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ABSTRACT

This curriculum guide for high-school students presents in-depth coverage of the full range of content related to drugs, including tobacco, alcohol, marijuana, cocaine, narcotics, and hallucinogens. It is part of a series designed to provide educators with the curricular tools necessary to challenge students to take personal responsibility for their health. In addition to the abundance of subject matter content, this 11-lesson curriculum unit involves students in activities that enhance decision-making, problem-solving, and coping skills and helps them develop effective personal strategies for resisting drug use. The well-developed lessons are designed to give teachers the flexibility to choose, modify, and combine the appropriate content for students. This guide fits within a comprehensive health education program; provides extensive content on commonly abused drugs; explores the legal issues involved in drug use; examines the personal and social costs of drug use; stimulates critical thinking and motivates high school students toward health behavior; and identifies community and school resources that provide counseling, rehabilitation and treatment services for drug users. The lessons include the objective; class time required; a brief overview of the topic; instructional strategies; teacher materials and preparation; procedures; key points; and evaluation materials. A separately bound student workbook contains identical exercises and activities for students as those found in the teacher's guide. (ABL)

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CONTEMPORARY HEALTH SERIES

Kathleen Middleton, MS, Series Editor

ENTERING ADULTHOOD:

**Examining Drugs
and Risks**

ENTERING ADULTHOOD:

**Examining Drugs
and Risks**

A Curriculum for Grades 9-12

Susan Giarratano, EdD and Dale Evans, HSD

Contemporary Health Series
Kathleen Middleton, MS, Series Editor

Network Publications, a division of ETR Associates
Santa Cruz, CA • 1990

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EDITOR'S PREFACE

Contemporary Health Series

Health educators and practitioners know that prevention of health problems is far more desirable than treatment. The earlier the knowledge and skill to make healthful decisions are instilled, the greater the chance a healthful lifestyle will be adopted. School is the logical place in our society to provide children, adolescents and young adults the learning opportunities essential to developing the knowledge and skills to choose a healthful life course.

The **Contemporary Health Series** has been designed to provide educators with the curricular tools necessary to challenge students to take personal responsibility for their health. The long range goals for the **Contemporary Health Series** are as follows:

Cognitive. Students will recognize the function of the existing body of knowledge pertaining to health and family life education.

Affective. Students will experience personal growth in the development of a positive self-concept and the ability to interact with others.

Practice. Students will gain skill in acting on personal decisions about health-related life choices.

Within the **Contemporary Health Series** there are two curricular divisions: *Into Adolescence* for middle school teachers and *Entering Adulthood* for high school teachers. The *Into Adolescence* modules focus on several different health and family life topics. Modules addressing puberty, AIDS, the family, self-esteem, reproduction and birth, and sexual abstinence have been developed by skilled author/educators. *Entering Adulthood* includes reproduction, birth

and contraception; health behavior, communication and self-esteem; AIDS and other STDs; relationships; and sexual abstinence.

All the authors are, or have been, classroom teachers with particular expertise in each of the topic areas. They bring a unique combination of theory, content and practice resulting in curricula which weave educational learning theory into lessons appropriate for the developmental age of the student. The module format was chosen to facilitate flexibility as the modules are compatible with each other but may stand alone. Finally, ease of use by the classroom teacher has driven the design. The lessons are comprehensive, key components are clearly identified and masters for all student and teacher materials are provided.

The **Contemporary Health Series** is intended to help teachers address critical health issues in their classrooms. The beneficiaries are their students, our children, and the next generation.

Kathleen Middleton, MS, CHES
Series Editor

INTRODUCTION

The problem of drug use in our society is so widespread that attempts to deal with the problem must be initiated at all levels of the schools and community. Drug use is not confined to any one population or socioeconomic level.

More than half of high school students report that they have used drugs, including tobacco, alcohol, marijuana or cocaine, at least once. Alcohol, tobacco and other drugs are obtained and used at school. The significant negative consequences of youthful drug use affect the user, family members and society. Alcohol and other drug use among young people is associated with problems in school and increased risks for serious injury, suicide, violence and long-term health problems.

According to a 1986 survey by the University of Michigan Institute for Social Research and the 1988 National Adolescent Student Health Survey, adolescent males have decreased their reported use of cigarettes, but females have not. Sixty-three percent of tenth-grade students report having tried cigarettes, and about 12 percent of males use chewing tobacco or snuff. Ninety percent of these same surveyed adolescents have tried alcohol; half used it within the past month, and 38 percent reported having had five or more drinks on one occasion during the past two weeks.

Problems also occur with the use of other chemicals that alter the function of the body, including prescription and over-the-counter drugs. Young people use drugs to change the way they feel, control weight and reduce pain, as do many adults in our society. Sometimes these substances

are overused. Social influences—the pressures to appear mature and have a good time—have made drug use attractive to young people. The problem is complicated by the fact that drugs are easily available to young people.

The connection between drug use and communicable diseases has been clearly demonstrated by the transmission of HIV, the AIDS virus, through intravenous drug use. Other possible problems include arrested physical and psychological development, memory and perception disturbances, loss of control, misconduct and discipline problems, increased drop-out rates and crime. The development of increasing tolerance or physical and psychological dependence, the accumulated side effects of prolonged drug use and the potential for dangerous and suicidal behavior are of great concern.

The beneficial effects of drug education in schools have been demonstrated by the results of a study conducted for the Metropolitan Life Foundation (1988). The study indicated that the longer a student experienced health education, the greater the possible impact. Health education that integrated a variety of approaches, provided information about drugs and their use and focused on affective education, self-concept, decision-making and communication skills appeared to be most effective.

Schools are expected to help resolve the youth drug problem that exists in the United States. Some educators are faced with the dilemma of trying to provide viable programs with limited funds, uncreative approaches and inadequate guidelines.

This module was written to provide the classroom teacher with a variety of drug use prevention education activities for high school students. It contains an abundance of subject matter content that offers the classroom teacher the opportunity to choose the materials appropriate for his or her class and precludes the necessity of searching elsewhere for information. Several of the lessons have activities and content that may be used for more than one class session. The teacher may decide to use only some of the activities provided. The lessons are intended to give the teacher the flexibility to choose, modify and combine the appropriate lessons and content for students.

References are provided for those educators who may wish to seek additional information. The U.S. Department of Education has published *What Works: Schools Without Drugs*, which contains an extensive listing of drugs and their effects, in addition to other valuable information. (The pamphlet is available free of charge from the Department of Education. It can be ordered by calling, toll-free, 1-800-624-0100, or by writing Schools Without Drugs, Pueblo, CO 81009.) A *Drug Facts* pamphlet is also available from ETR Associates/Network Publications.

The domains of learning emphasized in these lessons include cognitive, affective and psychomotor. Because of the nature of high school learners and their levels of ability, growth and developmental characteristics, it is assumed that these learners have a sense of responsibility for acquiring knowledge, participating in the activities and developing new attitudes and beliefs that may be similar to that of the adult learner. With that assumption, it can

be expected that students will learn through cognitive-oriented media, such as books and written materials. To stimulate critical thinking and motivate a variety of levels of high school learners, additional opportunities that combine guided direction from the teacher and involve multiple sensory stimuli with the cognitive, affective and psychomotor domains of learning are also presented. The authors believe that the classroom teacher can make the appropriate decisions as to which lessons and activities would be most effective for specific student populations.

These lessons are intended to fit within a comprehensive health education program and to complement other drug education programs. Programs that involve the community, parents and schools are most effective.

The lessons presented are intended to provide the full range of content related to drugs and to encourage students to develop decision-making, coping and life skills and enhanced self-esteem. Emphasis, however, has intentionally been on content, as there are many other available resources devoted solely to the affective domain and the development and practice of the aforementioned necessary skills. (The teacher may want to review *Entering Adulthood: Connecting Health, Communication and Self-Esteem* and *Entering Adulthood: Balancing Stress for Success*, two other titles in the Contemporary Health Series available from ETR Associates/Network Publications.)

Objectives

Lesson 1 *Drugs and Society*

- Students will be able to explain reasons people are motivated to use drugs.
- Students will be able to identify the basic effects on the body of substances commonly used.

Lesson 2 *Facts and Misconceptions About Drug Use*

- Students will be able to identify facts and misconceptions about drugs used today.
- Students will be able to define terms associated with drugs and drug use.

Lesson 3 *Impact of Drugs*

- Students will be able to cite factors that influence drug use.
- Students will be able to describe impacts of drug use.

Lesson 4 *Tobacco: Smoke(less) Signals*

- Students will be able to identify the physical, mental-emotional and social problems associated with tobacco use.

Lesson 5 *Alcohol: Liquid Illusion*

- Students will be able to describe the short- and long-term health effects of tobacco use.
- Students will be able to identify the advertising appeals used to sell tobacco.
- Students will be able to describe the mental-emotional, social and physical effects of alcohol on the body.
- Students will be able to identify programs that encourage responsible alcohol use.
- Students will be able to define alcoholism and describe its stages.

Lesson 6 *Marijuana: More than Grass*

- Students will be able to describe the short- and long-term health effects of marijuana use.
- Students will be able to describe the mental-emotional, social and physical effects of marijuana on the body.

Lesson 7 *Cocaine: Crack and Death*

- Students will be able to describe the physical, social and mental-emotional effects of cocaine.
- Students will be able to identify types of cocaine most commonly used (including crack and freebase).
- Students will be able to explain why cocaine use has become prevalent in today's society.

Lesson 8 *Emerging Drug Problems*

- Students will be able to analyze emerging drug problems.
- Students will be able to formulate strategies for solving drug problems in the school, in the community and in our society.

Lesson 9 *Legal Issues and Drug Use*

- Students will be able to explain local, state and federal laws and penalties that pertain to drug use and youth.
- Students will be able to explain school and school district policies on substance use and abuse.
- Students will be able to describe legal issues related to drug testing (screening).

Lesson 10 *Resisting Pressures*

- Students will be able to describe the relative risks for the individual and society of behaviors related to drug use.
- Students will be able to describe strategies and decision-making techniques to help resist pressures to use drugs.

Lesson 11 *Where to Get Help*

- Students will be able to identify community resources that provide counseling, rehabilitation and treatment services related to drug use.
- Students will be able to identify school counseling and guidance services related to drug use that are available through the school.

Instructional Strategies

This module incorporates a variety of instructional strategies to interest and involve students. Some strategies are traditional, while others reflect a more facilitative approach. The following section contains an alphabetized listing and description of the instructional strategies used.

Brainstorming
Class Discussion
Group Discussion
Guest Speakers

Mini-Lecture
Overhead Transparencies
Worksheets

Brainstorming

Brainstorming is used to open a discussion on an issue. Students are asked to give their ideas and opinions on a specific topic, while other students are asked not to pass judgment on those ideas and opinions. The teacher's responsibility is to list everything that is said on the board or

butcher paper. Brainstorming should continue until all ideas have been exhausted or a predetermined time limit has been reached.

Class Discussion

A class discussion led by the teacher is one of the most valuable strategies used in education. It can begin a lesson, such as a brainstorming session, or it can end a lesson, being used to review and clarify objectives. Most of the lessons in this curriculum include some form of class discussion.

Group Discussion

Group discussion is a process that uses small groups to disseminate information, analyze ideas or teach concepts to the rest of the class. The process also serves to increase student interaction among peers. The size of groups depends on the nature of the lesson and the make-up of the individual class. Generally, groups work best if they range from two to six members. The structure of groups and how groups are determined will have an effect on the success of the lessons. There are a number of methods from which to choose: student selection, random selection or selection based on ability. Each method has its strengths and weaknesses. Once groups have been created, the process works best if all groups know the groundrules. All members should have an individual responsibility within the group's larger task, such as reader, facilitator, recorder, timer, observer and reporter. It is suggested that the teacher move from group to group to answer questions and facilitate any problems that may arise as groups are working on their tasks.

Guest Speakers

Guest speakers can be a valuable adjunct to this curriculum. A qualified speaker could, for example, provide answers to the student questions developed in Lesson 1. (Give the speaker copies of the student questions prior to the classroom visit.) Some ideas for speakers are an officer from the narcotics education or drug education unit of your local police department, a physician who specializes in the treatment of substance abuse or a pharmacist. You should meet with the invited speaker prior to the classroom visit to assess his or her potential to address specific content and issues. At this time, you can acquaint the speaker with the knowledge level of the group, plan the information that will be presented to the class and determine the time limitations and any materials necessary for the presentation.

Mini-Lecture

Mini-lecture is utilized to disseminate information directly from the teacher to students. This method, combined with other instructional strategies, promotes high-level motivation and learning.

Overhead Transparencies

Overhead transparencies are used throughout the module as a visual strategy to present and review information and to provide graphic examples of work in which students will be involved.

Worksheets

In some lessons, students are asked to complete worksheets. Sometimes the worksheets are completed individually to afford privacy. At other times, worksheets are completed as part of a group process or completed worksheets are shared with a group.

Teacher Responsibilities

As with the teaching of other sensitive topics, the teaching of the subject of this module must be approached carefully. Teachers must be aware of the maturity level of individual classes and be able to adjust lesson activities and content accordingly. Efforts should be made by the teacher to involve the students' family members when appropriate.

The classroom atmosphere is critical to the success of teaching a module about drug use. Teachers can establish classroom conditions and groundrules that are essential to a feeling of security, autonomy, belonging, purpose and personal competence. If possible, for discussions involving the whole class, seating should be arranged in a circle or horseshoe configuration so that all students can see their classmates. These seating arrangements promote a more relaxed environment as well as encourage interaction.

Groundrules should be established to help provide a comfortable, positive and secure classroom environment. (If you choose, students can participate in formulating class groundrules.)

Some suggestions for groundrules follow:

- Treat each other with respect and courtesy.
- Listen carefully to others.
- Allow others to speak without interruption.
- Be supportive of others. No put-downs allowed.

Students should know from the beginning that they have the right to pass in any discussion or activity that involves personal opinions, feelings or experiences.

Evaluative Methods

Each lesson provides the teacher with one or more methods for evaluating student performance on stated objectives. The methods are listed following the PROCEDURE section of each lesson. Evaluative methods include analysis and comment on worksheets and other written materials, as well as individual responses. It is inappropriate to grade student work that is reflective of individual feelings, beliefs, opinions or behaviors. Therefore, the evaluation methods serve as tools to assess students' participation and cognitive learning from each lesson.

**LESSON
1**

DRUGS AND SOCIETY

Objectives

Students will be able to explain reasons people are motivated to use drugs.

Students will be able to identify the basic effects on the body of substances commonly used.

Overview

To make wise decisions about drug use, students need to understand motivations for drug use and the basic effects of drugs on the body. In this lesson, students consider the definition of a drug and some examples of drugs commonly used. Individually and in small groups, they examine reasons for drug use. They also have an opportunity to anonymously ask questions about drugs. A mini-lecture offers more information on drug categories and basic effects. A worksheet about drug use provides a basis for discussion of students' opinions and student interviews with family members.

Time

One 50-minute class period.

Teacher Materials and Preparation

HAVE:

- ✓ Butcher paper or large piece of newsprint (one piece per group).
- ✓ Masking tape.
- ✓ Felt-tip marker, one for each group.
- ✓ 3 x 5 cards or slips of paper, one for each student.
- ✓ Box (to collect student questions).
- ✓ Pen for marking on transparency.

MAKE:

- ✓ Transparency of **Motivations for Drug Use**.
- ✓ Transparency of **Drug Classifications** worksheet.

COPY:

- ✓ **Drug Classifications** worksheet, one for each student.
- ✓ **Drug Use—My Opinion** worksheet, one for each student.

REVIEW:

- ✓ **Teacher Background Information**.
-

Key Points

- Drugs are chemical substances that alter the structure or function of the body.
 - Some drugs are legal; some drugs are illegal; others fall in between these two categories.
 - There are six general categories of drugs used and abused today, classified by their effects on the user.
-

Procedure

- Tell students that they are going to begin a unit on drug use. Ask them if they have ever used aspirin or an aspirin-like product. Ask them why they used the drug. Did they read the label of the product for directions? How many tablets or capsules were recommended? What was the recommended age for appropriate use? What were the recommendations for how often to take the aspirin or when

aspirin shouldn't be taken (contraindicated)? Encourage volunteers to share their answers with the class.

Ask students if they know how aspirin functions in the body. Tell them that aspirin has three basic functions:

- **analgesic—relieves pain**
- **antipyretic—reduces fever**
- **anti-inflammatory—reduces inflammation**

Ask students why aspirin is considered a drug, and explain that it changes the structure or function of the body (the definition of a drug).

