

Chapters 20-21

TOBACCO AND OTHER DRUGS



Interview an adult family member, place answers in notes slide below:

Do you smoke? Why or why not? If you smoke, do you want to quit? Why or why not?

When and how did you learn about the dangers of using tobacco?

What is your present attitude about tobacco use? Has your attitude changed over time? If so, what changed it?

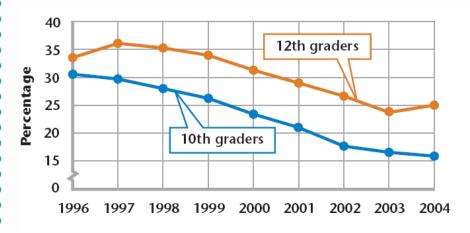
What advice would you give teens about using tobacco?

Review your family member's responses and answer the questions below.

- 1. Which of the responses surprised you? Explain.
- 2. How might this family member influence your decisions about tobacco use?



Health Stats This graph shows how the percentage of 10th graders and 12th graders who smoke has changed.



WRITING What does this graph reveal about the popularity of smoking among high school students?

sharply since people have become more aware of its negative health effects. **Reading Graphs** In 1964, the Surgeon General issued the first report on the negative health effects of smoking. What effect did the report seem to have on cigarette use? Explain.

Why Teens Use Tobacco

When your parents were teens, they lived in a much smokier environment than you do today. Only a few decades ago, people smoked on airplanes, in movie theaters, in restaurants, and at work. Today, people know a lot more about the dangers of tobacco use. As a result, tobacco use has fallen sharply and it is not as socially acceptable as it once was.

Despite all of the health warnings, some people do start using tobacco. Few users can pinpoint the exact reason they started smoking or using smokeless tobacco. But, both users and nonusers refer to the same factors when discussing their decision. Friends, family, and the media greatly influence whether someone starts to use tobacco.

Influence of Friends Most people who become addicted to tobacco start using it during their teens. Friends are an important influence. Teens with friends who use tobacco are more likely to also use tobacco. They may feel pressure to be part of the group.

On the other hand, if a teen's friends do not use tobacco, it is less likely that he or she will make the decision to use it. Many teenagers credit their friends for helping them resist the temptation to use tobacco.

Influence of Family Your parents may have first made you aware of tobacco's negative health effects. They also may have offered you advice on how to avoid tobacco use. Other family members, such as older brothers or sisters, may be positive role models for you.

Studies show that children of smokers are much more likely to smoke, even if their parents try to discourage them. Why are children of smokers more likely to smoke? These children may think of tobacco use as a behavior related to adulthood. They may simply assume that they will use tobacco just like their parents do.





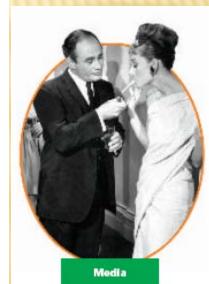
Influence of Media Anti-tobacco advertising in magazines, television, and other media also may have influenced your decision not to smoke. You probably have read or heard much about the dangers of tobacco through the media. Many anti-tobacco ads are designed to get the attention of teens. Anti-tobacco programs try to compete with the appealing ads created by tobacco companies.

The advertising of tobacco products on radio and television has been banned for over 30 years. In the 1990s, further regulations were placed on tobacco advertising. Ads placed near schools were banned. Tobacco companies were told to discontinue cartoon-like ads that appeal to children and teens. In addition, tobacco companies were required to help pay for anti-smoking education.

Despite all of these limitations, tobacco companies still spend over \$15 billion a year for advertising. In addition to print advertisements, this figure includes costs for sponsoring events and special offers. On pages 404–405 you will learn about the tactics used in advertising.



What people or factors have influenced your decisions about tobacco use?





- Why smoke?
 - + Socially _____for a long time

٧.























PEOPLE AND TOBACCO

Why people don't?

1

2

3.

4.

5.

6.

7

8.

9.

10.

11.

12.

13.

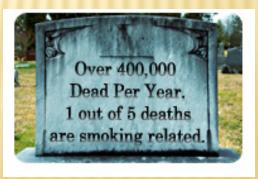
14.

Why Don't YOU? (answer in notes below...)







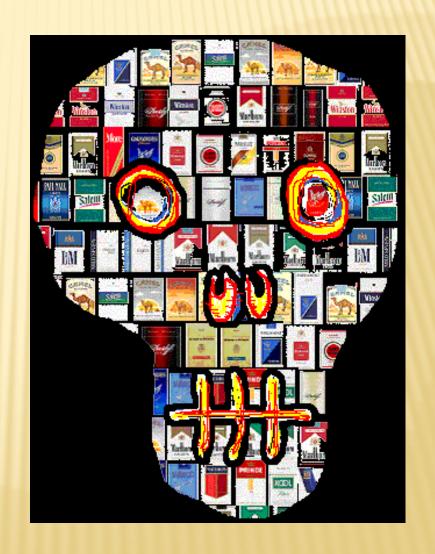






FAMILY AND FRIENDS

- You are at ______
 risk of using tobacco if
 your parents do
- You are at ______
 risk of using tobacco if
 your friends do
- * Tobacco is _____
 - ____is the drug













Smoking gave me throat cancer at 39. Now I breathe through a hole in my throat and need this



QUIT SMOKING TODAY







KIDS WATCH. KIDS LEARN.

Passive smoking



Indications of a heart attack include

ash

NOTES/COMMENTS/QUESTIONS...

Do you think these advertisements are effective?
Why or Why not? If not, what would your solution
be to get people to quit or not start smoking?

Tobacco Products

Tobacco products are made from the dried, processed leaves of tobacco plants. Tobacco plants naturally produce a chemical that acts as an insecticide to protect the plants' leaves from insects. This insecticide is **nicotine**, a very addictive chemical in tobacco products.

In its pure liquid form nicotine is extremely poisonous. In fact, each year millions of young children and pets are poisoned from eating cigarettes. Tobacco users are not immediately poisoned by nicotine because only a small amount enters the body at a time.

As you will learn in Sections 2 and 3, even small amounts of nicotine can have profound effects on several body systems. Tobacco users take in nicotine whenever they use cigarettes, cigars, pipes, or smokeless tobacco products.

Products That Are Smoked There is a wide variety of tobacco products that are smoked. When the tobacco is processed for these products, preservatives, flavorings, and other substances may be added. Some of these substances contribute to the harmful effects of smoking.

- ➤ Cigarettes are the most frequently used tobacco product. Cigarettes consist of cured and shredded tobacco leaves rolled in paper.
- ➤ *Bidis*, which are imported from India, are cigarette-like products that consist of tobacco wrapped in a leaf and tied with string.
- ► *Kreteks*, which are imported from Indonesia, contain ground clove. The clove alters the cigarette's flavor and numbs the lungs.
- ➤ Cigar and pipe tobacco is less processed than cigarette tobacco. It usually contains more nicotine than cigarette tobacco.

Many people think that products such as *bidis*, *kreteks*, cigars, and pipes are safe alternatives to cigarettes. This is not true. No matter how tobacco is burned, cancer-causing chemicals and other harmful substances are produced.

