B. Has put people in emergency rooms with vomiting, confusion, and hallucinations
- C. Is abused mainly by smoking
- D. All of the above

A. Hippocampus, C. No Drugs, D. All of the above

ANSWERS:



\* Product Placement

\* Product Placement

A lot of teens ask us about **peer pressure**, or why people do things that can hurt them just to fit in.



Why do people

# SMOKE

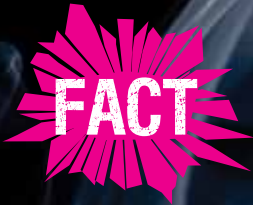
when they know it's so bad for them?



## Product Placement

Maybe they smoke because they can't stop. People start smoking for different reasons, but most keep doing it because of one reason—they are addicted to nicotine.

**DID YOU KNOW?** Research says that teens who see a lot of smoking in movies are more likely to start smoking themselves. Sometimes characters smoke to look edgy and rebellious; but sometimes it's just about "product placement"—the tobacco industry trying to get into your head and your pockets.



**MOST PEOPLE WHO START  
SMOKING IN THEIR TEENS  
BECOME REGULAR SMOKERS  
BEFORE THEY'RE 18.**

# QUIZ

## Smokeless tobacco does not cause cancer.

- A. True, it is the tar in cigarettes that causes lung cancer, emphysema, and bronchial disorders.
- B. False, smokeless tobacco (such as chewing tobacco and snuff) increases the risk of cancer, especially oral cancers.

## How many Americans die from diseases associated with tobacco use each year?

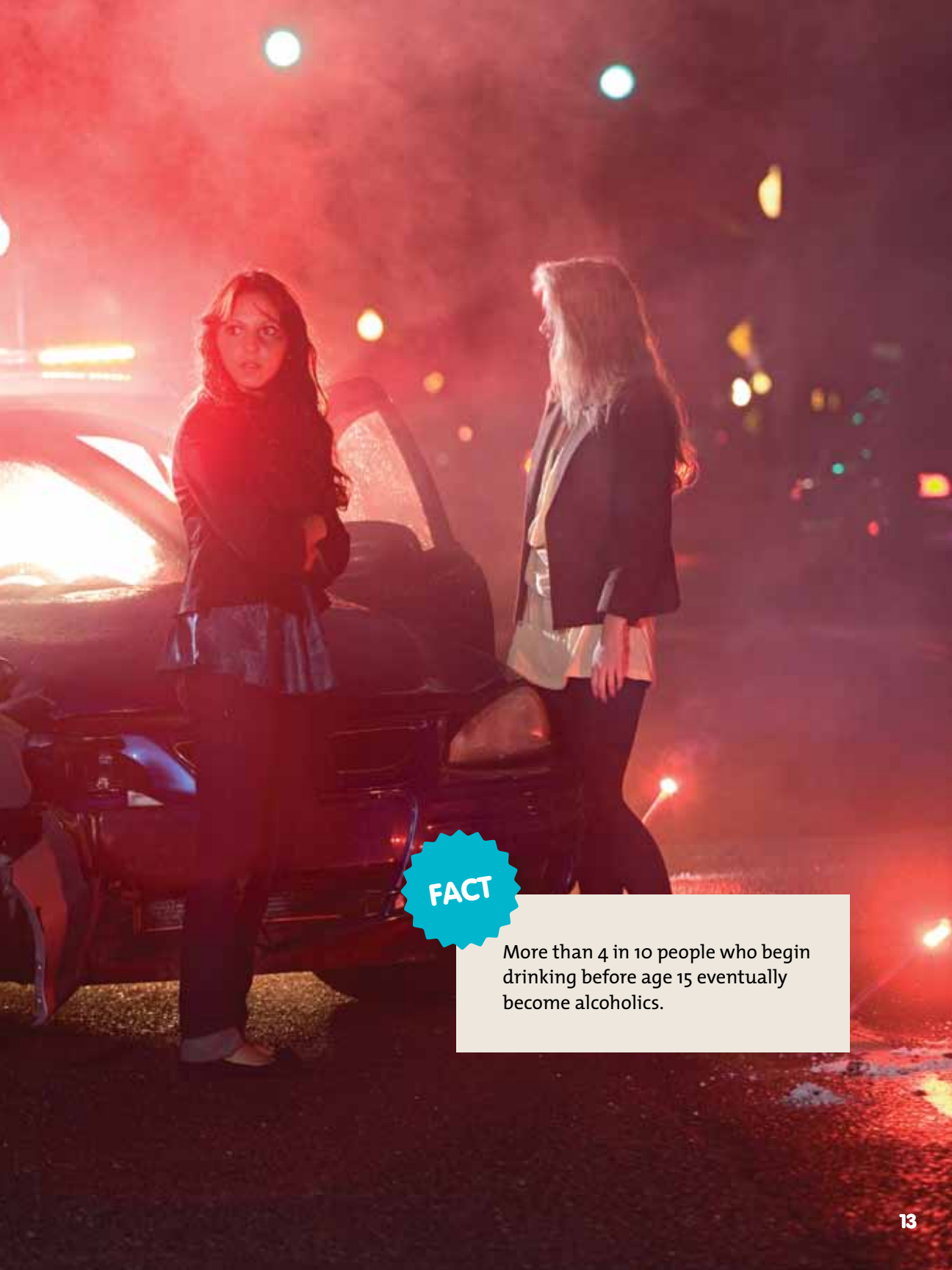
- A. About 1,500
- B. About 13,200
- C. About 50,500
- D. About 440,000