Ask students if they know anyone who has consumed an alcoholic beverage (wine, beer, liquor, wine cooler, etc.). Do they know why the person drank the beverage? Do they remember how many drinks the person consumed? Has anyone ever read the label of an alcoholic beverage product for directions for use? (There are none.) Does the label offer any other information about use? (Most labels now indicate that drinking alcohol while pregnant is known to cause health problems for the baby.) What is the legal age for consuming alcohol in their state? (In most states, the legal minimum age is 21.) Encourage volunteers to share their answers with the class.

Tell students that alcohol is a depressant. It causes the nervous system to slow down, making users feel relaxed and less inhibited and decreasing motor coordination and muscle control. If taken in excess, it can slow down the breathing and heart rates and reduce blood pressure.

Ask students why alcohol is considered a drug. Explain that as with aspirin, alcohol changes the structure or function of the body.

Ask students if they have watched television shows or movies or read or heard about someone who has used cocaine or crack. Ask them if they remember why the person used cocaine. Do they know if any directions for use of the product came with it? (Probably not, illegal drugs don't come with directions for use.) What is the legal age to use cocaine? (There is no legal age to use this illegal substance. Doctors and dentists may use cocaine medically to treat patients.)

Cocaine is a powerful central nervous system stimulant. It excites the brain and nervous system to produce alertness, wakefulness and attentiveness. Other effects include a feeling of euphoria, a false sense of well-being, reduced hunger, hyperactivity and a feeling of increased mental and physical power. These effects last only a short period of time; then depression sets in.

Ask students why cocaine is considered a drug. Once again, the answer is that it changes the structure or function of the body.

Tell students there are many types of substances that are classified as drugs but not perceived as such by society. Because certain drugs are legal or socially acceptable, we don't always call them drugs. Although aspirin and alcohol are legal drugs, alcohol is legal only for adult consumption. Cocaine is illegal for any social use. Yet all three may be considered socially acceptable within certain groups.

Tell students that the lessons presented here are about drug use and abuse. The lessons will offer information about drugs and clarify students' misconceptions about drugs and drug use.

■ Today's lesson focuses on *why* people use drugs. Tell students that they have already discussed why some people use aspirin, alcohol or cocaine, but they may be able to think of other reasons people are motivated to use all kinds of drugs.

Ask students to take out a piece of paper and list five reasons for drug use. When students have made their individual lists, divide the class into groups of five or six students. Give each group a piece of butcher paper (or newsprint) and a marker.

Tell groups to develop a composite list of reasons that people use drugs. This should be an agreed-upon list developed by the group. Ask each group to write its list on butcher paper (or newsprint) with printing large enough that others in the class can read it from a distance. When groups are finished, post the lists around the room. Ask each group to read and clarify its list. Allow other groups to ask questions or discuss items on the list.

Use the **Motivations for Drug Use** transparency to clarify any misconceptions or to point out reasons or motivations for drug use not indicated on the lists. Ask students why some motivations, occa-

sions or situations are acceptable to some people for drug use while others are not.

■ Distribute one blank 3 x 5 index card or slip of paper to each student. Ask students to write down three questions they have about drugs and drug use. Questions can be about how drugs work, legal questions, a concern about a problem drug—it's up to the students! Tell students these questions are *anonymous* and they are *not* to put their names on the cards. Collect the cards or papers (ask students to fold them) by having students drop them into a box that you will keep.

■ Distribute the **Drug Classifications** worksheet and present a mini-lecture on drug categories and classifications using **Teacher Background Information**. During the lecture, have students take notes on the worksheet about the effects on the body of the different categories of drugs. Use a transparency of the worksheet to organize class discussion of the effects.

Evaluation

Distribute the **Drug Use—My Opinion** worksheet to students and have them complete it. Have students share their answers with the class and explain why they answered as they did. Ask students to interview a family member, using the worksheet questions, as a homework assignment. Discuss these interviews, focusing on reasons people are motivated to use drugs, at the beginning of the next class period.

Evaluate student participation in the discussion of drug classifications for knowledge and understanding of the effects of drugs on the body.

Teacher Background Information

Drug Categories

There are six basic groups of drugs, often called categories of drugs. Their abuse potential and their basic effects on the body are described in the following paragraphs. Refer to the Glossary for further clarification of these terms.

NARCOTICS (OPIATES)

Narcotic drugs are central nervous system depressants in humans and are powerful painkillers. They induce analgesia (pain relief) without loss of consciousness. They also cause drowsiness, mental clouding, euphoria, pinpoint pupils, respiratory depression, nausea, vomiting and constipation. Narcotics have a high potential for physical addiction, and their use is tightly controlled.

Some narcotics are derived from the opium poppy; others are synthetic drugs that produce similar effects. Opium, morphine, codeine and heroin are opiates. Dilaudid, Percodan, methadone and Demerol are synthetic narcotics (opiates).

Because heroin is always illegally manufactured, there are no controls over its purity. There is a high risk of illness and death from unknown chemicals that are injected with the heroin. The strength of the drug can vary from one dose to the next, increasing the risk of accidental overdose. Because heroin addicts share needles, they have a much higher risk of hepatitis and HIV infection.

STIMULANTS

These drugs induce the release of the nervous system's messenger chemicals and speed the mental and physical responses of the central nervous system. The energy stimulants seem

to create is stolen from the body's reserves, leaving users exhausted and often depressed after use. (Prolonged use of stimulants is followed by a rebound depression, sometimes lasting as long as or longer than the drug was taken.) Stimulants promote wakefulness, alertness and reduced fatigue. They elevate mood, enhance ability to concentrate and often produce elation and euphoria.

Drugs in this category include cocaine (crack and rock cocaine), amphetamines (ice, Benzedrine, Dexedrine and Methedrine), caffeine, nicotine, Ritalin, Meratran and Preludin. Amphetamines are prescribed for narcolepsy, Parkinson's disease, asthma and hyperactivity in children. Cocaine is medically and legally used as a local anesthetic but nonmedical use of amphetamines and cocaine is illegal. Cocaine, and especially crack, has a high potential for addiction.

Nicotine and caffeine are the most widely used legal stimulants. Caffeine is generally found in coffee, tea and cola beverages, but is also available in over-the-counter stimulants and analgesics. Coffee causes a synergistic reaction because other chemicals in the beverage boost the power of the caffeine. In large amounts, caffeine can cause insomnia, nervousness, trembling, heart palpitations, nausea and diarrhea. Caffeine dependence has been reported, but withdrawal symptoms are usually limited to headaches. Nicotine, however, is physically addictive, and the withdrawal process is more difficult.

DEPRESSANTS

In lower doses, these drugs depress self-restraint and inhibitions by producing general

central nervous system depression. In larger doses, all of these drugs can produce motor incoordination, stupor from which arousal is difficult and respiratory depression. Barbiturates, alcohol, tranquilizers and methaqualones (Quaaludes) are all examples of depressants. All depressants are physically addictive, and withdrawal can be extremely difficult and sometimes life-threatening if not supervised by medical experts.

Alcohol is the most widely used depressant in our society. The synergistic effect of combining alcohol and barbiturates, including phenobarbital (Nembutal, "reds"), Seconal and Amytal, is particularly lethal. Tranquilizers can be used to treat major psychiatric disorders, and minor tranquilizers (Librium, Valium, Dalmane) are the drugs most frequently prescribed for anxiety and other less severe complaints. Methaqualones (Quaaludes, Sopors, "Ludes") have effects similar to other depressants. Although often called the "love drug," in high doses it may keep men from getting an erection and may delay orgasm in women.

HALLUCINOGENS

These drugs seem to work by distorting sensory information sent to the brain, causing the nerve signals governing vision, hearing, smell and touch to be scrambled. Not every user hallucinates, but some users report *seeing* music or *smelling* a sound. Use of hallucinogens is illegal.

Only a minute amount of the hallucinogen lysergic acid diethylamide (LSD) is needed to affect the user, sending him or her on a "trip" that lasts ten to twelve hours. Reactions are unpredictable and not always good. Hallucinations can induce fear and panic in users. LSD causes dilated pupils, nausea, dry mouth, headache and alternation between chills and

sweating, followed by perceptual distortions. Some users report flashbacks (recurrences of hallucinations) months after taking the drug.

PCP (phencyclidine, "angel dust," "hog," "rocket fuel") is an animal tranquilizer that has unpredictable effects on the human user. Although it is classified as a hallucinogen, it may also affect the user as a depressant or a stimulant. It produces numbness, relief of pain, apathy, confusion, stupor, distorted perceptions of space and time, inability to understand situations or control behavior, increased body temperature (this is why people frequently remove their clothes or go swimming while under the influence) and muscular rigidity. Heavy users can develop speech and memory problems. Only a minute amount is needed for effects that occur within minutes and last four to six hours.

Mescaline, STP and peyote are other hallucinogens.

MARIJUANA

Although frequently classified as a hallucinogen, marijuana is in a class by itself. It has some features of both depressants and stimulants. Its active ingredient, tetrahydrocannabinol (THC), has a chemical make-up like no other drug. Marijuana can enhance mood and produce euphoria or depression, alertness or sleep. It has addictive potential with heavier or more frequent use or as potency increases.

INHALANTS

Some commercially available products produce fumes that can make people high when they inhale them. Such products include gasoline, some aerosol sprays, solvents used in some cleaning fluids, paint thinner and glue. Most inhalants cause dizziness and drowsiness when used in small doses; aggressive behavior is also common, and higher doses

may cause hallucinations. The body develops tolerance to inhalants but no physical dependence. Repeated exposure to solvents can damage the brain, heart, liver and bone marrow and can lead to asphyxiation and death. Amyl nitrite ("poppers" or "snappers") and related chemicals known as butyl nitrite (Locker Room, liquid incense) and isobutyl nitrite

("rush") are sniffed. They distort time perception and reduce the ability of the blood to carry oxygen, causing some users to faint.

See *What Works: Schools Without Drugs* for more information on drugs in these categories.

(This information was compiled from resources listed in the References.)

Motivations for Drug Use

Peer Pressure

Medical/Health

Spiritual/Religious

Mystical

Recreational

Feel Better or Feel Different

Coping

Enhance Creativity

Escaping

Role Modeling

Media Influence/Advertising

Risk Taking

Athletic Performance

Social Interaction

Parents' Use

Drug Classifications

| Drug Category | Effects |
|--|---------|
| <i>Narcotics (Opiates)</i> | |
| Derived from Opium Poppy | |
| Opium | |
| Morphine | |
| Codeine | |
| Heroin | |
| Synthetic Narcotics (Synthetic Opiates) | |
| Dilaudid | |
| Percodan | |
| Methadone | |
| Demerol | |
| <i>Stimulants</i> | |
| Cocaine | |
| Crack | |
| Rock | |
| Amphetamines | |
| Ice | |
| Benzedrine | |
| Dexedrine | |
| Methedrine | |
| Caffeine | |
| Coffee | |
| Tea | |
| Colas | |
| OTC Stimulants | |
| OTC Analgesics | |
| Nicotine | |
| Ritalin | |
| Meratran | |
| Preludin | |
| <i>Marijuana (THC)</i> | |

| | |
|--------------------------------|--|
| <i>Depressants</i> | |
| Barbiturates | |
| Phenobarbital (Nembutal, Reds) | |
| Seconal | |
| Amytal | |
| Alcohol | |
| Tranquillizers | |
| Librium | |
| Valium | |
| Dalmane | |
| Sedatives | |
| Methaqualone | |
| Quaaludes | |
| Sopors | |
| Ludes | |
| <i>Hallucinogens</i> | |
| LSD | |
| PCP | |
| Angel Dust | |
| Hog | |
| Rocket Fuel | |
| Mescaline | |
| STP | |
| Peyote | |
| <i>Inhalants</i> | |
| Gasoline | |
| Aerosol Sprays | |
| Cleaning Fluids | |
| Paint Thinner | |
| Glue | |
| Amyl Nitrite | |
| Poppers | |
| Snappers | |
| Butyl Nitrite | |
| Locker Room | |
| Liquid Incense | |
| Isobutyl Nitrite | |
| Rush | |

Drug Use—My Opinion

Directions: Read each statement and then rate each situation as one where drug use is *Acceptable* or *Unacceptable*. Circle your answer.

- | | | |
|--|-------------------|---------------------|
| 1. Drinking alcohol (beer, wine, wine cooler, liquor) at a party. | Acceptable | Unacceptable |
| 2. Drinking alcohol after work to relax at home. | Acceptable | Unacceptable |
| 3. Drinking alcohol after school by anyone under 21 years of age. | Acceptable | Unacceptable |
| 4. Drinking alcohol before driving. | Acceptable | Unacceptable |
| 5. Drinking alcohol alone after an argument. | Acceptable | Unacceptable |
| 6. Riding in a car while someone who has been drinking alcohol is driving. | Acceptable | Unacceptable |
| 7. Using a narcotic drug, such as morphine, in a hospital for relief of pain after an operation. | Acceptable | Unacceptable |
| 8. Use of a narcotic drug by the head of a household (parent or guardian). | Acceptable | Unacceptable |
| 9. Use of a narcotic drug by a student in high school. | Acceptable | Unacceptable |
| 10. Use of a narcotic drug by a physician. | Acceptable | Unacceptable |
| 11. Use of a narcotic drug, such as codeine, as a cough suppressant. | Acceptable | Unacceptable |
| 12. Smoking tobacco while riding with other people in a car. | Acceptable | Unacceptable |
| 13. Smoking tobacco at school, in designated smoking areas. | Acceptable | Unacceptable |
| 14. Smoking tobacco in a high school restroom. | Acceptable | Unacceptable |
| 15. Smoking tobacco at a party. | Acceptable | Unacceptable |

| | | |
|---|------------|--------------|
| 16. Using a sedative or tranquilizer, such as Quaaludes (Ludes), to commit suicide. | Acceptable | Unacceptable |
| 17. Using a sedative or tranquilizer to sleep because of a loud roommate or noisy neighbor. | Acceptable | Unacceptable |
| 18. Use of a sedative or tranquilizer prescribed by a physician, followed by heavy drinking of alcoholic beverages. | Acceptable | Unacceptable |
| 19. Using a sedative or tranquilizer or drinking alcohol before making a speech to a large group of students. | Acceptable | Unacceptable |
| 20. Using marijuana at a party. | Acceptable | Unacceptable |
| 21. Using marijuana to relax after work or school. | Acceptable | Unacceptable |
| 22. Refusing a joint handed to you by your best friend. | Acceptable | Unacceptable |
| 23. Using marijuana before a big test. | Acceptable | Unacceptable |
| 24. Using marijuana on a daily basis. | Acceptable | Unacceptable |
| 25. Starting each day with a cup of coffee before doing anything else. | Acceptable | Unacceptable |
| 26. Snorting or doing a few lines of cocaine at a party. | Acceptable | Unacceptable |
| 27. Snorting or doing a few lines of cocaine before making a speech to your class. | Acceptable | Unacceptable |
| 28. Using laxatives or water pills to lose weight. | Acceptable | Unacceptable |
| 29. Taking aspirin every time you feel any pain. | Acceptable | Unacceptable |
| 30. Using steroids (roids) to develop muscles and increase strength. | Acceptable | Unacceptable |

LESSON
2

FACTS AND MISCONCEPTIONS ABOUT DRUG USE

Objectives

Students will be able to identify facts and misconceptions about drugs used today.

Students will be able to define terms associated with drugs and drug use.

Overview

Students need accurate information about drugs and drug use. In this lesson, students work in groups to identify misconceptions about drugs and drug use. A review of the activity provides correct information, and students use this information to complete a crossword puzzle.

Time

One 50-minute class period.

Teacher Materials and Preparation

MAKE:

- ✓ **Drug Information Cards.** Cut out and paste each statement on a 3 x 5 index card. Or copy one set of statements for each group of five or six students. Laminate cards for longevity.
- ✓ **Drug Information—Key Card,** one for each group of students.

COPY:

- ✓ **Crossword Puzzle,** one for each student.

REVIEW:

- ✓ **Drug Information—Descriptive Answer Key.**

Key Points

- There are many kinds of drugs with many different effects.
- Drugs are administered in many ways and are used for many purposes.
- There are a variety of misconceptions about drugs and drug use, particularly among teens.