Smokeless Tobacco Tobacco that is chewed, placed between the lower lip and teeth, or sniffed through the nose is known as **smokeless tobacco**.

As you will read in Sections 2 and 3, these products cause direct harm to the lining of the mouth, tongue, teeth, and gums. Smokeless tobacco also contains many of the same harmful chemicals found in tobacco smoke, including nicotine. In 1986, the Surgeon General concluded that smokeless tobacco is not a safe substitute for cigarettes.

- ► Chewing tobacco, also known as "dip" or "chew," consists of poor-quality, ground tobacco leaves mixed with flavorings, preservatives, and other chemicals. Wads of chewing tobacco are placed between the cheek and gum.
- ➤ Snuff is finely ground, powdered tobacco. It may be a dry powder, or oil may be added to make the snuff moist. Most snuff users place it in their mouths, between the lower lip and teeth. Some users sniff it through their nose.

When chewing tobacco and snuff are held in the mouth, the products cause increased saliva production. The user often spits out the excess saliva and tobacco juice. This is why smokeless tobacco is often called "spit" or "spitting tobacco."

FIGURE 3 Most smokeless tobacco products are held in the mouth. Although they do not harm the lungs like smoking does, these products pose other risks to a user's health.



Warm-Up

Myth Low-tar and low-nicotine cigarettes are safer than regular cigarettes.

Fact Although the amount of tar and nicotine in these cigarettes may be reduced, carbon monoxide levels are not. Also, smokers tend to smoke more of these cigarettes and inhale more deeply in order to feel the same effects as they felt from regular cigarettes.

WRITING Where do you think that most teens get their information about tobacco products? How factual do you think this information is?



Nicotine and the Body

tine's short-term effects on several body systems.

seem appealing.

Nicotine is a type of drug called a stimulant. Stimulants are drugs that increase the activity of the nervous system. In smokers, nicotine enters the blood mainly through the lungs. In smokeless tobacco users, nicotine enters the blood through the lining of the mouth or nose.

Once in the blood, nicotine reaches the brain within seconds. There, it takes the place of certain neurotransmitters—chemicals that send signals between cells. By mimicking these neurotransmitters, nicotine affects breathing, movement, learning, memory, mood, and appetite.

Nicotine's Short-Term Effects The immediate effects of nicotine on the body depend largely on how much nicotine is used and on the user's history of tobacco use. The major short-term effects of nicotine use are increased heart rate, increased blood pressure, and changes in the brain that may lead to addiction. Figure 4 outlines nico-

First-time tobacco users may experience mild signs of nicotine poisoning, which include rapid pulse, clammy skin, nausea, and dizziness. However, in frequent users, nicotine stimulates the area of the brain that produces feelings of reward and pleasure. These effects last for about 30 minutes. It is these feelings that make the continued use of tobacco



Nicotine

Nicotine is a substance in tobacco that causes addiction. In smokers, nicotine enters the lungs on tiny droplets of incompletely burned tobacco, or tar. From the lungs, it takes just seconds for nicotine to reach the brain. Nicotine causes the adrenal glands to release the stress hormone epinephrine. Many of the effects included in Figure 4 are

the result of epinephrine. As a person uses more tobacco throughout the day, the level of nicotine in the blood rises. A tobacco user's blood still contains some nicotine even through the night. As a result, most tobacco users are constantly under the influence of nicotine.

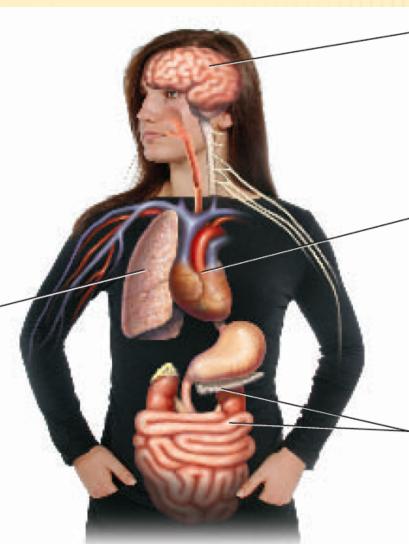
Effects of Nicotine

FIGURE 4 Nicotine acts as a stimulant. It has many immediate effects on several body systems.

Interpreting Diagrams How does nicotine affect the heart? How does it affect the brain?

Respiratory System

- Increases mucus production
- Decreases muscle action in the lungs' airways
- Causes breathing to become more shallow



Nervous System

- Increases activity level
- Mimics neurotransmitters
- Decreases some reflex actions
- Activates the brain's "reward pathway"

Cardiovascular System

- Increases heart rate and the force of contractions
- Increases blood pressure
- Reduces blood flow to skin
- Increases risk of blood clotting

Digestive System

- Increases saliva production
- Decreases the amount of insulin released from the pancreas
- Increases bowel activity

Name	(Class	Date
Section 16-1	Quiz		
Write the letter	of the correct answer in th	e space provided.	
a. b. c.	he percentage of teens wi is significantly lower th doubles about every ter has increased steadily fo has never been calculate	an it was in the 1990s. 1 years. or decades.	
a. b. c.	hree major influences on price, ads, and movies. friends, family, and med television, radio, and m peers, movies, and med	agazines.	se tobacco are
a. b. c.	advertising near school	s to be sold in pharmacies. s in advertisement.	om
a. b.	That is nicotine? a naturally occurring in a highly addictive chem an extremely poisonous all of the above		
a. b. c.	Thich of the following is on cigar I kretek I snuff I none of the above	onsidered a safe tobacco pro	duct?
Decide whether	r each statement is true or fi	alse. Write true or false in the s	space provided.
6. To	obacco use is much more	socially acceptable that it us	ed to be.
	lost people who become a eir teens.	addicted to tobacco start usir	ıg it in
	Iany teens who do not sn ake good decisions.	noke credit their friends for h	elping them
9. C	igarettes are the most fre	quently used type of tobacco	product.
10. C	hewing tobacco is not ad	dictive.	



WHY PEOPLE START TOBACCO USE

- 1. Some of the factors tobacco users mention are the same ones that _____say led them to the opposite decision.
- 2. _____, pressures, _____, and the _____,
- 3. Dangers don't seem _____to smokers
- 4. _____too strong.
- 5. Thought they couldn't become _____
- 6. ____% of smokers who began as teenagers are still addicted.
- 7. A youngster with one smoking parent is ____% more likely to smoke than a child with nonsmoking parents.
- 8. Many users see it as a ______...it shows they're grown up.
- 9. Some are trained as youngsters..._____ cigarettes; _____adults in their lives.



Smoking is highly addictive, don't start



TOBACCO AND ITS CHEMICALS



Letter to the Editor

Tobacco compan	ies spend	of
dollars each year	trying to influ	ence people to
start smoking or	keep smoking	. Making
people	_of the dange	rs of tobacco
products is one w	vay to help cou	unter the
influence of these	e ads.	

In the slide below, write a letter to the editor of a local newspaper urging community members to avoid tobacco because of its dangers. In your letter, describe the health effects of the three most dangerous substances in tobacco products.