TOPIC

Alcohol

# DRINKING

and driving can add up to tragic endings. In the U.S., about 5,000 people under age 21 die each year from injuries caused by underage drinking, nearly 40 percent (1,900) in car crashes.



**FACT**

More than 4 in 10 people who begin drinking before age 15 eventually become alcoholics.



TOPIC

## Medical Consequences

# HIV

## Getting HIV from unprotected sex

When you can't think straight because you're drunk or high, you may forget to play it safe. Kim did—read her story at:

[www.hiv.drugabuse.gov/english/webisodes/theParty.html](http://www.hiv.drugabuse.gov/english/webisodes/theParty.html)

# Meth

Meth reduces the amount of protective saliva around the teeth. People who use meth also tend to drink a lot of sugary soda, neglect personal hygiene, grind their teeth, and clench their jaws—all of which can cause what's known as “meth mouth.”

Meth users sometimes hallucinate that insects are creeping on top of or underneath their skin (called formication). The person will pick or scratch their skin, trying to get rid of the imaginary “crank bugs”...soon their face and arms are covered with open sores that can get infected. See more at my blog: [www.teens.drugabuse.gov/blog](http://www.teens.drugabuse.gov/blog)



**DID YOU  
KNOW?**

**You are getting bombarded with messages about drugs in songs and movies. A study of the most popular songs in 2005 found that about:**

**1 in 3**

songs said something about drug, alcohol, or tobacco use.

**3 in 4**

rap songs said something about drug, alcohol, or tobacco use.

**And of the top 90 movies over the last two decades, almost**

**7 in 10**

movies showed characters smoking.

**1 in 3**

movies showed people getting drunk.

**Get the facts, and make your own decisions.**



# Tobacco

Wrinkles, bad breath,  
yellow teeth, wheezing,  
stinky clothes?...Let me  
at those cigarettes!