Procedure

■ Tell students that this lesson focuses on identifying accurate information about drugs used today. A group activity will help determine what they already know about drugs and drug use. (This activity may be used as a pre- or posttest to assess students' knowledge of drugs, of motivations for drug use and of terms related to drug use.)

Divide students into groups of five or six. Each group should choose one student to serve as recorder. That person will need a pencil and a piece of paper, which will be turned in at the end of the game. Give each group six to eight of the **Drug Information Cards** in numerical order (e.g., the first group will receive cards 1 - 8, the second group will receive 9 - 16, etc.) One member of each group will be given the answers on the **Drug Information—Key Card**. This card should be placed face down on the student's desk. Have each group distribute cards to all students in the group (including recorder and **Key Card** holder).

Then give students the following instructions for the activity.

- One student reads aloud a **Drug Information Card** (begin with the lowest numbered card).
- The group decides whether the statement is true or false.
- The **Key Card** holder looks at the correct answer.
- The recorder writes on a piece of paper the numbers of the cards that are answered incorrectly or for which more information is needed.
- Groups continue until they finish their cards and then ask you for new cards.
- Continue this process until each group has finished the complete set of cards.

Some questions or statements on the **Drug Information Cards** are intentionally written to initiate group discussion. Allow about 30 minutes for groups to go through the complete set of cards. Then collect the recorders' papers and review each of the identified statements. *Or* you can have students remain in their groups and have the recorder from each group raise his or her hand when you call out the number of a card on the group's list. You may want to ask for student responses before you give the correct response. If there is particular information you want to cover, you may choose to review cards that are not on the group lists. You may be able to review all student questions during the remainder of the class period. If not, continue during the next class session.

Evaluation

Observe students during the drug card activity and subsequent discussion to determine their ability to identify facts and misconceptions about drugs used today. Have students complete the **Crossword Puzzle** to determine their ability to define terms associated with drug use.

Drug Information Cards

| | |
|---|--|
| 1. Any use of an illegal substance or chemical by an individual of any age is considered abuse. | 8. Combining alcohol and "Ludes" (Quaaludes) or other barbiturates has a greater effect than taking each of the drugs alone. |
| 2. "Proof" refers to the amount of ethanol (ethyl alcohol) in an alcoholic beverage. Specifically, "proof" is twice the percent of alcohol. | 9. Some alcoholics need less alcohol to get drunk or intoxicated than they did when they first started drinking. |
| 3. An individual's need to take greater amounts of a drug to feel the same effect is called the legal limit. | 10. Alcohol has a stimulating effect on the body. |
| 4. A drug is any substance or chemical that changes the function of the body. | 11. Alcohol, marijuana and tobacco are considered gateway drugs because they open the door to use of harder drugs. |
| 5. A glass of wine, a can of beer and a highball have equal amounts of alcohol. | 12. Most teens start using drugs because they feel pressured by their friends to try drugs. |
| 6. Most alcoholics end up homeless or on skid row. | 13. Drugs such as alcohol, barbiturates and opiates can cause physical dependence in the user. |
| 7. Someone who drinks alcohol only on weekends cannot be an alcoholic. | 14. Some drugs, such as marijuana and PCP (angel dust, crystal), build up in the body and brain and cause delayed effects (flashbacks) weeks and even months after the drug use has stopped. |

| | |
|--|--|
| <p>15. Psychological dependence on a drug occurs when drug taking becomes the center of the user's life.</p> | <p>23. Antiperspirants are drugs, but deodorants are cosmetics.</p> |
| <p>16. PCP or angel dust is a tranquilizer used on large animals such as elephants and horses.</p> | <p>24. Angel dust or crystal can cause someone to experience hallucinations, or it can have stimulating or depressing effects.</p> |
| <p>17. Having food in the stomach when alcohol is swallowed can slow down the effects of the alcohol.</p> | <p>25. Stimulants reduce inhibition and self-restraint.</p> |
| <p>18. The same drug can cause different reactions in an individual at different times.</p> | <p>26. Narcotics are drugs that promote alertness, reduce fatigue and keep people awake.</p> |
| <p>19. Mainlining means swallowing drugs rapidly.</p> | <p>27. Marijuana is a narcotic.</p> |
| <p>20. Methadone is an addicting drug used in the place of heroin.</p> | <p>28. No drug has a single effect.</p> |
| <p>21. An individual can be dependent on drugs but not tolerant of them.</p> | <p>29. Stimulant drugs, such as Ritalin, are used to treat hyperactivity in children because they actually calm children.</p> |
| <p>22. Aspirin is not a drug.</p> | |

| | |
|--|---|
| <p>30. In all states of the United States, someone who has a blood alcohol level of .05 is considered legally drunk.</p> | <p>37. Alcohol and other drugs are linked to adolescent problems such as school dropout, teen pregnancy, crime and suicide.</p> |
| <p>31. A woman may become more intoxicated than a man on the same amount of alcohol even if they weigh the same.</p> | <p>38. Over-the-counter sleeping aids often contain small amounts of a barbiturate.</p> |
| <p>32. Smokeless tobacco is less harmful than smoking tobacco.</p> | <p>39. Nicotine is both a stimulant and a depressant.</p> |
| <p>33. Alcohol causes the blood vessels to constrict (get smaller in diameter), causing a sensation of warmth and making the face flush.</p> | <p>40. Babies born to mothers who are addicted to alcohol or other drugs are likely to be born addicted to the drugs and suffer withdrawal symptoms at birth.</p> |
| <p>34. Coffee, cold showers and running in the fresh air cannot speed up the oxidation (processing) of alcohol in the body.</p> | <p>41. A person can have a different reaction to a drug taken at a party than when taken alone.</p> |
| <p>35. There is no cure for alcoholism.</p> | <p>42. The majority of people who use illegal drugs are experimental users.</p> |
| <p>36. The most psychologically addicting drug available today is cocaine.</p> | <p>43. Inhalants, such as gasoline, aerosol sprays, paint thinner and glue, can cause dizziness, drowsiness and aggressive behavior.</p> |

Drug Information

Key Card

- | | | |
|-------|-------|-------|
| 1. T | 15. T | 29. T |
| 2. T | 16. T | 30. F |
| 3. F | 17. T | 31. T |
| 4. T | 18. T | 32. F |
| 5. T | 19. F | 33. F |
| 6. F | 20. T | 34. T |
| 7. F | 21. T | 35. T |
| 8. T | 22. F | 36. T |
| 9. T | 23. T | 37. T |
| 10. F | 24. T | 38. F |
| 11. T | 25. F | 39. T |
| 12. T | 26. F | 40. T |
| 13. T | 27. F | 41. T |
| 14. T | 28. T | 42. T |
| | | 43. T |

Drug Information

Descriptive Answer Key

1. Any use of an illegal substance or chemical by an individual of any age is considered abuse.
T - Laws related to drug use are established to protect the health and welfare of individuals and society. Any use not outlined by law is considered unhealthy for individuals and/or society. Such use is, therefore, abuse.
2. Proof refers to the amount of ethanol (ethyl alcohol) in an alcoholic beverage. Specifically, proof is twice the percent of alcohol.
T - If bourbon has an 86 proof, it is 43 percent alcohol; the remainder is mostly water.
3. An individual's need to take greater amounts of a drug to feel the same effect is called the legal limit.
F - This is called *tolerance*; e.g., a person who begins by taking one sedative pill to fall asleep may soon need two or three.
4. A drug is any substance or chemical that changes the function of the body.
T - Drugs are chemical substances that alter the structure or function of body cells. For example, aspirin fights pain, fever and inflammation; birth control pills prevent conception; anticancer drugs kill cancer cells; tranquilizers relieve tension.
5. A glass of wine, a can of beer and a highball have equal amounts of alcohol.
T - Four ounces of wine, twelve ounces of beer and one and one half ounces of distilled spirits have the same alcohol content.
6. Most alcoholics end up homeless or on skid row.
F - Only about 5 percent of alcoholics end up like this.
7. Someone who drinks alcohol only on weekends cannot be an alcoholic.
F - People who are addicted to drugs (including alcohol) feel unable to function without them. Their obsession with obtaining and using their drug affects their relationships with friends, family and coworkers. The individual may have a physical dependence on the drug. If the use of alcohol interferes with a person's normal functioning (including getting to work on time on Monday), the person may have a problem with alcohol.
8. Combining alcohol and "Ludes" (Quaaludes) or other barbiturates has a greater effect than taking each of the drugs alone.
T - Taken individually, the drugs might act as mild depressants, causing drowsiness or drunkenness, depending on the dosage; but taken together, they work synergistically to produce a much greater effect that could cause death. The combination of alcohol and barbiturates causes more deaths than any other combination of drugs.

9. Some alcoholics need less alcohol to get drunk or intoxicated than they did when they first started drinking.
T- This is called reverse tolerance and is a sign of advanced phases of alcoholism. It often means there is damage to the liver.
10. Alcohol has a stimulating effect on the body.
F- Alcohol is a depressant, causing central nervous system depression.
11. Alcohol, marijuana and tobacco are considered gateway drugs because they open the door to use of harder drugs.
T- While the use of alcohol, marijuana and tobacco does not necessarily result in the use of harder drugs, individuals who use harder drugs report that they started with one or all of the gateway drugs.
12. Most teens start using drugs because they feel pressured by their friends to try drugs.
T- But there may be other reasons for young people to use drugs, e.g., recreational or social reasons.
13. Drugs such as alcohol, barbiturates and opiates can cause physical dependence in the user.
T- The user has the physical urge to use a substance that he or she cannot control. The individual requires an increasing amount of the drug to get the same effect. And physical withdrawal signs such as tremors, vomiting or diarrhea develop if the drug use is stopped.
14. Some drugs, such as marijuana and PCP (angel dust, crystal), build up in the body and brain and cause delayed effects (flashbacks) weeks and even months after the drug use has stopped.
T- The active ingredient of marijuana, THC, can be found in the fatty tissue and remain in the body from three to eight days to one month after use. PCP is known to hibernate in the fatty tissues and then recirculate at a later time, causing hallucinations or bizarre behavior.
15. Psychological dependence on a drug occurs when drug taking becomes the center of the user's life.
T- This is a condition of craving or overwhelming compulsion to use the drug.
16. PCP or angel dust is a tranquilizer used on large animals such as elephants and horses.
T- This drug is used legally for veterinary purposes only. It has no legal medical use for humans. The drug is usually smoked after a thread has been dipped in the liquid crystalline form and inserted through the length of a cigarette. It is also sometimes snorted, but rarely, because it takes so little of the drug to become high.

17. Having food in the stomach when alcohol is swallowed can slow down the effects of the alcohol.
T - If food is in the stomach, it takes the alcohol slightly longer to be absorbed into the bloodstream through the stomach lining.
18. The same drug can cause different reactions in an individual at different times.
T - Factors that can alter the influence of a drug include the dose, the time of day, the surroundings, whether other drugs are taken at the same time or food has been recently consumed, physical and mental condition of the individual, possible allergic reaction after previous use of the drug.
19. Mainlining means swallowing drugs rapidly.
F - Mainlining means injecting a drug, using a hypodermic needle or other apparatus.
20. Methadone is an addicting drug used in the place of heroin.
T - Methadone causes physical dependence in the user like other narcotic drugs such as heroin. It is used as a treatment (methadone maintenance) for heroin addiction. Even though it is physically addictive, the user generally does not develop tolerance to it, and it has fewer side effects, allowing an individual to lead a relatively normal life. Methadone controls heroin-addictive behavior, but it is a drug substitute, not a cure. Most addicts find it difficult to successfully end methadone treatment and maintain a drug-free life.
21. An individual can be dependent on drugs but not tolerant of them.
T - In other words, the individual might develop a psychological dependence on the drug but not need *more* of the drug to feel the physical effects.
22. Aspirin is not a drug.
F - It is a powerful over-the-counter drug that can be obtained without a physician's prescription.
23. Antiperspirants are drugs, but deodorants are cosmetics.
T - Antiperspirants change the way the body functions by slightly inhibiting perspiration, while deodorants are scents or perfumes that do not affect body functioning.
24. Angel dust or crystal can cause someone to experience hallucinations, or it can have stimulating or depressing effects.
T - PCP (phencyclidine) produces unpredictable effects in the user.
25. Stimulants reduce inhibition and self-restraint.
F - Depressants have these effects.
26. Narcotics are drugs that promote alertness, reduce fatigue and keep people awake.
F - Stimulants have these effects.

27. Marijuana is a narcotic.

F - Marijuana is in a class by itself. When it is used legally (to treat cancer patients for nausea or experimentally for glaucoma), it is classified as a narcotic. Although usually classified as a hallucinogen, in low doses it is not a true hallucinogen. However, when the THC content is high, hallucinations may occur.

28. No drug has a single effect.

T - The main effect of a drug is used as one way to classify the drug. Any other observed effects are considered side effects. All drugs have side effects, and a physician must weigh the potentially beneficial effects against the potential side effects to determine if use of the drug is warranted. Often, it is not possible to determine who will or will not experience side effects. (Some side effects can be dangerous or life-threatening; others are annoying or bothersome, e.g., dry mouth.)

29. Stimulant drugs, such as Ritalin, are used to treat hyperactivity in children because they actually calm children.

T - Such drugs have a paradoxical or an opposite effect in children.

30. In all states of the United States, someone who has a blood alcohol level of .05 is considered legally drunk.

F - Not all states have this same legal limit. In most states, this is the legal limit for minors. In some states, an individual with a blood alcohol level of .08 is considered drunk, while in other states the level is .10 for adults.

31. A woman may become more intoxicated than a man on the same amount of alcohol even if they weigh the same.

T - Women generally have less body fluid and more body fat than men of the same weight. Because alcohol does not diffuse as rapidly into body fat, its concentration in a woman's blood will be higher. Women also are often more affected by alcohol just before menstruation begins.

32. Smokeless tobacco is less harmful than smoking tobacco.

F - It is highly carcinogenic (cancer-causing), often resulting in leukoplakia, white patches inside the mouth, which are precancerous tissue.

33. Alcohol causes the blood vessels to constrict (get smaller in diameter), causing a sensation of warmth and making the face flush.

F - The blood vessels dilate (get larger in diameter), causing these sensations.

34. Coffee, cold showers and running in the fresh air cannot speed up the oxidation (processing) of alcohol in the body.

T - It is *not* possible to speed up the time the liver needs to oxidize (burn or process) the alcohol in the body.

35. There is no cure for alcoholism.
T - According to Alcoholics Anonymous, alcoholism can be treated but not cured.
36. The most psychologically addicting drug available today is cocaine.
T - It is a very powerful drug, although it was originally thought to be a fairly safe recreational drug of choice.
37. Alcohol and other drugs are linked to adolescent problems such as school dropout, teen pregnancy, crime and suicide.
T - While alcohol does not cause these problems, adolescents experiencing these problems often have problems with alcohol as well.
38. Over-the-counter sleeping aids often contain small amounts of a barbiturate.
F - Barbiturates can be obtained legally only with a prescription.
39. Nicotine is both a stimulant and a depressant.
T - It stimulates the adrenal glands to produce epinephrine (adrenalin), as in the "fight or flight" response. This causes a release of sugars to act as fuel for muscles, as well as increased blood pressure and heart rate; yet some smokers report a sense of relaxation. When nicotine clears, it produces a rebound depression.
40. Babies born to mothers who are addicted to alcohol or other drugs are likely to be born addicted to the drugs and suffer withdrawal symptoms at birth.
T - A growing number of babies are born addicted to crack, heroin, barbiturates and alcohol. These babies are often born prematurely and may suffer with other problems such as birth defects, low birthweight or infection with HIV (the virus that causes AIDS). In addition to experiencing withdrawal from the drug, these babies may face lifelong disabilities, illness, mental retardation or even death as a result of their mothers' drug addiction.
41. A person can have a different reaction to a drug taken at a party than when taken alone.
T - The physical, social and cultural environment in which a drug is taken can influence the experience and reaction a person has to the drug.
42. The majority of people who use illegal drugs are experimental users.
T - They do it out of curiosity and often do not repeat the experiment.
43. Inhalants, such as gasoline, aerosol sprays, paint thinner and glue, can cause dizziness, drowsiness and aggressive behavior.
T - The effects depend on the dose. Small doses cause dizziness, drowsiness and aggressive behavior; higher doses may cause hallucinations. Tolerance develops, but there is no physical dependence. Repeated exposure to solvents can damage the brain, heart, liver and bone marrow.