FOR EXTRA CREDIT...send it in to the Gaylord Herald Times (<u>www.gaylordheraldtimes.com</u>)
Letter to the Editor and have it published...

50 pts!

DEAR EDITOR IN CHIEF,

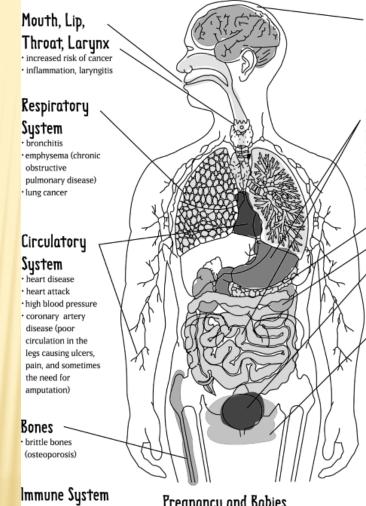
Sincerely,

EFFECTS OF SMOKING ON THE BODY...

Normal Vision AMD-related distortion Compared to normal vision, macular degeneration induces image distortion and dark areas.



The Long Term Health Effects Of Smoking Tobacco



Brain

- · increased risk of brain hemorrhage (stroke)
- · women using contraceptive pill have an even greater risk of stroke

Stomach and Intestines

- · lining becomes tender
- bleeding
- · ulcers, slow to heal
- · may lead to cancer

Pancreas, Kidney and Bladder

increased risk of cancer

Reproductive System Male and Female

- decreased sperm count and movement
- · lowered sex drive
- · egg damage, irregular menstrual cycle and altered hormone levels
- · cancers of the cervix, penis and anus
- · early onset of menopause
- · increased risk of breast cancer

- depressed immune response
- increased infections

Pregnancy and Babies

- · lower than average birth weight
- · high risk of Sudden Infant Death Syndrome
- · increased risk of premature birth
- · higher increased risk of miscarriage and still births
- increased risk of impairment in mental and physical development
- · nicotine carried to baby in breast milk



SMOKING DISEASES

Cardiovascular Diseases

Smoking causes

leading cause of death in the United States.4

Cigarette smoking causes

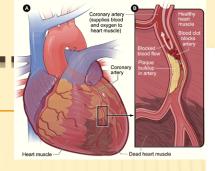
narrowing the blood vessels (arteries) and puts smokers at risk for developing

by

(i.e., obstruction of the large arteries in the arms and legs that can cause a range of problems from pain to tissue loss or gangrene).

Smoking causes

(i.e., a swelling or weakening of the main artery of the body—the aorta—where it runs through the abdomen).





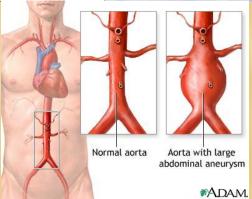














RESPIRATORY DISEASES

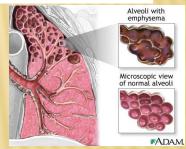
		RISEUSES
×		king causes the following lung diseases by ing the and (small air sacs of
	the lungs	<i>94444</i>
	+ <u>Lu</u>	ng cancer
	×	Cancer that forms in tissues of the lung, usually in the cells lining
	×	two main types are lung cancer and lung cancer.
	×	diagnosed based on how the cells look
	+ Em	nphysema
	×	a in the progression of chronic obstructive pulmonary disease (COPD),
	×	the flow of air when you breathe out.
	×	occurs when the air sacs at the ends of your smallest air passages () are gradually
	+	is the leading cause of emphysema.



Normal city dwellers lung



Smokers lung (white areas are cancer)



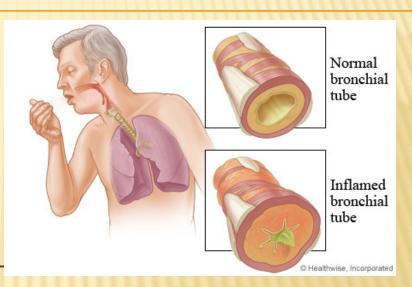


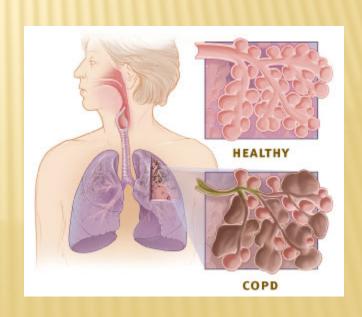


RESPIRATORY DISEASES

DISLASLS		
Ch	ronic Bronchitis	
×	lasts a	
×	more common among	
×	a that lasts most days for 3 months a year for 2 consecutive years.	
	months a year for 2 consecutive years.	
CO	PD Chronic obstructive pulmonary disease	
×	comprised of three related conditions	
	+ chronic bronchitis, chronic asthma, and	
	<u>emphysema</u> .	
	+ In each condition there is	
	of the flow of air through the airways and out	
	of the lungs, and the obstruction generally is	
	and may be <u>progressive</u> over time.	
×	is responsible for 90% of COPD.	
×	Although not all cigarette smokers will develop COPD, it	
	is estimated that% will.	
×	Smokers with COPD have death rates than	
	nonsmokers with COPD.	
×	They also have more respiratory symptoms	
	(coughing, shortness of breath, etc.) and a more rapid	
	in lung function than non-smokers.	
×	It is important to note that when a COPD patient stops	
	smoking, their decline in lung function	

Therefore, it is _

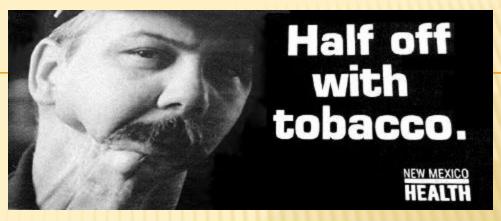


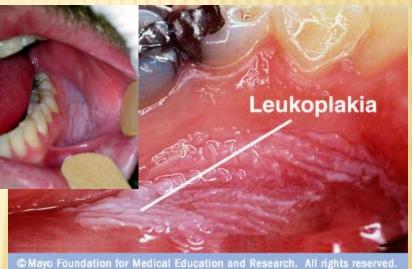




CANCER

- Other Cancers:
- Oral cancers
 - + Smoking is by far the
 _____ for developing oral cancer.
 - + The use of _____ and smoking further increases the risk of oral cancer, along with cancer of the larynx, and esophagus.
- Leukoplakia (mouth cancer)
- * Throat cancer







TOBACCO USE AND PREGNANCY

Wo	men who smoke during pregnancy are
×	are more likely to be born and with a
	(below 2.5kg or 5lb 8oz).
×	have a birth weight on average less than those born to non-smokers. This effect increases the more
	the mother smokes, the less the child weighs.
×	have organs that are on average than babies born to non-smokers.
×	have poorer function.
×	are twice as likely to die from There seems to be a direct link between SIDS and parents smoking.
×	are more frequently. Babies born to women who smoked 15 cigarettes or more a day during pregnancy are taken into hospital as often during the first eight months of life.
×	get painful diseases such as and
	more frequently in early childhood.
×	are more likely to become themselves in later years.
×	increase their risk of
×	In later pregnancyincreased risk of the baby's placenta coming away from the womb before the baby is born (placental abruption). This may cause the baby to be born,
	starve of, or even to in the womb (stillborn).