ADDICTION

SKIN DAMAGE

CATARACTS

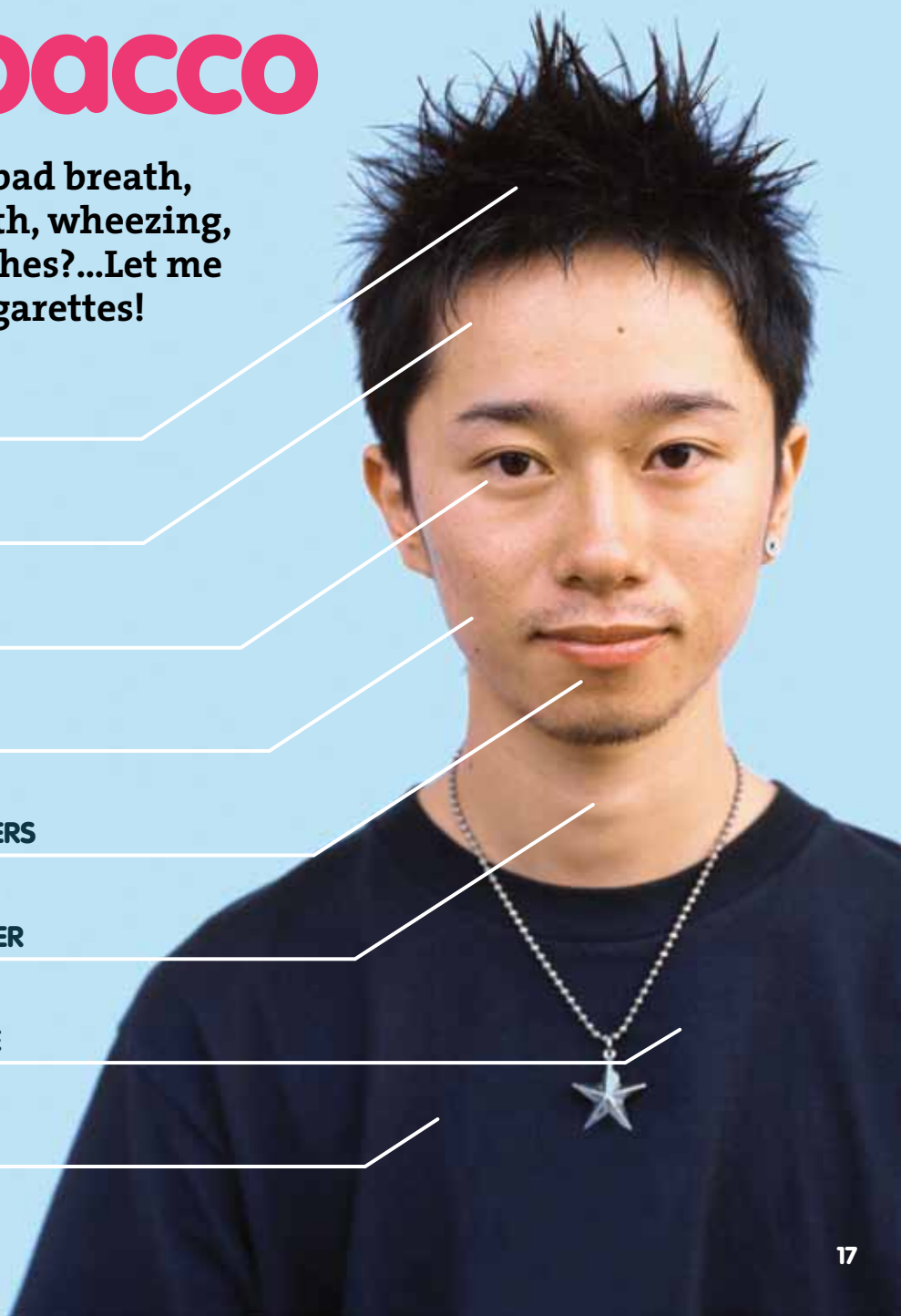
WRINKLES

MOUTH CANCERS

THROAT CANCER

HEART DISEASE

LUNG DISEASE





## Q&A

### What is Vicodin?

Vicodin is a medication prescribed to relieve pain. When taken as prescribed it can be very effective, helping people recover from surgery, for example. But it is from the same class of drugs as heroin and can be dangerous if used to get high.



### FACT

In 2007, prescription pain medications like Vicodin and OxyContin were involved in more overdose deaths than heroin and cocaine combined.

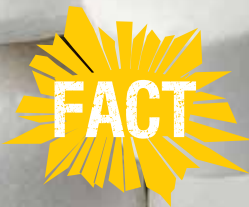
**A lot of you have asked: how can**

# PRESCRIPTION DRUGS

**be harmful when they're prescribed  
by doctors?**

Prescription drugs aren't bad—they totally help a lot of people. It really depends on the *who*, *how*, and *why* of it—*who* were they prescribed for (you or someone else?), *how* are you taking them (as prescribed or not?), and *why* (to get well or to get high)?

Some teens abuse stimulants thinking it will improve their grades; in fact, it may do just the opposite!



**RX DRUG ABUSE IS  
DRUG ABUSE.**

# QUIZ

## It's safe to use prescription medications when:

- A. You've checked out WebMD and know what you are doing.
- B. You've taken them before for another problem.
- C. They are prescribed for you by a doctor for a current problem.
- D. Your mom gave them to you from her prescription.
- E. All of the above.

### DID YOU KNOW?

Mixing pills with other drugs or with alcohol really increases your risk of death from accidental overdose.