Crossword Puzzle

Directions: Complete the puzzle using the clues below. Each clue refers to one of these terms:

tolerance
synergistic
rock
dependence
inhaled
OTC

abuse
proof
PCP
freebase
alcoholism

use
gateway
stimulant
amphetamine
coffee

drug
opiates
aspirin
narcotics
cocaine

Across

- 1. Taking a drug
- 3. A substance that changes the function of the body
- 6. Drug that reduces pain, inflammation and fever
- 8. Heroin, morphine and codeine are in this drug classification
- 11. Two times the percentage of alcohol in the beverage
- 13. Over-the-counter (abbreviation)
- 14. Use of an illegal drug
- 17. A stimulant that can produce strong psychological dependence
- 20. Physical and psychological need for the drug

Down

- 2. Effect of combining two drugs that is greater than either drug taken individually
- 4. A form of cocaine
- 5. Marijuana, alcohol and tobacco are considered to be this type of drug
- 6. A type of stimulant
- 7. Another term for 8 across
- 9. When alcohol controls an individual's life
- 10. A condition of needing increasing doses of a drug to feel the desired effects

- 12. Angel dust
- 15. Type of cocaine that is smoked
- 16. Drug that produces wakefulness and reduces fatigue
- 18. Beverage that contains caffeine
- 19. Way that gasoline, aerosol sprays and glue are taken into the body

Crossword Puzzle

Key

| | | | | | | | | | | | | | | |
|-----------------|----------------|---|-----------------|----------------|-----------------|---|-----------------|----------------|---|---|-----------------|---|-----------------|-----------------|
| ¹ U | ² S | E | | ³ D | ⁴ R | U | ⁵ G | ⁶ A | S | P | I | R | I | ⁷ N |
| | Y | | | | O | | A | M | | | | | | A |
| | N | | | | C | | T | ⁸ O | P | I | ⁹ A | T | E | S |
| | E | | ¹⁰ T | | K | | E | | H | | L | | | C |
| ¹¹ P | R | O | O | F | | | W | | E | | C | | ¹² P | O |
| | G | | L | | | | A | | T | | ¹³ O | T | C | T |
| | I | | E | | | | Y | | A | | H | | P | I |
| | S | | R | | | | | | M | | O | | | C |
| | T | | ¹⁴ A | B | U | S | E | | I | | L | | ¹⁵ F | ¹⁶ S |
| | I | | N | | | | | | N | | | | R | T |
| | C | | ¹⁷ C | O | ¹⁸ C | A | ¹⁹ I | N | E | | S | | E | I |
| | | | E | | O | | N | | | | M | | E | M |
| | | | | | F | | H | | | | | | B | U |
| | | | | | F | | A | | | | | | A | L |
| | | | | | E | | L | | | | | | S | A |
| | | | ²⁰ D | E | P | E | N | D | E | N | C | E | | N |
| | | | | | | D | | | | | | | | T |

LESSON
3

IMPACT OF DRUGS

Objectives

Students will be able to cite factors that influence drug use.

Students will be able to describe impacts of drug use.

Overview

This lesson focuses on the scope and impact of drug use in the United States. A class discussion and mini-lecture deal with the problems of drug use in today's society. Then students work together in small groups to consider the impacts of drug use on various areas of society.

Time

One 50-minute class period.

Teacher Materials and Preparation

HAVE:

- ✓ Pen for marking on transparency.

MAKE:

- ✓ Transparency of **Terms of Use**.
- ✓ Transparency of **Patterns of Use**.

COPY:

- ✓ **Impact of Drug Use** worksheet, one for each group of five or six students.
- ✓ **Drug Blanks** worksheet, one for each student.

REVIEW:

- ✓ **Teacher Background Information**.
- ✓ **Impact of Drug Use Key**.

Key Points

- Drug use may be at a historical peak for the general population, but may be declining for teenagers.
- Multiple factors influence drug use in the United States today.
- Although the health hazards of drug use are known, individuals continue to use drugs.

Procedure

■ Lead a discussion about the problems of drug use in today's society. Use **Teacher Background Information** as the basis of the discussion, extending into mini-lecture as needed. The following are some factors to consider:

- reasons people use drugs today
- how these reasons contribute to problems associated with drug use
- medical and health problems related to drug use
- impact of drug sales and drug trafficking

■ Ask students to define drug abuse. Drug abuse can be defined as taking drugs in ways not medically intended; using illegal substances or using substances not intended to be taken into the body; a level of use that impairs a person's ability to function socially, at school or on the job. Point out to students that any use

of alcohol and other drugs by minors is illegal, except medications used as prescribed and medically intended.

Use the **Terms of Use** and **Patterns of Use** transparencies to further develop student understanding during the discussion.

■ Tell students that drug use has major impacts on individuals and groups in our society. These impacts include the social, health, economic and vocational areas. *Note:* The following activity is a higher-level activity that challenges students' critical thinking skills. Teachers should assess individual classes to determine the appropriateness of level based on student abilities.

Divide students into groups of five or six students. Give each group one copy of the **Impact of Drug Use** worksheet. The worksheet lists four drugs: OTC cough suppressant, alcohol, marijuana and cocaine. Groups should identify at least one social, health, economic and vocational impact for each drug. Have groups explain the impact of and problems associated with the use of each drug.

Give students this example. If heroin is the drug, and students are explaining the economic impact, they should provide an illustration of an economic impact that heroin use has on society. One possible answer is: Someone who uses heroin might not have enough money to maintain the habit, so she or he must steal another's property and then sell (fence) the property for money to buy the heroin. This costs the property owner, and the heroin purchaser never obtains the value of the merchandise he or she fences.

Point out that the impacts of drug use in one area can overlap other areas (e.g., the economic and vocational impacts), but ask students to try to find a separate illustration of the impact of each area.

Allow groups about fifteen minutes to develop their responses; then have one member of each group read the group's responses for OTC cough suppressant. Review the responses for each of the other drugs in the same way. Discuss responses with the class, clarifying whether the response was appropriate for the category of the impact (social, health, economic, vocational). Use the **Impact of Drug Use Key** as a guideline for this discussion.

Evaluation

Have students complete the **Drug Blanks** worksheet. Evaluate student responses for knowledge of influences on and impacts of drug use. Observe students' participation during the small group activity to determine their understanding of the impact of drug use on various aspects of society.

Extension/ Homework

Ask students to clip out and bring in one article from a newspaper or magazine about the problem of drug use. Have students highlight or underline the section of the article that contains information discussed in class and circle (or highlight in another color) information that was not discussed in class. Provide class time for discussion of the information in the article.

Teacher Background Information

SCOPE OF THE DRUG PROBLEM

America's Involvement with Drugs

- One-third of Americans smoke cigarettes.
- More than 14.5 million Americans have alcohol-related problems.
- Billions of dollars are spent yearly on over-the-counter drugs.
- Street sales of all illicit drugs have reached an estimated \$95 billion per year in the United States.
- Cocaine use has spread, and heroin use has continued to be big business in the United States.
- Drug trafficking has become the largest retail business in some states.
- Drugs are found in every locality in this country, not just in big cities or urban areas.

Adolescent Drug Problem

As reported in the National Adolescent Student Health Survey (1988):

- One in five adolescents smoked cigarettes during the past month.
- More than 25 percent drank heavily during the past two weeks.
- One in ten smoked marijuana in the past month.
- One in fifteen has tried cocaine.
- One in five has tried sniffing glue.
- Fifty-five percent of high school students have used drugs, including tobacco, alcohol, marijuana and cocaine, at least once.
- Adolescent males have decreased their reported use of cigarettes; females have not.
- Sixty-three percent of tenth-grade students report having tried cigarettes.
- Twelve percent of males use chewing tobacco or snuff.
- Almost 90 percent of adolescents surveyed have tried alcohol. Half used it within the

past month; 38 percent had five or more drinks on one occasion during the past two weeks.

Parents' Knowledge of Drug Problem

- Often parents do not know the extent of smoking, drinking or other drug use among their children or their children's peers.
- Thirty-six percent of parents report that their child has had at least one alcoholic drink; 66 to 90 percent of students say that they have used alcohol at least once or twice.
- Fourteen percent of parents report that their child has smoked a cigarette, while 41 percent of children say they have smoked a cigarette.
- Five percent of parents say that their child has used drugs, while 17 percent of students report they have used drugs.

Consequences of Drug Use

The use of alcohol and other drugs is associated with the following:

- problems in school
- increased risks for serious injury
- suicide
- violence
- long-term health problems
- arrested physical and psychological development
- possible memory and perception disturbances
- loss of control
- misconduct
- discipline problems
- increased drop-out rate
- crime
- possible tolerance
- physical dependence
- psychological dependence
- accumulated side effects of drugs

COMMONLY USED DRUGS

Millions of Americans regularly use both physician-prescribed and self-prescribed drugs. The self-prescribed drugs include both licit and illicit ones. Licit drugs (socially acceptable and legal) include alcohol, tobacco, coffee, tea, colas, cocoa and various over-the-counter drugs. Illicit drugs include marijuana, cocaine, heroin, PCP and certain medicines that are psychoactive and that are purchased illegally.

Many people use "medicines" obtained through proper and legal medical channels for non-medical uses.

Young adults between the ages of 18 and 25 use the greatest quantity and variety of drugs. Teenagers (12 to 17 years of age) are the next most active drug users. More than half of the United States population uses drugs for non-medical reasons.

(This information was compiled from resources listed in the References.)

Terms of Use

Addiction

- ◆ dependence on a drug
- ◆ strong physical or psychological need for a drug

Drug Abuse

- ◆ any use of a drug to a point where one's health is adversely affected or one's ability to function in society is impaired
- ◆ an underage person's use of drugs that are legal for adults (illegal use of a drug)
- ◆ use of any illegal substance

Habituation

- ◆ mental dependence on a drug
- ◆ the need or compulsion to continue using a drug because it increases pleasurable feelings or reduces feelings of anxiety, fear or stress

Physical Dependence

- ◆ drug-induced change in a person
- ◆ the overpowering physical or emotional urge to use a drug repeatedly
- ◆ use accompanied by tolerance for the drug
- ◆ withdrawal symptoms if drug use ends

Psychological Dependence

- ◆ a condition in which a person is convinced that she or he needs to feel the effect(s) of a drug
- ◆ may feel withdrawal symptoms when not using the drug

Tolerance

- ◆ body's ability to adapt to a drug
- ◆ need for increasing doses of a drug to produce the same effect

Withdrawal

- ◆ result of stopping use of a drug after developing physical dependence
- ◆ characterized by sweating, delirium, nausea, vomiting and shaking
- ◆ also called detoxification
- ◆ usually a crisis, with varying degrees of physical and emotional severity

Patterns of Use

Experimental

- ◆ drugs used out of curiosity
- ◆ majority of people use drugs this way, at a party or social event
- ◆ experiment often not repeated

Occasional

- ◆ drug use not integrated into the person's life
- ◆ drugs used socially or occasionally
- ◆ risks of this type of use are low

Situational

- ◆ use associated with particular activities
- ◆ people feel they need the effects of a drug to get through certain situations
- ◆ serious risk of developing dangerous psychological dependence

Intense

- ◆ characterized by high doses over long periods of time
- ◆ users habitually turn to drugs for help whenever faced with a problem
- ◆ users believe they cannot function without drugs, although usually they can
- ◆ on the verge of becoming dependent on drugs

Compulsive

- ◆ cannot control drug use
- ◆ emotionally dependent on the drug
- ◆ cannot function without it
- ◆ may also be physically dependent
- ◆ drugs come before family and friends
- ◆ may be incapable of holding a steady job

Impact of Drug Use

Drug Used: OTC Cough Suppressant

Impact:

Social:

Health:

Economic:

Vocational:

Drug Used: Alcohol

Impact:

Social:

Health:

Economic:

Vocational:

Drug Used: Marijuana

Impact:

Social:

Health:

Economic:

Vocational:

Drug Used: Cocaine

Impact:

Social:

Health:

Economic:

Vocational:

Impact of Drug Use

Key

Drug Used: OTC Cough Suppressant

Impact:

Social: Socially, individuals would be affected only mildly, if at all, with such depressant drugs. If abused, the use of cough suppressants could lead to problems similar to those related to alcohol use.

Health: Cough suppressants have a beneficial effect for short-term use but, as indicated on the label, should not be used for extended periods of time. The effects of the abuse of cough suppressants are similar to those of alcohol or narcotics abuse.

Economic: The individual cost of cough suppressants is not great, yet society spends millions of dollars each year on them. Used as directed, cough suppressants are somewhat effective in slowing or stopping a cough. People who use cough suppressants regularly can become dependent, as some cough suppressants have synthetic narcotics or alcohol in them. Younger people have to consider how and where they will get the money to purchase the drug for illicit use. Eventually, because the drugs are depressants, they will interfere with functioning. They can affect one's ability to work and therefore will have a negative financial impact.

Vocational: If use of the suppressant interferes with the ability to work or go to school, this is a vocational impact. If suppressants are abused, the vocational impact is similar to that of alcohol abuse.

Drug Used: Alcohol

Impact:

Social: Alcohol is a depressant. Although an individual may feel elated, less inhibited and "more sociable" while under the influence of alcohol at a party, she or he might also feel fatigued, have slurred speech and be lethargic. For someone who drinks alone and is already depressed, alcohol can interfere with the ability to reason logically. Alcohol can also affect inhibitions, so that a person who normally would not have decided to be sexually intimate with another person might be more easily talked into doing so. The media depict the use of alcohol as acceptable in television and radio programs, movies and videos, and in ads on billboards, in magazines and newspapers.

Health: Alcohol interferes with reasoning and inhibitions, and as more is consumed at any one time, it interferes with coordination, respiration and heart rate. The long-term use of excessive amounts of alcohol can affect the liver and the brain and can cause physical deterioration of the body. Alcohol can affect an unborn baby if a woman drinks while pregnant. Heavy drinking (a bottle of wine, a six-pack of beer or the equivalent) is known to cause fetal alcohol effects or fetal alcohol syndrome—a

cluster of birth defects including malformed heads and faces, below-average stature, irreversible mental retardation, hyperactivity, leg and arm stiffness and cardiac defects.

Economic: Federal and state governments receive tax revenues for the sale of alcohol. The financial impact of purchasing alcoholic beverages varies, depending on the beverage. The cost may become a burden if using alcohol interferes with one's ability to earn an income that pays for the alcohol. The cost of lives lost due to drunk drivers who cause crashes is high. The cost of paying for hospitalization and care for injured victims is, eventually, the burden of taxpayers in most states.

Vocational: Alcohol slows the senses and affects one's decision-making ability. It can interfere with the desire to work and the capacity for work. It may also distort one's perception of the work (e.g., you may think you are doing a great, efficient typing job, while you are actually typing slowly and making many errors). A work supervisor may be one of the first people to recognize the symptoms of alcoholism. Some companies have policies regarding treatment for employees who have problems with alcohol use.

Drug Used: Marijuana

Impact:

Social: Marijuana use usually begins socially. But that social use can interfere with one's ability to drive and function physically. An individual may become so dependent on the drug that he or she also cannot function socially.

Health: Marijuana has many negative impacts on an individual's health, particularly from the effect of the known carcinogens that are inhaled in the smoke, benzopyrenes. Marijuana tends to increase the appetite and interfere with sense of time and can cause a cough. Marijuana use over a long period of time can cause lethargy and loss of motivation. The drug remains in the body for extended periods of time after only one use. It can build up in the fatty tissues of the body and interfere with sexual and reproductive functioning. Medicinally, prescriptions of marijuana cigarettes have a low concentration of THC (active ingredient in marijuana) and generally do not interfere with individual functioning.

Economic: The cost of marijuana for an individual is not too great when used occasionally, but it becomes greater with daily use and as the THC content increases. Unfortunately, marijuana is big illegal business. Selling marijuana is financially rewarding, but the income is illegal. Growing, selling or using marijuana is illegal.

Vocational: Daily use of marijuana with a high (5 percent to 10 percent) concentration of THC over extended periods of time is known to cause "amotivational syndrome," which interferes with the desire to do any kind of work. This can make it hard to keep a job. Marijuana use at school or work interferes with the ability to think clearly and function normally.

Drug Used: Cocaine**Impact:**

Social: Cocaine use can interfere with an individual's ability to function socially. Although the use may begin in social situations, the user may become obsessed with the idea of obtaining and taking the drug, and that obsession can become the controlling factor in his or her life. Cocaine use interferes with functioning in the family and socially.