OTHER PHYSICAL EFFECTS

Bad skin.	
Smoking restricts which prever skin – smokers often appear	nts oxygen and nutrients from getting to the
increased risk of getting	
Dental Problems and Bad breath.	
Cigarettes leave smokers with a condition of	called, or persistent bad breath.
Cigarette smoking is a significant risk factor more than half the cases in the population.	r for disease and accounts for
Smokers are also more likely to have missi tooth loss than nonsmokers.	ng and experience greater rates of
Former smokers retain more teeth than currisk of tooth loss relative to people who ne	rent smokers but still seem to be at elevated ver smoked.
Bad-smelling clothes and hair.	
The smell of stale smoke tends to linger – furniture, and cars; it's often hard to get the	not just on people's clothing, but on their hair, ne smell of smoke out.
Reduced athletic performance.	
	rith nonsmoking peers because the physical creased circulation, and shortness of breath)
Greater risk of injury and slower healing time	
	ce, so common sports injuries, such neal more in smokers than nonsmokers.
Increased risk of illness.	
they smoke (and often if they're just arour smoke as a way to manage weight often light	n conditions, like asthma, become more sick if











SMOKELESS TOBACCO

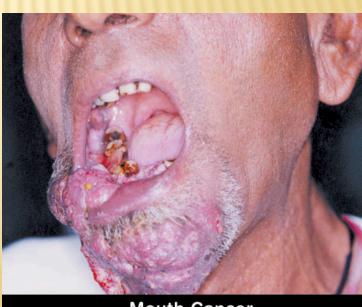
What Can Smokeless Tobacco Do to Me?

- bad _____ and yellowish-brown ____ on your teeth
- **mouth sores** (about 70% of spit tobacco users have them):
 - + ____ and ____ lips and gums
 - + ____ gums, which can eventually make your teeth fall out
- increased ______, ____, and irregular _____, all leading to a greater risk of _____ and ____

× cancer

+ Oral cancer means cancer of the mouth and can happen in the lips, the tongue, the floor of the mouth, the roof of the mouth, the cheeks, or gums. It's been medically proven that long-time use of chewing tobacco can lead to cancer. But cancer from chewing tobacco doesn't just occur in the mouth. Some of the cancer-causing agents in the tobacco can get into the lining of your _____, your _____, and into your ______,





Mouth Cancer



FIRES CAUSED BY SMOKING

- Smoking materials (i.e., cigarettes, cigars, pipes, etc.) are the _____ cause of fire in the United States. Roughly one of every four fire deaths in 2006 was attributed to smoking materials.
- In 2006, there were an estimated 142,900 smoking-material fires in the United States. These fires caused 780 civilian deaths and 1,600 civilian injuries.
- Older adults are at the risk of death or injury from smoking-material fires even though they are less likely to smoke than younger adults.
- The most common items first ignited in home smoking-material fire deaths were





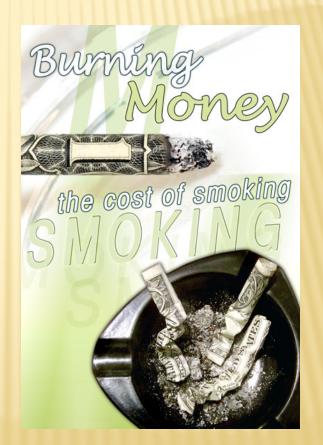




FINANCIAL COST TO SOCIETY

×	\$_	\$ billion per year
	//4/	Treating tobacco-related
	//4/	/ from disease
		and early death
	// +/	caused by smoking-
		related illness
	//+/	damage, injury, and death caused
		by careless smokers
	/ /+/	Increased cost of health and fire
		7 ////////////////////////////////////
	(/+)	Installing special or new
		air conditioning systems
	+	involving tobacco industry
	+	When an employee stops smoking, that
		produces a percent medical
		savings and increased productivity

http://www.tobaccofacts.info/cost_to_society.htm



PASSIVE SMOKING

ETS (ENVIRONMENTAL TOBACCO SMOKE)

In adults:

- is a human lung carcinogen, responsible for approximately lung cancer deaths annually in U.S. nonsmokers.
- has been classified as a _____ carcinogen under EPA's carcinogen assessment guidelines. This classification is reserved for those compounds or mixtures which have been shown to cause cancer in humans, based on studies in human populations.

In children:

- increases the risk of lower respiratory tract infections such as _____ and _____. EPA estimates that between 150,000 and 300,000 of these cases annually in infants and young children up to 18 months of age are attributable to exposure to ETS. Of these, between 7,500 and 15,000 will result in hospitalization.
- increases the prevalence of fluid in the middle ear, a sign of
- irritates the upper respiratory tract and is associated with a small but significant ______.
- increases the frequency of episodes and severity of symptoms in ______ children. The report estimates that 200,000 to 1,000,000 asthmatic children have their condition worsened by exposure to environmental tobacco smoke.
- * is a risk factor for new cases of _____ in children who have not previously displayed symptoms.









http://www.epa.gov/smokefree/pubs/etsfs.html#Major%20Conclusions

OTHER TOBACCO PRODUCTS

- Low tar
- Low nicotine
- Flavored bidis http://faculty.washington.e du/chudler/bidi.html
- × Pipes
- Cigars
- Smokeless tobacco http://www.mayoclinic.com/print/chewing- http://www.mayoclinic.com/print/chewing- http://www.mayoclinic.com/print/chewing- http://www.mayoclinic.com/print/chewing- http://www.mayoclinic.com/print/chewing- https://www.mayoclinic.com/ <a href="http
- Herbal cigarette http://www.ahealthyme.co m/topic/herbalcig







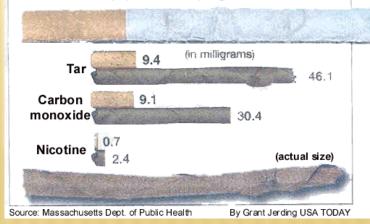


Myths vs. Facts

- Low tar, low nicotine cigarettes are safer than regular cigarettes
- Cigarettes with filters are safe
- Smokeless tobacco is a safe form of tobacco
- •Bidis, the flavored Indian cigarettes are safer than tobacco cigarettes

Bidis vs. Cigarettes

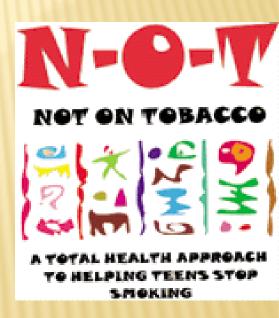
Bidi smoke contains more tar, nicotine and carbon monoxide than popular filter-tip cigarettes.