Abuse of prescription stimulants like Ritalin and Adderall can cause serious health problems, including panic attacks, seizures, and heart attacks.

C. They are prescribed for you by a doctor for a current problem.

You know they make you

**FUZZY,**  
but what do drugs do to your brain?

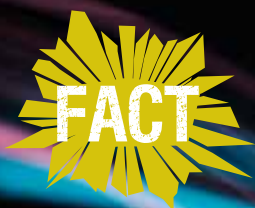
Different drugs do different things. But they *all* affect the brain—that’s why drugs make you feel high, low, speeded up, slowed down, or see things that aren’t there.

**DID YOU KNOW?** Repeated drug use can reset the brain’s pleasure meter, so that without the drug, you feel hopeless and sad. Eventually, everyday fun stuff like spending time with friends or playing with your dog doesn’t make you happy anymore.



**A TRUE  
STORY**

**Justin** posted a comment on my blog saying he always thought that if he “huffs” markers in small doses, just every once in a while, it will cause little or no damage to his brain cells. Maybe, maybe not. We’re all different, so you never know when something dangerous will happen to you. Huffing may make you high for a few minutes, but it can damage your brain for a whole lot longer.



**DRUGS MESS WITH YOUR  
BRAIN'S WIRING AND SIGNALS.**



# QUIZ

**Some drugs affect the brain because their chemical structures are similar to natural brain chemicals called:**

- A. neurons
- B. axons
- C. neurotransmitters
- D. dendrites

**Sniffing markers can harm the brain by affecting a fatty tissue called:**

- A. myelin
- B. noradrenaline
- C. frontal cortex
- D. polyneuropathy

**Salvia is a herb that can make you:**

- A. Feel a surge of connectedness to what's around you.
- B. Experience hallucinations and emotional swings.
- C. Feel detached and less able to interact with what's going on.
- D. Both b and c.
- E. Both a and b.

# REHAB?

## **Does treatment really work—why do people come and go so much?**

It takes time to recover from addiction—not only for the brain to re-adjust, but to make lifestyle changes to avoid drugs. Think how hard it is for people trying to lose weight—they try different diets, exercise for a while, lose a few pounds only to gain them back... until they can make lasting changes to keep the weight off. Same with quitting drugs—it may take several rounds of treatment before it sticks.



**DID YOU  
KNOW?**

## **1-800-662-HELP**

Different types of treatments are available to meet your specific needs. You can get referrals to treatment programs by calling 1-800-662-HELP (a confidential hotline), or by visiting the Substance Abuse and Mental Health Services Administration on line at **[www.findtreatment.samhsa.gov](http://www.findtreatment.samhsa.gov)**.



**FACT**

**THERE IS TREATMENT  
AND IT WORKS.**

# QUIZ

**A person who is addicted to drugs...**

- A. Is beyond reach.
- B. Can be helped with treatment.
- C. Needs a brain transplant.
- D. Can easily quit if they want to.

# What do **YOU** think?

We know you have a lot of questions about drugs. We do too, and we'd love to hear from you! So go to my blog at <http://teens.drugabuse.gov/blog/what-do-you-think/> and let us know what you think about the questions below—and thanks for sharing!

1. How do you convince a friend who is using drugs that they may be at risk for addiction or other bad consequences even though they feel fine right now?
2. Knowing what we do now, would you make cigarettes illegal if you could?
3. What is the best way to convince you or your friends that prescription drugs can be dangerous when abused—without scaring the people who need them?
4. Do you consider it cheating when athletes use steroids to improve their performance—what should the consequences be?
5. What's the best way to get messages out to teens—social networks, TV ads, Web sites? Who should the messages be from?

If we haven't covered something you want to know about, go to [www.teens.drugabuse.gov](http://www.teens.drugabuse.gov) and enter your topic in the search box.

GRADERS  
SMOKE  
LEAD  
SECONDARY  
RESEARCH  
SCIENCE  
ADDICTIVE  
PER  
PLEA  
MEMOR  
SMOKE  
M





drugabuse.gov  
teens.drugabuse.gov

**NIDA** NATIONAL INSTITUTE  
ON DRUG ABUSE  
U.S. DEPARTMENT OF HEALTH  
AND HUMAN SERVICES  
National Institutes of Health



NIH Publication No. 10-7589  
Printed October 2010  
Revised April 2011