Health: Cocaine is a short-acting central nervous system stimulant. If too much is consumed in a short amount of time, it can cause death, usually by heart attack. Psychologically, consumption of large amounts over a short period of time can cause paranoia and violent behavior. Small amounts over short periods of time also cause loss of appetite, euphoria and a sense of stimulation and control.

Economic: The cost of any type of cocaine is an economic burden. Since there is no legal or medical reason for an individual to possess cocaine, possession and use are illegal. Because cocaine has such a powerful psychologically addicting potential, it can take over one's life. The drug will eventually use up all of the assets of someone who becomes dependent on it. People have lost cars, furniture, boats, homes, etc., for their obsession with cocaine. Some have been known to spend anywhere from \$1,000 to \$35,000 a month for the drug. Since most people do not have the money to finance this kind of habit, they must use illegal means to obtain the funds to purchase the drug.

Vocational: The money one makes on the job may not be sufficient to sustain the cocaine habit, and an obsession with cocaine may interfere with the ability to function at work or school.

Drug Blanks

Directions: Fill in the blank word in each of the following statements. Then use the letters of these words to complete the message at the bottom of the next page.

1. A level of drug use that impairs the ability of the individual to function socially, vocationally or otherwise is called drug _____.

1 2 3 4 5

2. The habitual use of alcohol that can lead to both physical and psychological addiction is called _____.

1 2 3 4 5 6 7 8 9 10

3. This stimulant is found in coffee, cola drinks and many headache remedies; it is _____.

1 2 3 4 5 6 7 8

4. Drugs that are legal to obtain and do not require a prescription are called _____ drugs.

1 2 3 4 5 6 7 8 9 10 11 12 13 14

5. Unfortunately, about one-third of Americans smoke _____.

1 2 3 4 5 6 7 8 9 10

6. AIDS is transmitted by sexual intercourse and sharing intravenous drug _____.

1 2 3 4 5 6 7

7. Alcohol, barbiturates and tranquilizers are _____.

1 2 3 4 5 6 7 8 9 10 11

8. Cocaine is a short-acting central nervous system _____.

1 2 3 4 5 6 7 8 9

9. Drugs that interfere with the finances or assets are said to have an _____ impact.

1 2 3 4 5 6 7 8

10. When drugs interfere with the ability to maintain a job or attend work or school, this impact is considered _____ .
 1 2 3 4 5 6 7 8 9 10

11. When drugs interfere with the ability to function with peers, family and friends, this is said to be a social _____ .
 1 2 3 4 5 6

12. If drugs interfere with a physical or psychological condition, they have a _____ impact.
 1 2 3 4 5 6

Fill in the message below by using letters from the words you filled in above.

Word 1

Statement 1, letter 3 = _____
 Statement 1, letter 4 = _____
 Statement 3, letter 5 = _____

Word 2

Statement 4, letter 1 = _____
 Statement 3, letter 3 = _____

Word 3

Statement 6, letter 4 = _____
 Statement 4, letter 4 = _____
 Statement 8, letter 5 = _____
 Statement 5, letter 3 = _____
 Statement 5, letter 10 = _____

Word 4

Statement 9, letter 2 = _____
 Statement 10, letter 9 = _____
 Statement 4, letter 11 = _____

Word 5

Statement 10, letter 3 = _____
 Statement 12, letter 3 = _____
 Statement 8, letter 5 = _____
 Statement 8, letter 1 = _____
 Statement 5, letter 6 = _____

Word 6

Statement 11, letter 3 = _____
 Statement 4, letter 4 = _____
 Statement 10, letter 2 = _____
 Statement 1, letter 2 = _____
 Statement 6, letter 5 = _____
 Statement 12, letter 2 = _____
 Statement 8, letter 4 = _____
 Statement 5, letter 10 = _____

Drug Blanks

Key

Directions: Fill in the blank word in each of the following statements. Then use the letters of these words to complete the message at the bottom of the next page.

- A level of drug use that impairs the ability of the individual to function socially, vocationally or otherwise is called drug a b u s e .
1 2 3 4 5
- The habitual use of alcohol that can lead to both physical and psychological addiction is called a l c o h o l i s m .
1 2 3 4 5 6 7 8 9 10
- This stimulant is found in coffee, cola drinks and many headache remedies; it is c a f f e i n e .
1 2 3 4 5 6 7 8
- Drugs that are legal to obtain and do not require a prescription are called o v e r - t h e - c o u n t e r drugs.
1 2 3 4 5 6 7 8 9 10 11 12 13 14
- Unfortunately, about one-third of Americans smoke c l g a r e t t e s .
1 2 3 4 5 6 7 8 9 10
- AIDS is transmitted by sexual intercourse and sharing intravenous drug n e e d l e s .
1 2 3 4 5 6 7
- Alcohol, barbiturates and tranquilizers are d e p r e s s a n t s .
1 2 3 4 5 6 7 8 9 10 11
- Cocaine is a short-acting central nervous system s t i m u l a n t .
1 2 3 4 5 6 7 8 9
- Drugs that interfere with the finances or assets are said to have an e c o n o m i c impact.
1 2 3 4 5 6 7 8

10. When drugs interfere with the ability to maintain a job or attend work or school, this impact is considered v o c a t i o n a i .
 1 2 3 4 5 6 7 8 9 10

11. When drugs interfere with the ability to function with peers, family and friends, this is said to be a social i m p a c t .
 1 2 3 4 5 6

12. If drugs interfere with a physical or psychological condition, they have a h e a i t h impact.
 1 2 3 4 5 6

Fill in the message below by using letters from the words you filled in above.

Word 1

Statement 1, letter 3 = U
 Statement 1, letter 4 = S
 Statement 3, letter 5 = E

Word 2

Statement 4, letter 1 = O
 Statement 3, letter 3 = F

Word 3

Statement 6, letter 4 = D
 Statement 4, letter 4 = R
 Statement 8, letter 5 = U
 Statement 5, letter 3 = G
 Statement 5, letter 10 = S

Word 4

Statement 9, letter 2 = C
 Statement 10, letter 9 = A
 Statement 4, letter 11 = N

Word 5

Statement 10, letter 3 = C
 Statement 12, letter 3 = A
 Statement 8, letter 5 = U
 Statement 8, letter 1 = S
 Statement 5, letter 6 = E

Word 6

Statement 11, letter 3 = P
 Statement 4, letter 4 = R
 Statement 10, letter 2 = O
 Statement 1, letter 2 = B
 Statement 6, letter 5 = L
 Statement 12, letter 2 = E
 Statement 8, letter 4 = M
 Statement 5, letter 10 = S

U S E O F D R U G S C A N
C A U S E P R O B L E M S

LESSON
4

TOBACCO: SMOKE(LESS) SIGNALS

Objectives

Students will be able to identify the physical, mental-emotional and social problems associated with tobacco use.

Students will be able to describe the short- and long-term health effects of tobacco use.

Students will be able to identify the advertising appeals used to sell tobacco.

Overview

It is important that students understand tobacco's effects on the health of both the individual smoker and those people surrounding him or her. Before this lesson begins, students are asked to interview a smoker. Information from those interviews is used as an introduction to a class discussion of the health effects of smoking. Another class discussion and a mini-lecture focus on the health effects of smokeless tobacco. Students also examine and critique a tobacco advertisement, analyzing the appeal used.

Time

Three 50-minute class periods.

Teacher Materials and Preparation

ASSIGN:

- ✓ As homework, the **Interview a Smoker** worksheet, prior to class sessions on tobacco so that discussions related to the worksheet will be meaningful.
- ✓ Students to bring to class a tobacco advertisement from a magazine or newspaper.

CONTACT:

- ✓ (Optional) A local voluntary health agency (e.g., American Lung Association, American Heart Association, American Cancer Society) for films, videos or slides about tobacco.

COPY:

- ✓ **Interview a Smoker** worksheet, one for each student.
- ✓ **Tobacco Advertisement Critique** worksheet, one for each student.
- ✓ **Tobacco** worksheet, one for each student.

REVIEW:

- ✓ **Teacher Background Information.**
 - ✓ **Tobacco Key.**
-

Key Points

- Tobacco smoke has been implicated in many life-threatening diseases, including emphysema, lung cancer and heart disease.
- Nicotine is a powerful drug that has both stimulant and depressant properties.
- Tobacco has different particles, known collectively as tar, and gases, including carbon monoxide.
- Smokeless tobacco has been implicated as a cause of cancer of the oral cavity and of nicotine addiction.
- Low-tar and low-nicotine cigarettes are not necessarily effective in cutting the intake of tar and nicotine, because the smoker may compensate by inhaling more deeply or taking more puffs from the cigarette.
- Pipe smoking and cigar smoking have been linked to cancers

of the lip, mouth, larynx and esophagus. Chewing tobacco has been linked to cancer of the mouth.

- People who smoke despite the health hazards generally do so because they have formed a habit that is very difficult to break.
- In recent years, the percentage of male smokers has been decreasing, while the percentage of female smokers has increased.
- Smoking shortens life expectancy and leads to poor general health.
- Smoking can cause reduced birthweight and has been linked to spontaneous abortions and neonatal death.
- Billions of dollars in expenses for lost work time, hospital bills, fire insurance and other costs are associated with smoking.

Procedure

■ **Note:** Students must have completed **Part I** of the **Interview a Smoker** before this lesson begins. Have students use the information collected in their interviews to fill in **Part II** of the **Interview a Smoker** worksheet. Students should calculate the amount of money the person they interviewed spends on cigarettes per day, week or year and consider the short- and long-term health effects of cigarette smoking. Discuss the interviews with students, including these points:

- the number of years people have smoked
- reasons for smoking
- attempts to stop smoking
- methods used to try to stop
- amount of money spent each day (week, year) on cigarettes
- popular types or brands of cigarettes

Then ask students, from their observations, if the smoker they interviewed is showing signs of habituation, physical or psychological dependence or addiction to cigarettes. What is the smoker's pattern of use? (Refer to **Terms of Use And Patterns of Use** transparencies in Lesson 3 for more information about these terms.)

■ Ask students if they are aware of the health effects of cigarette smoking. Draw three columns on the chalkboard and label them **PHYSICAL**, **MENTAL-EMOTIONAL**, **SOCIAL**. At the top of the columns write **SHORT-TERM EFFECTS**. About halfway down the

columns write **LONG-TERM EFFECTS**. Then ask students to brainstorm the short- and long-term effects of cigarette smoking in each area. Use **Teacher Background Information** on the health facts of tobacco as a resource for a mini-lecture.

■ Ask students what they know about smokeless tobacco products and where they learned it. Do they think that the use of smokeless tobacco products is better than smoking? Do they think smokeless tobacco products are addictive? Is smokeless tobacco more or less addictive than smoking? Does it improve athletic performance?

Use **Teacher Background Information** on smokeless tobacco to continue the discussion and conduct a mini-lecture as needed and appropriate.

■ Review **Teacher Background Information** on advertising appeals and present the information in a mini-lecture for student use as a basis for evaluating tobacco advertisements.

Have students complete the **Tobacco Advertisement Critique** worksheet, using a tobacco advertisement (for cigarettes, cigars, pipe tobacco, chewing tobacco, etc.) from a magazine or newspaper. Students should evaluate the advertisement using the specified criteria from the mini-lecture. *Note:* Students should be asked to bring in a tobacco advertisement prior to this class session.

After students have completed the **Tobacco Advertisement Critique** worksheet, have them discuss their findings with the class. Give each student approximately one to two minutes to present the ad and his or her critique. This could also be done in small groups.

■ (Optional) Show a film that demonstrates a variety of emotional appeals used to sell tobacco products. Have students use the information to evaluate tobacco advertisements. Or show a film about the health effects of smoking.

Evaluation

Have students complete the **Tobacco** worksheet and evaluate responses to assess students' ability to describe the effects of tobacco and to identify problems associated with tobacco use and the appeals used in advertising techniques.

Homework

Ask students if they know a cigarette smoker. Tell students that they are to interview someone they know who smokes cigarettes. Tell students to use the **Interview a Smoker** worksheet and record the smoker's responses on it. Students should leave the *For Student Only* section to be completed during class. Ideally, this homework should be assigned ahead of the sessions on tobacco so that students can conduct in-class calculations and discussions appropriately. *Note:* Tell students to talk directly to you if they don't know a smoker. Problem solve individually with students in this situation.

Extension

Ask students to write a corrected version of the tobacco advertisement they used earlier, using an honest, healthful approach.

Teacher Background Information

Tobacco

SMOKING

Cigarette smoking has been identified as one of the major public health hazards of the twentieth century. Approximately one-third of Americans smoke tobacco. Although people have been smoking tobacco for hundreds of years, it was not recognized until about 1964 that a link existed between smoking and the spread of diseases such as lung cancer, bronchitis, emphysema and heart disease. In 1964, the Surgeon General issued a report on the growing evidence that cigarettes were a major public health hazard. As a result, cigarette use began to decline. From a peak in 1963, when Americans annually smoked an average of 4,345 cigarettes per person, the figure fell to 3,274 by 1986. Ninety percent of Americans now believe smoking is hazardous to health (Kane et al., 1985).

The Surgeon General, reporting on the health consequences of smoking, said, "Cigarette smoking is the major single cause of cancer mortality in the United States." He also said, "Cigarette smoking is the major cause of chronic obstructive lung disease in the United States for both men and women." Cigarette smoking should be considered the most important of the known modifiable risk factors for coronary heart disease in the United States. An estimated 30 percent to 40 percent of the 565,000 yearly deaths from coronary heart disease in the United States can be linked to smoking. Smokers have a 70 percent higher mortality from coronary artery disease than nonsmokers.

According to the National Institute on Drug Abuse (NIDA) data ("A Nation of Suspects," 1989), adolescent smokers consumed 19.51

billion cigarettes in 1974, but their use dropped in 1985 to 10.26 billion, while adult smokers consumed approximately 378 billion cigarettes in 1985.

Smoking by adults is definitely on the decline. In 1965, 40 percent of adults smoked, in 1985, the percentage of smokers was 30 percent, and the projected estimate for 1990 is 25 percent. This is a marked decrease since 1964 when the Surgeon General first made his report on tobacco smoking and health (AJPH, 1989).

More and more nonsmokers are insisting on their right to a smoke-free environment. Smokers are being assigned special workplace and eating spaces, and smoking is being restricted in many other areas so that nonsmokers can legally have a relatively smoke-free atmosphere.

TOBACCO—THE HEALTH FACTS

Nicotine

Nicotine, the active ingredient in tobacco, is a fast-acting drug that affects the central nervous system. It has both stimulant and depressant properties and no medical use. Other ingredients of tobacco smoke include *carbon monoxide*, which increases the heart rate and elevates the blood pressure; *tar*, which refers to all the particles present in cigarette smoke; and *lead*. All of these ingredients are potential carcinogens, or cancer-causing agents.

Physical Health Effects of Smoking Tobacco

Short-term effects: Nicotine stimulates the heart rate and constricts blood vessels, producing elevated blood pressure. It increases muscle

tone and activity in the gastrointestinal tract. It acts as an antidiuretic, resulting in fluid retention. It may also induce diarrhea and intestinal cramps. Nicotine lowers skin temperature, particularly in fingers and toes. Most of the effects are dose-related.

Long-term effects: Cigarette smoking has been reviewed by a NIDA task force on smoking. The task force found that smoking caused compulsive use and is toxic. Because of the adverse social consequences of smoking (discussed later), the task force classified nicotine as an addictive substance. The cigarette smoker who stops smoking usually craves the effects of nicotine. Although most smokers start to smoke for social or psychological reasons, once the habit is established it is probably maintained by the powerful physical effects of nicotine.

Withdrawal symptoms include craving for tobacco, irritability, anxiety, difficulty in concentration, restlessness, headaches, drowsiness and gastrointestinal disturbances. Withdrawal effects may occur as little as two hours after having the last cigarette, and craving peaks within the first 24 hours. Other withdrawal phenomena include decreased heart rate and blood pressure, weight gain and impairment in performance.

Risk factors and smoking: The association between cigarette smoking and lung cancer is well known (ten out of eleven men who are diagnosed with lung cancer are smokers). Higher rates of larynx, oral cavity, esophagus, bladder, kidney and pancreatic cancer are found in tobacco smokers than in nonsmokers.

Cigarette smoking is a major factor for fatal and nonfatal heart attacks. The major culprit

appears to be carbon monoxide, which produces increased heart rate and elevated blood pressure, decreases the oxygen that is transported to body organs (including the heart) and strains the heart (raises the heart's demand for oxygen).