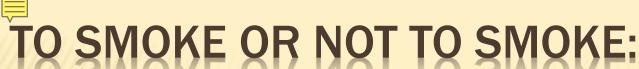




Tobacco Use (Youth Survey) http://www.cdc.gov/HealthyYouth/yrbs/index.htm

- 20.0% of students had smoked cigarettes on at least 1 day during the 30 days before the survey.
- 7.9% of students had used smokeless tobacco (e.g., chewing tobacco, snuff, or dip) on at least 1 day during the 30 days before the survey.
- 14.2% of students had smoked a whole cigarette for the first time before age 13 years.
- 5.7% of students had smoked cigarettes on school property on at least 1 day during the 30 days before the survey.
- * Adolescents who smoke regularly can have _____ quitting as long-time smokers.
- Of adolescents who have smoked at least 100 cigarettes in their lifetime,
 of them report that they would like to quit, but are
 - Cigarette advertisements tend to emphasize ______,
 and ______ themes, which appeal to teenagers and young adults struggling with these issues.
 - Tobacco use in adolescence is associated with a range of health-compromising behaviors, including being involved in _____, carrying _____, engaging in high-risk ______ behavior and using _____ and _____.





1. E	Expensive	(over \$	a year f	or a pac	k a day)
------	-----------	----------	----------	----------	----------

- 2. Bad _____
- 3. Stained _____and ____
- 4. _____
- 5. Problems _____
- 6. Feeling _____and out of _____
- 7. _____(more, sooner)
- 8. _____with parents, friends
- 9. _____risk
- 10. _____risk
- 11. _____risk
- 12. Bad _____in your clothes, hair, skin
- 13. Cigarette _____in your car or on your clothes
- 14. Risk of _____smoke to people around you

Alternatives to smoking if you do:

- 1. Chew sugarless gum.
- 2. Call a friend.
- 3. Chew sunflower seeds, ground mint leaves or caffeine-free herbal tea leaves.
- 4. Go to a movie or another place where you can't smoke.
- 5. Take a walk or work out.
- 6. Remind yourself why you want to quit.
- 7. Others.....can you think of any others?





Personal Inventory Attitudes About Tobacco In the United States, attitudes about tobacco use have become more negative over recent decades. Attitudes, in turn, influence whether people use tobacco. What are your attitudes about tobacco? Complete the following sentences with your own opinions. 1. Using tobacco is... 2. I think that people start to use tobacco because... 3. The effects of tobacco on the body are... 4. Banning smoking in public places is... 5. Warning labels on cigarette packages are... 6. When someone near me lights up a cigarette, I... 7. When I am around people who are smoking, I... 8. When asked to choose a smoking or nonsmoking area, I... 9. When someone offers me tobacco, I... 10. When I am with someone who is trying to quit smoking, I... 11. Are you satisfied and comfortable with your attitudes about tobacco? 12. Are there any attitudes that you would like to change? If so, which ones?

	×	After 8 hours:
	×	* Carbon monoxide in your body * Oxygen level in your blood increases to
		* Oxygen level in your blood increases to
	×	After 2 days:
	×	* Your sense of smell and taste will You will enjoy your
		food more. * Your risk of heart attack begins to
	×	After 3 - 4 days:
	×	* Bronchial tubes relax and your lung capacity will have, making breathing easier.
CTOD COOULOC	×	After 2 weeks:
STOP SMOKING	×	* improves; nicotine has passed from your body. Within 2 weeks to 3 months:
	×	* will improve, making walking and running easier; lung functioning increases up to 30%.
	×	Within 6 to 9 months:
	×	* You'll experience less, sinus, and shortness of
	×	After 1 year:
	×	* Your risk of heart disease will be about of what it would have been if you continued to smoke.
FOR UFE	×	After 5 years:
	×	* Your risk of stroke will be substantially reduced; within 5 to 15 years after quitting, it becomes as a non-smokers.
	×	After 10 years:
	×	* Your risk of dying from lung cancer will be of what it would have been if you had continued to smoke. * Your risk of cancer of the mouth, throat, esophagus, bladder, kidney, and pancreas will also
	×	Within 15 years:
	×	* Your risk of dying from a is equal to a person who never smoked.

Attitudes About Tobacco

In the United States, attitudes about tobacco use have become more negative over recent decades. Attitudes, in turn, influence whether people use tobacco. What are your attitudes about tobacco?

Complete the following sentences with your own opinions.

- 1. Using tobacco is
- 2. I think that people start to use tobacco because
- 3. The effects of tobacco on the body are
- 4. Banning smoking in public places is
- 5. Warning labels on cigarette packages are
- 6. When someone near me lights up a cigarette, I
- 7. When I am around people who are smoking, I
- 8. When asked to choose a smoking or nonsmoking area, I
- 9. When someone offers me tobacco, I
- 10. When I am with someone who is trying to quit smoking, I

Look over how you completed sentences 1–10. Then, answer the questions below.

- 11. Are you satisfied and comfortable with your attitudes about tobacco?
- 12. Are there any attitudes that you would like to change? If so, which ones?







Dried Cannabis bud Anonymous Photographer, © 2002 Erowid.org















OTHER DRUGS

Marijuana, Crack/Cocaine, Heroin, Methamphetamine, Psilocybin, OTC, Ecstasy, Ketamine, GHB, Rohypnol, Mescaline, Steroids, Inhalants

FAMILY INVOLVEMENT: FACTORS AFFECTING DRUG ABUSE

- When your parents and grandparents were teens, they probably had different risk factors and protective factors for drug abuse than you have today...they may have been under more or less peer pressure to use drugs than you are, or drug use may have been more or less acceptable than it is now. How do you think factors affecting drug abuse have changed in recent years?
- Interview a family member from a different generation about factors affecting drug abuse that may have influenced him or her as a teen. Include the following questions in your interview. Record your responses in the space below or on a separate piece of paper. If you add questions, record the questions and answers on another sheet.
- x 1. When you were a teen, did you have friends or other peers who used drugs?
- 2. What role models were popular when you were a teen? Did they use drugs?
- × 3. As teens, how do you think the majority of people in your generation viewed drug use?
- * 4. What was your own attitude toward drug use when you were a teen?
- × 5. What factors do you think shaped your attitude toward drug use as a teen?
- * 6. What, if any, cultural values helped to protect you from drug use as a teen?

Based on the answers to the interview questions, how do you think factors affecting drug abuse have changed since your family member was a teen?



OTHER DRUGS

- x Legal:
 - +
 - 4
 - 4
- Good when used
- Drug abuse:

+ How are these drugs abused?





OVER-THE-COUNTER DRUGS OVER-THE-COUNTER DRUGS ARE MEDICINES YOU CAN BUY WITHOUT A PRESCRIPTION FROM A DOCTOR. THEY INCLUDE MEDICINES SUCH AS ASPIRIN. MOST PEOPLE USE OVER-THE COUNTER DRUGS AT SOME TIME IN THEIR LIFE, AND MANY PEOPLE USE THEM OFTEN. EACH OF THE TERMS LISTED BELOW DESCRIBES A TYPE OF MEDICINE THAT HAS A SPECIFIC EFFECT ON THE BODY. NEXT TO EACH TERM, LIST THIS EFFECT. IF NECESSARY, USE A DICTIONARY OR THE INTERNET. THEN WRITE A BRAND NAME OF AN OVER-THE-COUNTER DRUG THAT HAS THIS EFFECT (IF YOU KNOW ONE). Effect of this Type of Over-the-Counter Type of Medicine (Brand Name?) **Drug With this Effect** Medicine on the Body Analgesic Antacid **Antihistamine**

Antiseptic

Decongestant Expectorant

FACTORS THAT INFLUENCE TEENS

1.