Smoking is also a factor in respiratory tract problems other than lung cancer. Emphysema is highly correlated with smoking (four times more common in smokers than nonsmokers). Damage from emphysema is irreversible and is associated with shortness of breath, difficulty in breathing, consequent loss of energy and strain on the heart. Another respiratory difficulty related to smoking is bronchitis. Gastrointestinal problems include peptic and gastric ulcers.

Effects of smoking during pregnancy: Smoking during pregnancy adversely affects the pregnancy outcome and the growth and development of the fetus. Smoking during pregnancy is associated with stillbirth, bleeding during pregnancy, spontaneous abortion, perinatal mortality and sudden infant death syndrome. Smoking causes retardation of fetal growth. Infants born to smoking mothers weigh less than those born to nonsmoking mothers.

Smoking and oral contraceptives: Women who use oral contraceptives containing estrogen increase their risk of heart attack. Women who smoke and take the pill are more likely to suffer a stroke than are nonsmokers who take the pill.

Pipe and cigar smoking: Although pipe and cigar smoking do not carry the same risks of heart and lung disease as cigarette smoking (these smokers tend not to inhale the smoke into their lungs but retain the smoke in their mouths for a short period), they have other

hazards. Cancer mortality due to oral cancers (mouth, larynx and esophagus) is the same as for cigarette smoking.

Mental-Emotional Effects of Smoking Tobacco

Short- and long-term effects: The psychoactive effects of nicotine largely depend on the setting. Many smokers report relaxation; however, other smokers report irritability and nervousness after smoking more cigarettes than usual.

Social Effects of Smoking Tobacco

Short-term effects: Smoking may be offensive to nonsmokers, and the smoke may sting others' eyes. Cigarette smoking causes burns in clothing, halitosis (bad breath) and an offensive odor on the smoker's body and clothes.

Long-term effects: Cigarette smoking is a financial burden on individuals and society due to the high medical costs of smoking-related diseases. In 1986, 350,333 lives were lost in the United States as a direct result of smoking. Deaths are due to cancer, cardiovascular and respiratory-related diseases. Life expectancy is shortened by cigarette smoking. Fires caused by cigarette smoking are costly as well, in terms of both money and lives.

Passive Smoke Effects

Sidestream or passive smoke (sometimes called secondhand smoke) can endanger the health of anyone who breathes it. Nonsmokers who live with smokers have a higher risk of developing lung, breast, cervical and nasal/sinus cancer and heart disease. Nonsmokers exposed to cigarette smoke from a family member during childhood or adulthood have increased cancer risk and increased rates of bronchitis and pneumonia.

SMOKELESS TOBACCO

There are two types of smokeless tobacco used today.

Snuff

Snuff is sold in small, round tins in loose powder form in "tea bag" pouches. Either a pouch or a pinch is used by placing the tobacco between the cheek and gum or the gum and lower lip. Snuff is cured ground tobacco that comes in three forms: dry snuff, moist snuff and fine-cut tobacco.

Chewing Tobacco

This is coarsely cut tobacco sold in cans or pouches in loose or "plug" forms. It is placed between the cheek and gum, usually in a golf-ball sized wad, and is sucked or chewed. It comes in three forms: loose-leaf tobacco, plug tobacco and twist chewing tobacco.

Present Use

The number of teenage boys who chew smokeless tobacco has doubled since 1977. It is estimated that from three to four million young people under the age of 21 chew tobacco on a regular basis. More than one-third of the high school baseball players in New York and New Jersey reported that they have tried smokeless tobacco, and about 6 percent are long-time users. As much as 4 percent of teenage boys have tried some form of smokeless tobacco, and 15 percent are regular users. Many started before age 13. An estimated twelve million or more people in the United States use smokeless tobacco, either in the form of snuff or chewing tobacco, and about half of them dip or chew at least once a week.

Smokeless tobacco is a \$1 billion a year business. Many young users probably started their habit because of glamorous ads by a few well-known athletes who sold their names to promote the product. Since 1987, smokeless

tobacco advertisements have been banned on radio and television. The Surgeon General now requires a health warning on packages of smokeless tobacco similar to the warnings found on cigarettes.

Physical Health Effects

Smokeless tobacco is a serious health hazard related to cancer of the oral cavity and nicotine addiction, similar to that produced by cigarette smoking.

Research has shown that snuff may be even more addictive than cigarettes. The nicotine level in the blood is higher in smokeless-tobacco users than in smokers. The nicotine concentration in a can of snuff is often higher than in a pack of cigarettes. Although snuff may be labeled "low-nicotine," it may have a high alkaline content, which increases the body's absorption of nicotine.

Chewing tobacco has a higher average sugar content than snuff. The sugar is cariogenic (dental decay-producing). Continued use of smokeless tobacco causes destruction of the gums and loosening of the teeth. The gums recede from the crowns of the teeth, eventually leaving roots exposed, and biting surfaces become abraded and toughened.

Leukoplakia may develop on the gums and cheeks of smokeless tobacco users. These are white, leathery patches that tend to go away if a person stops using smokeless tobacco, but they are composed of precancerous tissue that can become malignant. A study done by the National Cancer Institute and the University of North Carolina found that the use of smokeless tobacco increases the risk of oral cancer by four times, and long-term use increases the risk by 50 times. One teenager died of oral cancer after using smokeless tobacco for only six years.

Tobacco chewers have been observed to develop cancer of the lip, cheek, gingiva and the anterior part of the tongue. (Smokers tend to develop cancer on the posterior part of the tongue and on other parts of the oral pharynx.) The prime carcinogenic ingredient in smokeless tobacco is a type of nitrosamine found in nicotine and other tobacco products.

Nicotine is the active ingredient in both smokeless tobacco and cigarettes that gives the user the feeling of exhilaration; it is also the factor that develops dependency and addiction.

Nicotine causes the heart to beat faster while at the same time constricting blood vessels. Consider the effect of nicotine on the athlete. When an athlete uses a drug with nicotine in it, the nicotine affects the heart. The heart beats faster, and blood pressure increases within three to five minutes after the tobacco is placed in the mouth, producing additional stress. The heart must work harder to force the blood through the constricted vessels. Although the athlete may seem to feel more alert for a time, his actual playing ability is no better; in fact, it may be worse. Other symptoms of nicotine's effect on muscles include fatigue, shortness of breath, palpitations and muscle wasting.

The increases in heart rate induced by the use of smokeless tobacco are counterproductive and serve to reduce the cardiovascular response flexibility of male athletes. Many teenagers continue to use smokeless tobacco because they think using it is harmless and is a flashy thing to do. Smokeless tobacco is not a safe alternative to cigarette smoking!

Other effects of smokeless tobacco include stained teeth, unsightly spitting, stains on clothes from spitting accidents, and halitosis.

ADVERTISING APPEALS

A variety of advertising appeals are used to sell products, especially tobacco products, including the following:

1. *“Proof of” Appeal:* This appeal emphasizes the facts. It may point out for example, the fact that each cigarette has ___ mg. of tar as proof that it is a better cigarette.

2. *Emotional Appeal:* This appeal uses mental and emotional overtones to encourage users to try the product. The ad may use a glamorous woman or man smoking the product in a beautiful setting, or show a man and a woman together, on a date, having a wonderful time, or show someone smoking, having fun.

3. *Comparison Appeal:* This appeal compares the company’s product with a similar product. The ad may compare two cigarette packages, filter vs. nonfilter, contents (tar, nicotine, gases) or even price, to encourage people to buy the product.

4. *Medical or Health Appeal:* This appeal is not often used in advertising cigarettes. It may emphasize the low-tar and low-nicotine content, thereby implying the health “benefits” of smoking this brand of cigarette. The Federal Trade Commission requires an ad not only to identify the tar and nicotine content of the cigarette but also to carry a health warning. Four different warnings appear on cigarette packages and on cigarette advertisements, and they are rotated quarterly.

5. *Bandwagon Appeal:* This appeal demonstrates to the reader that everyone is using this product. Although the ad may show only one person smoking, everyone else in the ad is either smiling or holding a cigarette or a pack of cigarettes, etc.

6. *Star or Glamour Appeal:* This is a type of emotional appeal that uses famous or glamorous situations or people to sell the product, such as an athlete using smokeless tobacco.

Note: While most of the appeals discussed refer to cigarette smoking, ads for smokeless tobacco use many of the same appeals.

Interview a Smoker

Part I

Directions: Use this form to interview an individual who is a regular tobacco smoker (someone who smokes at least one or two cigarettes a day). Ask the following questions and record the answers on this form.

Ask the smoker:

- Do you remember when you first started smoking? (circle) Yes No
- Approximately how old were you, or how long have you been smoking? _____
- Why did you first start smoking? _____

- Why do you continue to smoke? _____

- How many cigarettes or packs of cigarettes do you smoke each day? _____
- Do you smoke only in certain situations, such as in social situations, in stressful situations or on other occasions? (circle) Yes No
- If yes, what are the specific situations or occasions when you smoke? _____

- Do you know how much money you spend (approximately) on cigarettes per day, per week, per year? (circle) Yes No
- How much do you spend for one pack of your brand of cigarettes? \$ _____
- What brand of cigarette do you smoke? _____
- Are the cigarettes you smoke (circle as many as apply):
 Low tar
 Low nicotine
 No filter
 Other special type _____
- Are you aware of the long-term health hazards of smoking? (circle) Yes No

➔ Do your family members or friends smoke? (circle) Yes No

➔ Have you ever tried to stop smoking? (circle) Yes No

➔ If yes, what method(s) did you use to try to stop? _____

Part II

Directions: Answer the following questions about the interview in class. *Do not* use the name of the individual you interviewed on this form.

For student only:

Calculate the amount of dollars this person spends on cigarettes each:

a. day \$ _____ (cost of pack of cigarettes x number of packs smoked per day
 or cost of pack of cigarettes/number of cigarettes in pack x number of cigarettes
 smoked per day)

b. week \$ _____ (number from "a" x 7)

c. year \$ _____ (number from "b" x 52)

From your observations, is this smoker showing signs of (check all that apply)

- Habituation
- Psychological Dependence
- Physical Dependence

Tobacco Advertisement Critique

Directions: Use the six appeals below to critique your tobacco advertisement. Attach the advertisement to this worksheet when you have completed answering the questions that apply to your ad.

1. What is the **"Proof of" Appeal** used in this ad?

2. What is the **Emotional Appeal** used in this ad?

3. What is the **Comparison Appeal** used in this ad?

4. What is the **Medical or Health Appeal** used in this ad?

What health warning is used in this ad?

5. What is the **Bandwagon Appeal** used in this ad?

6. What is the **Star or Glamour Appeal** used in this ad?

Tobacco

Directions: Answer the following questions by circling the correct word, filling in the blank space or circling the letter of the correct answer.

1. If you smoke cigarettes, your risk of cardiovascular disease (circle) *increases / decreases*.
2. The more cigarettes you smoke, the (circle) *greater / lower* your risk of heart attack and stroke.
3. Name three effects of smoking on your cardiovascular system.

4. Name three effects on your health of using chewing tobacco.

5. Name two effects of passive smoke on the nonsmoker.

6. Name one effect of smoking during pregnancy.

7. What type of action do cigarettes have in the body? (Circle the letter of the best answer.)
 - a. stimulant
 - b. depressant
 - c. hallucinogenic
 - d. narcotic/opiate
 - e. stimulant and depressant

8. Name the six appeals used for advertising tobacco products.

Tobacco

Key

Directions: Answer the following questions by circling the correct word, filling in the blank space or circling the letter of the correct answer.

- If you smoke cigarettes, your risk of cardiovascular disease (circle) increases / decreases.
- The more cigarettes you smoke, the (circle) greater / lower your risk of heart attack and stroke.
- Name three effects of smoking on your cardiovascular system.
raises the heart's demand for oxygen
increases the heart rate
limits oxygen supply to the heart
- Name three effects on your health of using chewing tobacco.
develop cancer of the lip, cheek, gingiva and the anterior part of the tongue
stained teeth, unsightly spitting, stains on clothes from spitting accidents, halitosis
fatigue, increased heart rate and blood pressure, shortness of breath, palpitations and muscle wasting
- Name two effects of passive smoke on the nonsmoker.
higher risk of developing lung, breast, cervical and nasal/sinus cancer and heart disease
family members have increased cancer risk and increased frequency of bronchitis and pneumonia
- Name one effect of smoking during pregnancy.
Smoking adversely affects the pregnancy outcome and the growth and development of the fetus and is associated with stillbirth, bleeding during pregnancy, spontaneous abortion, perinatal mortality and sudden infant death syndrome. Smoking causes retardation of fetal growth.
- What type of action do cigarettes have in the body? (Circle the letter of the best answer.)
 a. stimulant
 b. depressant
 c. hallucinogenic
 d. narcotic/opiate
(e.) stimulant and depressant
- Name the six appeals used for advertising tobacco products.

| | |
|--------------------------|---------------------------------|
| <u>"Proof of" Appeal</u> | <u>Medical or Health Appeal</u> |
| <u>Emotional Appeal</u> | <u>Bandwagon Appeal</u> |
| <u>Comparison Appeal</u> | <u>Star or Glamour Appeal</u> |

**LESSON
5**

ALCOHOL: LIQUID ILLUSION

Objectives

Students will be able to describe the mental-emotional, social and physical effects of alcohol on the body.

Students will be able to identify programs that encourage responsible alcohol use.

Students will be able to define alcoholism and describe its stages.

Overview

This lesson is designed to promote student understanding of the scope of the alcohol problem. Students consider alcohol-related issues on a worksheet that examines attitudes toward alcohol use. A mini-lecture and worksheet provide factual information about alcohol. Transparencies are used to explain the effects of alcohol on the body, including blood alcohol concentration. A poster identifies some resources for dealing with the problem, and as follow-up to the lesson, students are asked to find additional resources. The attitudes worksheet is used again at the end of the lesson to evaluate changes in students' attitudes regardless of alcohol use.

Time

Two 50-minute class periods.

Teacher Materials and Preparation

MAKE:

- ✓ Poster with Resources phone numbers (place this poster in the classroom).
- ✓ Transparency of Effects on the Body.
- ✓ Transparency of Factors Affecting Alcohol in the Body.
- ✓ Transparency of Blood Alcohol Concentration Chart.
- ✓ Transparency of The Three Stages of Alcoholism.

COPY:

- ✓ Alcohol Attitudes Inventory, two copies for each student (one to be completed at beginning of unit, another to be completed at end of unit).
- ✓ Facts About Alcohol worksheet, one for each student.

REVIEW:

- ✓ Teacher Background Information.
 - ✓ Facts About Alcohol Key.
 - ✓ Blood Alcohol Concentration Chart and calculations.
-

Key Points

- Alcohol is a traditional part of American celebrations, entertainment and social life.
- Millions of Americans are problems drinkers or alcoholics who often have difficulties maintaining relationships with family and friends.
- Alcohol abuse causes many serious and costly social problems, including the breakup of families, violent crimes, health problems, absenteeism from work and school.
- Alcohol is a drug that is present in varying amounts in beer, wine and distilled liquor.
- Alcohol interferes with the parts of the brain that control inhibitions and judgment.
- Large doses of alcohol slow a drinker's reflexes and perception, impair coordination and depress all areas of the brain and central nervous system.
- Alcohol can kill if taken in very large doses or mixed with other depressant drugs.

- Alcohol's effects depend on many variables, including emotional state, health status, previous experience drinking alcohol, type of beverage consumed, etc.
- Some people choose not to drink or to drink in moderation.

Procedure

■ Ask students to complete **Alcohol Attitudes Inventory** and discuss their responses.

■ Use the **Facts About Alcohol Key** and the **Effects on the Body** transparency to present a mini-lecture. Have students complete the **Facts About Alcohol** worksheet as you present this information.

■ Ask students, "Why can one person have several drinks and still appear sober, while another person gets light-headed after only one drink? Why are people affected in different ways on different occasions even though they consume the same amount of alcohol each time?" Use the **Factors Affecting Alcohol in the Body** transparency and **Teacher Background Information** to discuss the answers to these questions.

■ Show students the **Blood Alcohol Concentration Chart** transparency. Discuss blood alcohol concentration (BAC) as one example of a variety of factors affected by alcohol in the body. Point out that in many states a person with a BAC of 0.08-0.10 (actually one-twelfth to one-tenth of 1 percent) is considered legally drunk. Effective January 1992, U.S. federal law mandates that all states must enforce a 0.04 BAC limit (*Los Angeles Times*, 9/15/89).