2.

3.

4.

5.

6.





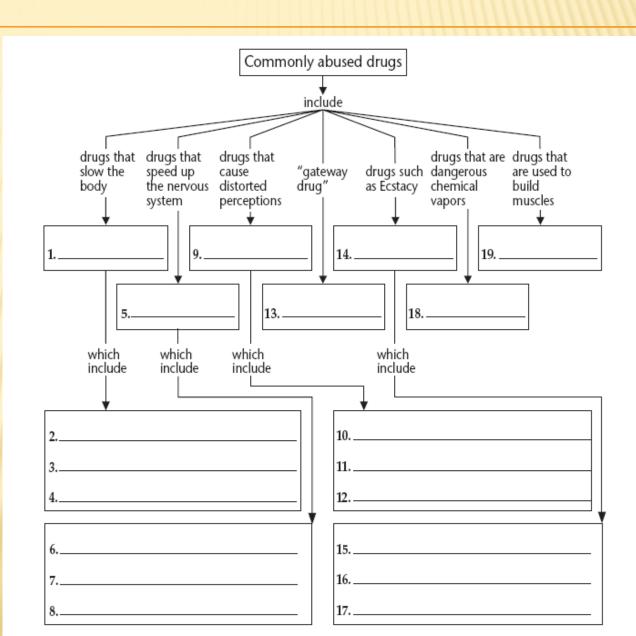


Peer

Pressure

VOCABULARY ACTIVITY: COMMONLY ABUSED DRUGS USE THE TERMS ABOVE TO COMPLETE THE CONCEPT MAP.

marijuana, stimulants, amphetamines, club drugs, LSD, opiates, inhalants, hallucinogens, anabolic steroids, GHB, PCP, cocaine, depressants, ketamine, methamphetamine, barbiturates, rohypnol, CNS depressants, psilocybin



HOW DRUGS AFFECT YOUR HEALTH

- Physical, Mental and Social Health
- * Tolerance
- Psychological dependence
- Physiological dependence
- × Addiction



Addiction Choice

Adolescent Addiction

Drug abuse starts early and peaks during the teen years. This increased risk is partly due to adolescents' heightened sensitivity to social influences (friends) and their still developing brain, particularly areas critical to judgment and impulse control.





CONSEQUENCES TO DRUG USE/ABUSE

* Teens:

- May stop pursuing interests and goals
- + Lowers inhibitions
 - May lead to behaviors that can harm total health
 - Sex, poor grades, risky behaviors, illegal behaviors
- + Depression
- + Suicide
- + Violence
- + Crime











CONSEQUENCES OF SUBSTANCE ABUSE AMONG YOUTH

× School problems.

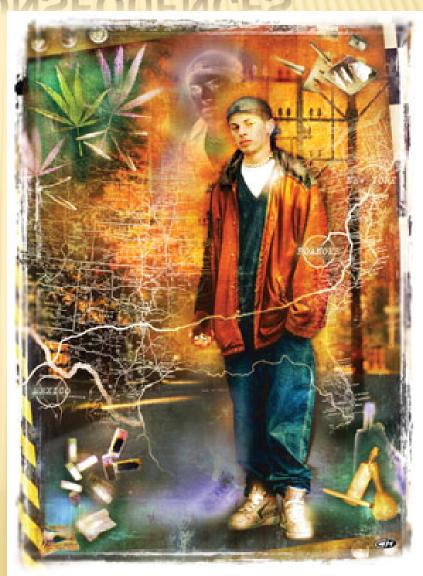
- + A lowered commitment to education,
- + declining grades,
- absenteeism from school and related activities,
- increased potential for dropping out, and higher truancy rates
- + cognitive and behavioral problems precipitated by alcohol and other drug use not only affect their own academic performance, but also may disrupt learning by their peers



http://whyquit.com/pr/112806.html

HEALTH AND SAFETY CONSEQUENCES.

- Accidental injuries,
- physical disabilities,
- × diseases,
- possible overdoses
- Drug-related suicides,
- * homicides,
- × accidents,
- illnesses may result in death for some youth
- Alcohol-related traffic fatalities
- drug-related hospital emergency episodes
- increases the risk that youth will contract HIV or other sexually transmitted diseases
- Injection of psychoactive substances with unsterile needles and other equipment is strongly associated with transmission of HIV.
- The effects of mood-altering substances,
 - such as poor judgment and diminished impulse control,
 - + Youth more likely to engage in unprotected sex.
 - many young adults with AIDS may have been infected with HIV as adolescents



RELATIONSHIPS.

Peer:

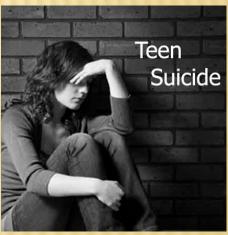
- may be alienated from and stigmatized by their peers.
- + often disengage from school and community activities
- depriving their peers and communities of the positive contributions they might otherwise make.

Social, developmental, and emotional consequences.

- + depression,
- developmental lags,
- + apathy,
- + withdrawal,
- + other psychosocial disorders
- + higher risk for conduct problems,
- + depression,
- + suicidal thoughts,
- attempted suicide,
- + completed suicide,
- personality disorders
- Marijuana use has been shown to interfere with short-term memory, learning, and psychomotor skills. Motivation and psychosexual development also may be impaired by marijuana use







FAMILY ISSUES

- jeopardizes many aspects of family life
- May lead to and result from dysfunctional families
- Siblings and parents are affected profoundly by youth involved in alcohol and other drug use.
- Substance abuse and its consequences may drain family financial and emotional resources



SOCIAL AND ECONOMIC COSTS

Monetary expenditures and emotional distress related to alcohol- and drug-related crimes by youth affect many others in the community. Often there is an additional burden for the support of adolescents and young adults who are not able to support themselves. Further, substanceabusing youth increase the overall demands for treatment of substance abuse and medical conditions (Gropper, 1985).



CONTROLLED BY GREEDY
INDIVIDUALS AND ORGANIZATIONS
WHO BELIEVE THEY CAN MAKE A
LIVING OFF YOUR CHOICES.

CONSEQUENCES OF SUBSTANCE ABUSE AMONG YOUTH

- Increasingly, drug abuse and addiction are viewed as both health and social problems.
- Addiction is considered a chronic, relapsing disorder, characterized by the compulsion to seek drugs and use them despite negative consequences.
- Virtually all drugs of abuse have similar damaging effects on the brain, and prolonged use can cause extensive changes in brain function that will persist even after drug use stops.
- Because substance abuse and addiction result in changes in brain function, treatment must reverse or help the individual compensate for those changes. Often both medical treatment (e.g., medication) and behavioral treatment are required to intervene effectively with the substance-abusing individual



http://www.ncjrs.gov/html/ojjdp/jaibg_2000_5_2/consequences.html

NOTES/COMMENTS/QUESTIONS...

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MARIJUANA, INHALANTS & STEROIDS

- * http://www.drugabuse.gov/MarijBroch/Marijte ens.html
- <u>http://teens.drugabuse.gov/facts/facts_inhale</u>
 <u>1.asp</u>
- <u>http://teens.drugabuse.gov/drnida/drnida_ster</u>
 <u>1.asp</u>

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PSYCHOACTIVE DRUGS: ECSTASY, ROHYPNOL, GHB, KETAMINE, LSD, MESCALINE, PCP, PSILOCYBIN (MUSHROOMS)

- * http://teens.drugabuse.gov/facts/facts_xtc2.asp
- http://www.drugfree.org/Portal/drug_guide/Rohypn ol
- <u>http://www.projectghb.org/what_is_ghb.htm</u>
- http://www.projectghb.org/2008/
- http://www.usdoj.gov/ndic/pubs4/4769/index.htm
- * http://www.usdoj.gov/ndic/pubs4/4260/index.htm
- * http://www.narconon.ca/mescaline.htm
- * http://www.drugfree.org/Portal/drug_guide/PCP
- http://www.usdoj.gov/ndic/pubs6/6038/index.htm

NOTES/COMMENTS/QUESTIONS...

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Quiz

- 1. The percentage of teens who use tobacco
- a. is significantly lower than it was in the 1990s.
- b. doubles about every ten years.
- c. has increased steadily for decades.
- d. has never been calculated.
- 2. Three major influences on whether someone starts to use tobacco are
- a. price, ads, and movies.
- b. friends, family, and media.
- c. television, radio, and magazines.
- d. peers, movies, and media.
- 3. Tobacco laws have not prohibited tobacco companies from
- a. advertising near schools.
- b. supplying their products to be sold in pharmacies.
- c. using cartoon characters in advertisement.
- d. advertising on the radio.
- 4. What is nicotine?
- a. a naturally occurring insecticide in tobacco leaves
- b. a highly addictive chemical in tobacco products
- c. an extremely poisonous substance in pure form
- d. all of the above
- 5. Which of the following is considered a safe tobacco product?
- a. cigar
- b. kretek
- c. snuff
- d. none of the above

True or False...

- 6. Tobacco use is much more socially acceptable that it used to be.
- 7. Most people who become addicted to tobacco start using it in their teens.
- 8. Many teens who do not smoke credit their friends for helping them make good decisions.
- 9. Cigarettes are the most frequently used type of tobacco product.
- 10. Chewing tobacco is not addictive.

MATCHING

- 1. drug that increases the activity of the nervous system
- 2. dark, sticky substance that forms when tobacco burns
- 3. any chemical or other substance that causes cancer
- 4. poisonous gas produced when tobacco is burned
- 5. the need for more of a drug to produce the same effect
- a. tar
- b. tolerance
- c. oxygen
- d. stimulant
- e. carcinogen
- f. carbon monoxide

MULTIPLE CHOICE

- 6. A short-term consequence of nicotine use is
- a. increased heart rate.
- b. decreased blood pressure.
- c. increased blood flow to skin.
- d. decreased risk of blood clotting.
- 7. How does nicotine affect the respiratory system?
- a. It increases muscle action in the airways.
- b. It causes breathing to become shallow.
- c. It increases some reflex actions.
- d. It decreases mucus production.
- 8. Short-term effects of tar include
- a, brown stains on teeth.
- b. increased blood pressure.
- c. tooth decay.
- d. drooling.
- 9. How does carbon monoxide affect a smoker's blood?
- a. It reduces the number of red blood cells in the blood.
- b. It increases the amount of oxygen in the blood.
- c. It reduces the blood's ability to transport oxygen.
- d. It increases the amount of hemoglobin in the blood.
- 10. Which term refers to symptoms in a tobacco user who goes without
- nicotine?
- a. addiction
- b. dependence
- c. tolerance
- d. withdrawal

MULTIPLE CHOICE

- 6. Permanent inflammation of the airways accompanied by excess mucus production is called
- a. stroke.
- b. leukoplakia.
- c. emphysema.
- d. chronic bronchitis.
- 7. Tobacco use can lead to weakened blood vessels because it
- a. decreases blood cholesterol.
- b. raises blood pressure.
- c. thins artery walls.
- d. lowers heart rate.
- 8. Smoke that is exhaled from smokers' lungs is called
- a. environmental smoke.
- b. secondhand smoke.
- c. mainstream smoke.
- d. sidestream smoke.
- 9. Children exposed to secondhand smoke are more likely to have
- a. asthma.
- b. allergies.
- c. recurring ear infections.
- d. all of the above.
- 10. When a woman smokes during pregnancy, how does it affect the baby?
- a. The baby grows faster.
- b. The baby gets more oxygen.
- c. The baby has a slower heart rate.
- d. After birth, the baby has a higher risk for sudden infant death syndrome.

TRUE OR FALSE...

- 1. Tobacco use is the leading cause of preventable death in the United States.
- 2. Emphysema is a disorder in which artery walls thicken and harden.
- 3. Chronic bronchitis can be cured if a person stops smoking.
- 4. Sidestream smoke contains more tar and nicotine than mainstream smoke.
- 5. Secondhand smoke is a worse problem today than it was a few decades ago.

MULTIPLE CHOICE

- 1. Which statement is true about teens and smoking in the United States?
- a. Fewer than one out of four teens smoke.
- b. More than two out of three teens smoke.
- c. A growing majority of teens chooses to smoke.
- d. It is easier to quit if you start smoking in your teens.
- 2. Which change occurs in a smoker's body within two days of quitting?
- a. Risk of heart disease is reduced by half.
- b. Risk of oral cancer is reduced by half.
- c. Risk of sudden heart attack decreases.
- d. Risk of stroke returns to normal.
- 3. What happens to the risk of most smoking-related cancers after a smoker quits?
- a. The risk decreases in the first few days.
- b. The risk increases for several years.
- c. The risk decreases after ten years.
- d. The risk remains the same.
- 4. The most important factor in successfully quitting tobacco is
- a. changing your daily routine.
- b. avoiding people who use tobacco.
- c. setting up a rewards system.
- d. having a strong personal commitment.
- 5. Nicotine substitutes
- a. contain more nicotine than cigarettes.
- b. do not contain nicotine.
- c. help reduce nicotine withdrawal symptoms.
- d. contain all the same chemicals as tobacco smoke.

TRUE OR FALSE...

- 6. Nine out of ten smokers want to quit smoking.
- 7. The health benefits of quitting tobacco begin immediately.
- 8. Psychological symptoms of nicotine withdrawal often last longer than physical symptoms.
- 9. Quitting "cold turkey" is a method of quitting smoking that works for everyone.
- 10. Nicotine substitutes should never be used along with tobacco products.