A study in Sweden showed that skilled drivers with a BAC of 0.05 (half the legal limit) negotiated a road course about 30 percent more slowly than a control group of drivers who did not drink. Studies show that driving skill begins to deteriorate with a BAC of 0.02, night vision is impaired at 0.08 and peripheral vision is impaired at a 0.05 level. Braking distance time is increased by 25 percent with a BAC of 0.10. Slowed reaction and perception times and poor coordination are not the only problems. Many drivers also become more aggressive when they drink because the part of the brain that normally controls behavior is dulled. Some drivers may push their cars to the limit while trying dangerous maneuvers to impress their passengers.

Ask students if they are familiar with campaigns to encourage stiffer drunken-driving laws and stricter enforcement. Are students familiar with MADD (Mothers Against Drunk Drivers) and SADD (Students Against Driving Drunk)? Refer students to the **Resources** poster for other organizations that deal with alcohol use.

Ask students, "What can you do if you find yourself in a car with a driver who's under the influence of alcohol or other drugs?" The following are some possible responses:

- Get the driver out from behind the wheel.
- Say you need to stop at the store and take the car keys.
- Get out and call a taxi.
- Get out and walk.
- Get out and call "Safe Ride."

■ Discuss alcoholism and the signs of alcoholism, using **Teacher Background Information** and the transparency of **The Three Stages of Alcoholism**. Begin a mini-lecture by asking students if they have any idea of the number of people who have problems with alcohol.

Evaluation

Have students again complete the **Alcohol Attitudes Inventory** and compare those answers with the responses they provided the first time. All answers to content-related questions are given in **Teacher Background Information**. Assess students' ability to identify the effects of alcohol, the programs available for responsible alcohol use and resources to deal with alcoholism.

Extension

As a homework assignment, have students identify groups at school and in the community that encourage responsible drinking behavior (e.g., parties without alcohol, safe-ride programs, school counselors and student groups) and report back to the class.

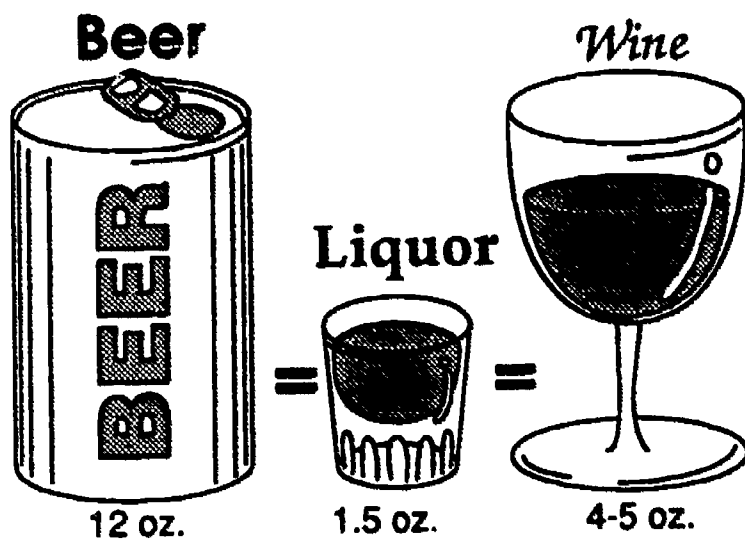
Have students write a brief essay about how the media (television, movies, videos, magazines, newspapers) glamorize drinking behavior.

Teacher Background Information

Alcohol

FACTORS AFFECTING ALCOHOL IN THE BODY

Type of drink: Some drinks have a greater alcohol content than others. The alcohol content of hard liquor (distilled beverages) is expressed in *proof*, which is twice the actual percentage of alcohol. An 86-proof bottle of whiskey is actually 43 percent alcohol. Beer has about 4 percent alcohol by volume (about one-half ounce in a 12-ounce beer); wine has 10 to 14 percent; and whiskey, rum, tequila, vodka and other distilled spirits contain between 40 to 50 percent. A 12-ounce beer, a 4- to 5-ounce glass of wine and a 1 1/2-ounce shot of whiskey all have about the same amount of alcohol, roughly one-half ounce.



Amount of alcohol consumed: The liver can process (oxidize) only about one-half ounce of alcohol per hour. If the liver could immediately oxidize all of the alcohol that reaches it, people would never get drunk.

Time elapsed between drinks: If a person drank only one beer an hour, he or she would

feel little effect. But if a person drank four beers in an hour, one and one-half ounces of alcohol would remain in the person's system at the end of the hour.

Body weight: A heavy person is able to tolerate more alcohol in the bloodstream and oxidize alcohol more rapidly than a thin person. Generally speaking, a 200-pound person will need about twice times as much alcohol to achieve the same blood alcohol concentration as a 100-pound person. Body fat also plays a role in alcohol oxidation, because alcohol does not diffuse as rapidly into body fat. A woman has more body fat and less body fluid than a man does. If a woman and a man weigh the same, the woman's blood alcohol concentration will be higher than the man's.

Empty or full stomach: Food in the stomach and small intestine can slow the absorption of alcohol into the bloodstream. In general, it is probably a good idea to eat before or during drinking, but one shouldn't rely on food to maintain sobriety. The amount of alcohol absorbed into the bloodstream will increase if drinking is heavy and continuous.

Mental/emotional state: The drinker may think he or she is a better speaker, driver, partygoer or lover, but this is not true. Carefully performed experiments have shown that alcohol increases neither physical nor mental ability. People who expect to get drunk are often going to act drunk regardless of the amount they drink. If a person drinks when upset or depressed, the depressing effects are accelerated. People who are happy, excited or in a festive atmosphere may get caught up in the feeling and may seem to become intoxicated

more rapidly than people drinking calmly.

Previous experience with alcohol: Individuals who have experience with or tolerance to alcohol are able to minimize their reaction to alcohol. Although the body and brain may be feeling the physical effects of alcohol, an experienced drinker learns to modify his or her behavior accordingly. Such behavior may be so disguised (e.g., reaching for a glass more slowly or walking more carefully) that the person may not even realize he or she is overcompensating for the behavior.

Intoxication and hangover: Someone who is intoxicated has lost some or a great deal of control over his or her actions. This occurs when alcohol dulls the brain's functions. No one knows how a person will react when intoxicated—some people feel happy, others depressed (or more depressed) or enraged and want to fight. A hangover is the consequence of excessive drinking and causes severe headaches, vomiting and weakness. Hangovers have several causes: Alcohol irritates the central nervous system and dehydrates body cells; alcohol makes the stomach increase production of gastric juices, which irritate the stomach lining; the body experiences withdrawal from the drug. The only known cure for a hangover is time—nothing else.

ALCOHOLISM

Alcoholism is an addiction to alcohol. It is a general term used to describe the set of physical, psychological and social problems associated with a drinking disease. It is both a medical and a psychological problem.

There are approximately ten to twelve million Americans of different ages, religions, races, educational backgrounds and socioeconomic status who have problems with alcohol. Over three million teenagers (ages 14-17) have a drinking problem. More than a third of all suicides involve alcohol. Approximately six million adults have personal and health problems with alcohol severe enough to cause them to be labeled alcoholics.

Approximately 75 percent of American adults of drinking age and approximately 80 percent of high school students have consumed alcohol. Some surveys indicate that as many as 50 percent of high school students attend drinking parties at least once a month and that half of that percentage get drunk once each month. Drinking behavior may be influenced by peer pressure and drinking companions. When high school students named the drug most frequently used by their peers, 89 percent named alcohol, 9 percent named tobacco and 2 percent named marijuana. Less than 1 percent named drugs such as cocaine.

The most difficult part of recovery for an alcoholic is to admit that he or she has a problem and to identify the problem in his or her mind.

Alcoholism usually develops from a prealcoholic stage of needing to drink to relieve tension and anxiety, and this stage may last for years. During this time, tolerance to alcohol develops gradually. Progression to a state of alcoholism is characterized by three stages. See **The Three Stages of Alcoholism** transparency for information about these stages.

(This information was compiled from resources listed in the References.)

Resources

***Alcoholism and Drug Addiction Treatment Center*(800) 382-4357**

Referrals to local facilities where adolescents and adults can seek help.

***Al-Anon Group Family Headquarters*(800) 356-9996**

Provides materials on alcoholism specifically aimed at helping families dealing with problems of alcoholics (available 24 hours a day, seven days a week).

National Council on Alcoholism..(800) NCA-CALL

Provides referrals to local affiliates, and written information on alcoholism (24 hours a day, seven days a week).

National Cocaine Hotline.....(800) COC-AINE

Answers questions on health risks of cocaine and provides counseling to cocaine users and their friends and families. Provides referrals.

National Parent's Resource Institute for Drug Education (PRIDE)(800) 241-7946

Provides a broad range of educational and professional materials on drug-related issues, including alcohol and legal questions.

NIDA Helpline(800) 662-HELP

Provides general information on drug abuse and on AIDS as it relates to intravenous drug users. Referrals offered.

Office of Substance Abuse Prevention(800) 638-2045

Offers information and technical assistance to schools, parent groups, business and industry and national organizations in developing drug abuse prevention activities. Does not provide counseling, treatment referrals, information on pharmacology of drugs or criminal aspects.

Alcohol Attitudes Inventory

Directions: Read the following statements and circle the answer that best represents your attitude about each statement.

- SA = Strongly Agree**
- A = Agree**
- U = Undecided**
- D = Disagree**
- SD = Strongly Disagree**

1. The legal drinking age for consuming alcoholic beverages should be lower **SA A U D SD**
2. Even small amounts of alcohol can lower inhibitions and make people feel like doing things they wouldn't ordinarily do.... **SA A U D SD**
3. Alcohol use increases the likelihood of developing cancer. **SA A U D SD**
4. Drinking alcohol may cause more stress in personal relationships. **SA A U D SD**
5. Most people who have been arrested have been drinking alcohol. **SA A U D SD**
6. One out of ten people who drink alcoholic beverages is an alcoholic. **SA A U D SD**
7. Alcoholism is a disease. **SA A U D SD**
8. A person who drinks alcohol on a full stomach will not be as affected as a person who drinks on an empty stomach. **SA A U D SD**
9. A person's mood when drinking alcoholic beverages can affect his or her experiences after drinking. **SA A U D SD**
10. Alcohol can interfere with achievement of goals. **SA A U D SD**
11. Alcohol has no nutritional value. **SA A U D SD**
12. The "morning after" headache from alcohol can be avoided by taking aspirin before drinking alcoholic beverages. **SA A U D SD**
13. At a cold football game, it makes sense to drink alcohol because alcohol increases body temperature. **SA A U D SD**
14. Alcohol is an aphrodisiac. **SA A U D SD**
15. One drink is not likely to impair driving skills. **SA A U D SD**

Facts About Alcohol

Directions: Write in the effects of alcohol on these body parts.

Brain

Lungs

Stomach

Liver

Small Intestine

Cardiovascular System—Bloodstream

Kidneys

Reproductive Organs

Facts About Alcohol

Key

Brain

Alcohol acts as a central nervous system depressant, causing the drinker's reactions and perceptions to slow. The highest centers of the brain are depressed first: speech, thought, cognition, restraint and judgment, followed by lower brain function, respiration and spinal cord reflexes. Depression of the respiratory reflex center by high blood alcohol concentration can lead to death. Coordination is impaired; speech is affected.

Lungs

Some alcohol can be exhaled through respiration (only a small amount). Large amounts of alcohol can slow respiration and impair breathing.

Stomach

Some alcohol is absorbed in the stomach. Gastric juices are secreted in response to alcohol. Food in the stomach can slow absorption and modify the irritating effects of alcohol. Alcohol causes irritation of the gastrointestinal tract because of the direct toxic effect of alcohol on the stomach lining and the stimulation of acid secretion. Excess and chronic consumption of alcohol can cause ulcers. Note that aspirin, taken by alcohol abusers to alleviate discomfort, may actually aggravate stomach irritation by causing hemorrhaging of the stomach lining.

Liver

Ninety percent of alcohol is oxidized (metabolized) by the liver, or about one-half ounce per hour. Cirrhosis of the liver and deposits of fatty tissue can be related to chronic alcohol consumption.

Small Intestine

Most of the absorption of alcohol occurs here.

Cardiovascular System—Bloodstream

The bloodstream carries alcohol to all parts of the body. Alcohol causes the blood vessels to dilate, especially those on the surface of the skin, giving the feeling of warmth and a flush that leads a person to use alcohol to warm up in cold weather. The body temperature actually decreases, because the person has lost body heat through dilated blood vessels. One of the physical signs of alcoholism is broken blood vessels in the upper cheeks adjacent to the nose. These result from chronic dilation of the blood vessels. Severe alcohol intoxication results in a slowed heart rate.

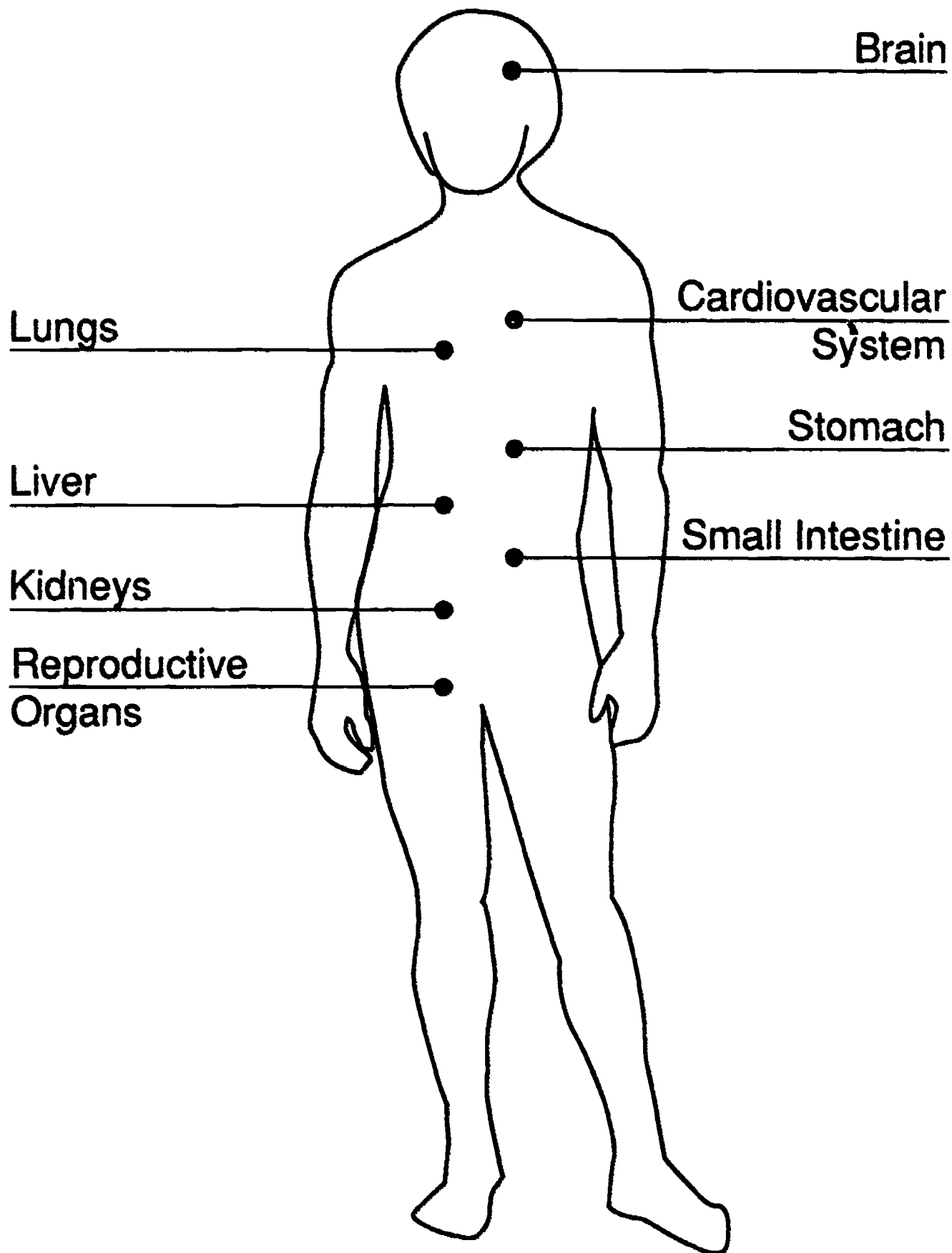
Kidneys

Alcohol causes increased production of urine; dehydration of body cells occurs.