48 Club Drugs

Club Drugs

Drug	Classification	Side Effects	Other Facts
Ecstasy (MDMA)	Combined stimulant and hallucinogen	Increased heart rate and blood pressure, blurred vision, muscle tension, severe sweating and chills, nausea	Drugs called "Ecstasy" often contain other dangerous substances besides MDMA.
Rohypnol	CNS depressant	Decreased blood pressure, drowsiness, dizziness, confusion, memory loss	Associated with "date rapes"; a small dose can impair a user for hours.
GHB (Gamma- hydroxybutyrate)	CNS depressant; also has anabolic (body-building) effects	Drowsiness, nausea, headache, loss of reflexes	Associated with "date rapes"; high doses may result in sleep, coma, or death.
Ketamine	Hallucinogen	Hallucinations, increased heart rate and blood pressure, impaired motor function, memory loss, numbness, nausea	High doses may cause delirium and fatal respiratory problems.

Stimulants

Drug	Side Effects	Long-Term Effects
Amphetamines	Restlessness, rapid speech, blurred vision, dizziness	Hyperactivity, irritability, irregular heart rate, liver damage, paranoia
Methamphetamine	Increased respiration, elevated body temperature, convulsions, stroke	Psychotic behavior, memory loss, aggression, brain damage, heart damage, severe tooth and gum disease, stroke
Cocaine	Sleep disorders, loss of appetite, increased blood pressure and heart rate	Depression, paranoia, irritability, weight loss, irregular heartbeat, seizures, respiratory failure, cardiovascular failure, liver damage
Nicotine/ Tobacco Smoke	Nausea, loss of appetite, headache, increased blood pressure	Hacking cough, difficulty breathing, increased number of colds, heart and lung disease

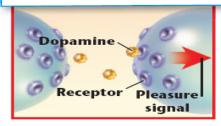
Depressants

Drug	Side Effects	Long-Term Effects
Barbiturates	Poor coordination, slurred speech, decreased alertness	Sleepiness, irritability, confusion
CNS Depressants	Blurred vision, dizziness, slurred speech, drowsiness, headache, skin rash	Blood and liver disease
Opiates	Nausea, vomiting, decreased alertness, drowsiness, depressed respiration	Constipation, infections associated with injecting
Alcohol	Impaired judgment, decreased alertness, lack of coordination, memory problems, vomiting	Liver damage, brain damage, anxiety and depression, malnutrition, memory loss

45 How Drugs Affect the Brain

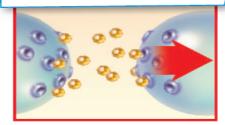
Under Normal Conditions

The chemical dopamine travels between brain cells, producing pleasurable sensations.

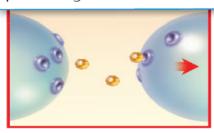


On Drugs

Cells release extra dopamine, causing a stronger signal.



After Repeated Drug Use Brain cells lose receptors for dopamine, becoming less able to process the chemical. The pleasure signal weakens.



Changes in a Smoker's Body After Quitting

First Days

After 20 minutes

- Blood pressure and heart rate return to normal
- Temperature of hands and feet increases to normal

After 8 hours

Oxygen and carbon monoxide levels return to normal

After 24 hours

• Risk of sudden heart attack decreases

After 48 hours

 Senses of smell and taste start to improve

After 3 months

Circulation improves; lung function improves

After 9 months

- Coughing and nasal congestion diminish
- Respiratory infections are less frequent
- Energy level increases

After 1 year

 Excess risk of heart disease is half that of a current smoker

After 5 years

- Stroke risk is the same as a nonsmoker
- Risk of mouth and throat cancer is half that of a current smoker

After 10 years

- Lung cancer death rate is about half the rate of a current smoker
- Life expectancy is comparable to a nonsmoker

43 Effects of Nicotine

Nervous System-

Increases activity level

Mimics neurotransmitters

• Decreases some reflex actions

 Activates the brain's "reward pathway"

Cardiovascular System

- Increases heart rate and the force of contractions
- Increases blood pressure
- Reduces blood flow to skin
- Increases risk of blood clotting

Respiratory System

- Increases mucus production
- Decreases muscle action in the lungs' airways
- Causes breathing to become more shallow

Digestive System

- Increases saliva production
- Decreases the amount of insulin released from the pancreas
- Increases bowel activity

Estimating Blood Alcohol Concentration

Number of		Males		Females		
Drinks* (per hour)	100–120 lb	120–140 lb	140–160 lb	100–120 lb	120–140 lb	140–160 lb
1	0.04	0.03	0.02	0.05	0.04	0.03
3	0.10	0.08	0.07	0.13	0.11	0.07
5	0.18	0.15	0.12	0.21	0.18	0.15
7	0.24	0.20	0.17	0.30	0.25	0.22

*One drink is 1.25 oz of 80-proof liquor, 5 oz of wine, or 12 oz of beer.

When Blood Alcohol Concentration Is . . .

0.02 - 0.03

 Reflexes and alertness decline.

0.04-0.06

- Judgment and self-control are impaired.
- Reaction time slows.

0.07 - 0.09

 Muscle coordination decreases.

0.12 - 0.15

- Vomiting usually occurs.
- Emotions become exaggerated, unstable, or violent.

0.20

- Confusion, dizziness, and disorientation occur.
- Vision and speech are impaired.
- Blackouts are typical.

0.30

- · Ability to stand or walk is lost.
- Loss of consciousness may occur.

0.40

- Loss of consciousness usually occurs.
- Death may occur.

0.50 and higher

Death usually occurs.

Cardiovascular System

 Heart rate and blood pressure increase.

 More blood flows to the skin's surface.

• Core body temperature decreases.

Nervous System

- Brain activity slows down.
- Coordination becomes impaired.
- Sensations and perception become less clear.
- Reflexes become sluggish.

Digestive System

 Too much alcohol in the stomach may cause vomiting.

Excretory System

- Kidneys increase urine production.
- Drinker loses more water from body than usual.

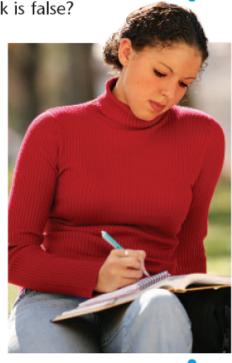
W55 Quick Quiz

Warm-Up

Quick Quiz All of the following statements are true except for one. Which statement do you think is false?

- 1 In the United States, over 400,000 people die from smoking each year.
- 2 Children of people who smoke have a greater risk of developing asthma.
- 3 Scientists have developed cures for chronic bronchitis and emphysema.
- 4 Smokers die about 13 years earlier than nonsmokers.
- 5 Smokeless tobacco increases one's risk of cardiovascular disease.





W56 Advice Line

Warm-Up



Dear Advice Line:

A bunch of my friends chew tobacco, especially when we get together to play sports. I know that it is not good for you, but I feel like a wimp when everyone else is chewing and I'm not. What if I just use chewing tobacco when we are playing?

WRITING Write a response to this teen to help with the decision he is facing.