Reproductive Organs

Alcohol affects inhibitions. Although there is a myth that alcohol is an aphrodisiac (a sexual stimulant), alcohol is actually a depressant. It releases inhibitions and interferes with sexual function. (In fact, it may stimulate desire but diminish performance.)

Effects on the Body



Factors Affecting Alcohol in the Body

Type of Drink

Amount of Alcohol Consumed

Time Elapsed Between Drinks

Body Weight

Empty or Full Stomach

Mental/Emotional State

Previous Experience with Alcohol

Blood Alcohol Concentration Chart

Directions: To estimate an individual's blood alcohol concentration, match the number of drinks consumed to the body weight. Subtract 0.015 for each hour since drinking began.

One drink equals an ounce of 86-proof liquor, a 12-ounce beer or a 5-ounce glass of table wine. (Source: Mothers Against Drunk Drivers)

| Drinks | BLOOD ALCOHOL CONCENTRATION (BAC) | | | | | | | |
|--------|-----------------------------------|-----|-----|-----|-----|-----|-----|----------|
| | 100 | 125 | 150 | 175 | 200 | 225 | 250 | |
| 1 | .03 | .03 | .02 | .02 | .01 | .01 | .01 | |
| 2 | .06 | .05 | .04 | .04 | .03 | .03 | .03 | SOBER |
| 3 | .10 | .08 | .06 | .06 | .05 | .04 | .04 | |
| 4 | .13 | .10 | .09 | .07 | .06 | .06 | .05 | |
| 5 | .16 | .13 | .11 | .09 | .08 | .07 | .06 | IMPAIRED |
| 6 | .19 | .16 | .13 | .11 | .10 | .09 | .08 | |
| 7 | .22 | .18 | .15 | .13 | .11 | .10 | .09 | |
| 8 | .26 | .21 | .17 | .15 | .13 | .11 | .10 | |
| 9 | .29 | .24 | .19 | .17 | .14 | .13 | .12 | |
| 10 | .33 | .26 | .22 | .18 | .16 | .14 | .13 | ILLEGAL |
| 11 | .36 | .29 | .24 | .20 | .18 | .16 | .14 | |
| 12 | .39 | .31 | .26 | .22 | .19 | .17 | .16 | |

Example: If a 125-pound person drank 3 drinks, BAC = 0.08; in 2 hours, the estimated BAC would be

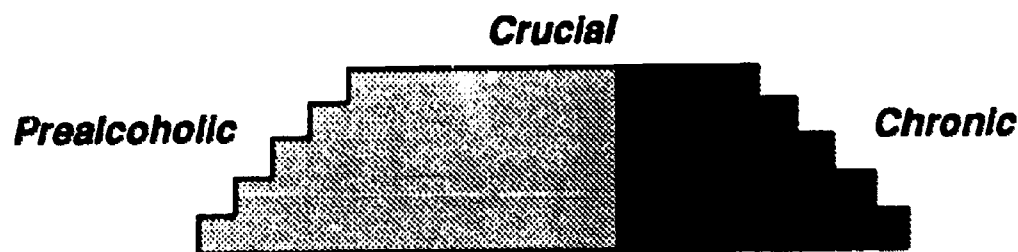
$$0.08 - (0.015 \times 2 \text{ hours} = 0.030) = 0.05 \text{ BAC.}$$

The Three Stages of Alcoholism

1. **Warning stage (prealcoholic and early alcoholic stages)**
 - ▲ Increased tolerance to alcohol
 - ▲ Drinking to escape from tension and frustration of daily living
 - ▲ Preoccupation with drinking (drink alone, gulp drinks)
 - ▲ Embarrassing behavior to significant others
 - ▲ Surreptitious drinking (sneaking drinks)
 - ▲ Blackouts (drinker has no recall of events that have taken place)

2. **Crucial stage**
 - ▲ Loss of control over how much one drinks (may not drink every day, but cannot control the amount of alcohol consumed once drinking has begun)
 - ▲ Conscious or unconscious guilt feelings about drinking
 - ▲ Rationalization of drinking behavior (drinker has "good reasons" for drinking)
 - ▲ Promises to stop drinking; may stop, but resumes drinking
 - ▲ May still hold down job or continue in school

3. **Chronic stage (true alcoholic phase and complete alcohol dependence)**
 - ▲ Everything revolves around alcohol—total dependence on alcohol (appearance, home relations, school, job, possessions neglected, disrupted and begin to deteriorate)
 - ▲ Periods of constant drinking
 - ▲ Can't stop after one drink
 - ▲ Health consequences may intensify (may have severe liver damage and possible damage to brain tissue)
 - ▲ Continued drinking needed to prevent withdrawal symptoms
 - ▲ Reverse tolerance—body needs smaller doses of alcohol to feel the effects
 - ▲ Drinking may continue for days ("bender")
 - ▲ Delirium tremens (D.T.'s) occur in absence of alcohol
 - ▲ After several years in chronic phase, symptoms may include delirium, muscle tremor, confusion and hallucinations; may last two days to two weeks; death occurs in about 10 percent of cases.



Each stage may last for years and never progress to the next stage.

LESSON
6

MARIJUANA: MORE THAN GRASS

Objectives

Students will be able to describe the short- and long-term health effects of marijuana use.

Students will be able to describe the mental-emotional, social and physical effects of marijuana on the body.

Overview

This lesson presents factual information about the short- and long-term health effects of marijuana use. A worksheet is used to test students' current knowledge about marijuana use. Worksheet review and class discussion provide accurate information, and another worksheet checks students' new knowledge about the drug.

Time

One 50-minute class period.

Teacher Materials and Preparation

COPY:

- ✓ **How Much Do You Know About Marijuana?** worksheet, one for each student.
- ✓ **Fact Sheet—Marijuana**, one for each student.
- ✓ **Marijuana Controversy** worksheet, one for each student.

REVIEW:

- ✓ **How Much Do You Know About Marijuana? Key.**

Key Points

- Marijuana smoke contains many ingredients that are still under medical investigation.
- Marijuana use has both unhealthful and some potentially beneficial effects on the body.
- Long-term, frequent use of marijuana affects physical and mental abilities and can affect social relationships.
- Marijuana is known to be a gateway drug to other harmful drugs.
- There are definite health risks involved in regular use of marijuana.

Procedure

■ Tell students that to start the discussion about marijuana you would like them to answer a few questions. Distribute the **How Much Do You Know About Marijuana?** worksheet to each student. Allow five minutes for students to answer the questions. Review the worksheet with students, using the **How Much Do You Know About Marijuana? Key** as a reference.

■ Distribute **Fact Sheet—Marijuana** to students. Review and discuss important points with the class. Tell students that despite continued research on marijuana, there is still much not known about the effects of the drug.

Evaluation

Have students complete the **Marijuana Controversy** worksheet to evaluate the knowledge they have gained about the short- and long-term effects as well as the mental-emotional, physical and social effects of marijuana. The worksheet could be completed as a homework assignment or in another class session.

Homework

Have students write an essay on the role of marijuana as a medicinal agent, why a higher percentage of males than females use marijuana in the United States or why the number of marijuana smokers diminishes with increasing age. Discuss these essays orally in another class session.

How Much Do You Know About Marijuana?

Directions: Read the following statements about marijuana and decide whether they are *True* or *False*. Circle the word *True* or *False* on the line preceding each statement.

- True False** 1. Marijuana smoke is safer than tobacco smoke.
- True False** 2. The chemicals in marijuana stay in the body for only a short time after smoking a joint.
- True False** 3. Today's marijuana is stronger than varieties grown in the 1960s.
- True False** 4. Marijuana use decreases the heart rate.
- True False** 5. Marijuana use interferes with the user's ability to concentrate.
- True False** 6. Marijuana use improves driving ability.
- True False** 7. Marijuana use can reduce sperm count and cause reproduction problems.
- True False** 8. Marijuana use can cause irregular menstrual cycles.
- True False** 9. A marijuana user always has red eyes.
- True False** 10. Marijuana helps the lungs to get rid of bacteria and other foreign substances.
- True False** 11. Marijuana is safer than alcohol.
- True False** 12. Marijuana has no withdrawal effects.
- True False** 13. Marijuana use relieves stress.
- True False** 14. Marijuana use does not lead to use of other drugs.
- True False** 15. Marijuana use expands the mind.

How Much Do You Know About Marijuana?

Key

Directions: Read the following statements about marijuana and decide whether they are *True* or *False*. Circle the word *True* or *False* on the line preceding each statement.

True **(False)** 1. Marijuana smoke is safer than tobacco smoke.

Marijuana smoke has more cancer-causing chemicals than tobacco smoke. Smoking three to five marijuana joints a week is equivalent to smoking sixteen to eighteen cigarettes a day, seven days a week. Smoking marijuana is a factor in lung cancer, due to the depth of inhalation, the heat of the smoke and length of time the smoke is held in the lungs.

True **(False)** 2. The chemicals in marijuana stay in the body for only a short time after smoking a joint.

The chemicals in marijuana can stay in the body for 30 to 45 days following the smoking of a single joint because of the fat solubility of THC, the active ingredient in marijuana.

(True) **False** 3. Today's marijuana is stronger than varieties grown in the 1960s.

Today's marijuana is about 20 times stronger than marijuana used in the 1960s. Special growing techniques have increased the potency of marijuana, and some growers have added many dangerous herbicides.

True **(False)** 4. Marijuana use decreases the heart rate.

Marijuana use increases the heart rate and raises the blood pressure as much as 50 percent. This increase reaches a maximum point about 30 minutes after smoking the joint and lasts about one hour.

(True) **False** 5. Marijuana use interferes with the user's ability to concentrate.

Marijuana use interferes with the ability to concentrate, which is necessary for basic academic skills such as reading comprehension, verbal and numerical problem solving and overall thinking ability.

True **(False)** 6. Marijuana use improves driving ability.

Marijuana use impairs driving ability, even after ordinary social use. THC interferes with the coordination of body movements and psychomotor performance. It interferes with motor skills by slowing down reaction time, distorting visual perception and minimizing coordination.

True **False** 7. Marijuana use can reduce sperm count and cause reproduction problems.

The reproductive system cells are high in fat and therefore absorb THC. Regular marijuana use causes lowered levels of the male hormone testosterone, necessary for the development and maintenance of male secondary sexual characteristics; low to no production of sperm; and, in abusers, an inability to function sexually.

True **False** 8. Marijuana use can cause irregular menstrual cycles.

The level of the male hormone testosterone increases in females who use marijuana regularly, and acne and male sexual characteristics may increase (hair on chest, face and arms; flattening of the buttocks and chest). Marijuana use can interrupt the normal menstrual cycle and affect reproductive health.

True **False** 9. A marijuana user always has red eyes.

Redness of the eyes is seen in some smokers but not all. It is caused by congestion of the conjunctiva (whites) of the eyes, indicated by a change in blood pressure and dilation of the blood vessels in the eyes.

True **False** 10. Marijuana helps the lungs to get rid of bacteria and other foreign substances.

It irritates the lungs and impairs their ability to expel bacteria and other foreign substances. In moderate doses, THC causes bronchodilation (dilation of the lungs' airways), but heavy use has the opposite effect, causing slight obstruction of the air passages. Daily smoking of one joint reduces the lungs' capacity (volume of air the lungs can expel after one breath) as much as smoking sixteen tobacco cigarettes. Hot marijuana smoke is more detrimental to the lungs than hot tobacco smoke.

True **False** 11. Marijuana is safer than alcohol.

Young people who smoke marijuana heavily over long periods of time can become dull, slow-moving and inattentive, unaware of their surroundings and unresponsive. Be-

cause THC is fat soluble and its breakdown products are stored in the brain, lungs, testes, ovaries and body fat, slow release of these products from the tissues permits their detection in the body or urine ten days to weeks after a single use. In contrast, one-half ounce of alcohol can be oxidized, on the average, in one hour.

True **False** 12. Marijuana has no withdrawal effects.

Users can experience mild physical and psychological dependence on the drug and can develop a tolerance to the drug, requiring them to use more or stronger forms of marijuana to achieve the same level of drug high. When marijuana users become dependent, they can suffer from nausea, diarrhea, insomnia, irritability, weight loss, loss of appetite and sweating when denied access to the drug.

True **False** 13. Marijuana use relieves stress.

Marijuana, like other drugs, deters the user from dealing with stressful situations. Use of marijuana can lead to depression. Marijuana intoxication induces a state of lethargy and may release inhibitions.

True **False** 14. Marijuana use does not lead to use of other drugs.

Studies indicate that marijuana use increases the predisposition to use other drugs by about 60 percent. According to the National Adolescent Student Health Survey in 1988, one-third of all tenth-grade students have tried marijuana, and about 15 percent had used it during the past month. But use among high school students seems to have dropped between 1978 and 1982. Almost 60 percent of high school seniors said there was a great risk in regular marijuana use. This does not mean that marijuana use will lead to heroin use, but users may be more likely than nonusers to experiment with other drugs.

True **False** 15. Marijuana use expands the mind.

Marijuana interferes with memory and the decision-making processes and can cause mood changes.

Fact Sheet—Marijuana

◆ **Identification**

Marijuana is America's most widely used illegal drug. Even after much study, it is not completely understood.

Marijuana and hashish are made from the plant *Cannabis sativa*. The principal mind-altering ingredient in marijuana and hashish is a chemical compound called THC (tetrahydrocannabinol).

◆ **Forms**

Cannabis appears in different forms. Marijuana is olive green in color and looks like oregano leaves. Other types from countries other than the United States can be different colors (red, dark brown or yellow) and are stronger. The most powerful source of THC is the resin of the hemp plant, which may be mixed with leaves, stems and seeds. Sinsemilla is a type of marijuana grown without seeds from mature female plants. It is usually about ten times stronger than marijuana mixtures containing leaves and seeds.

◆ **Methods of Use**

Marijuana is usually smoked in a cigarette (joint) or pipe, and THC is inhaled in the smoke. Marijuana can also be eaten (in certain forms) or taken as a pill.

◆ **Names**

Grass, weed, MJ, Acapulco Gold, Panama Red, THC, hashish, hash oil, etc.

◆ **Physical Effects**

When marijuana is smoked, it travels down the windpipe (trachea) to the lungs. From the lungs, the THC passes into the bloodstream and to every cell in the body.

THC dilates the bronchial tubes, but frequent marijuana smokers may suffer from chronic cough ("joint cough"), bronchitis and obstruction of the blood supply from the heart to the lungs. Marijuana speeds up the heart rate and can temporarily weaken the heart. This means marijuana smoking can be dangerous for people with heart problems. Marijuana also can cause reddening of the eyes. THC is fat-soluble, and its breakdown products are stored in the brain, lungs, testes, ovaries and body fat. Therefore, these tissues may be more likely to be harmed.

When marijuana is eaten, it enters the stomach and is broken down for digestion. THC passes into the small intestine and then is absorbed into the bloodstream. This takes longer than smoking marijuana, and less THC goes into the bloodstream. Five to ten times more THC enters the bloodstream from smoking marijuana than from eating it.

THC in its active form may be retained in the body for as long as ten to 45 days after smoking.

Marijuana may reduce the body's natural immunity and harm the lungs and heart. It may also decrease fertility.

The following are some of the health dangers of continuing, long-term marijuana use:

- bronchitis caused by marijuana smoke
- increased heart rate and blood pressure
- slight decrease in immune system functions

Marijuana does have some medical uses. It can reduce the stomach upset and depression caused by chemotherapy (treatment for cancer). It can also reduce inner eye pressure, which lessens the pain caused by glaucoma.

◆ *Mental-Emotional Effects*

In most people, low doses of THC produce a high with feelings of euphoria and relaxation. Occasionally, people experience an altered sense of space and time. Reactions may be slower, and short-term memory is affected. Driving a car or operating other machines while under the influence of THC is considered unsafe.

Sometimes marijuana use, especially among first-time or naive drug users, causes psychological reactions such as confusion, anxiety, panic, hallucinations and paranoia. Marijuana use may also worsen a prior mental health problem or negative mood. Long-term use is not known to cause permanent changes in brain function or reduce learning abilities.

◆ *Social Effects*

The regular use of marijuana may cause "amotivational syndrome"—a loss of interest in long-term goals and activities. The user becomes easily tired, depressed and moody. He or she finds it difficult to cope with complex situations. As the marijuana user repeatedly smokes to block out pain, boredom and frustration, he or she is less successful at meeting daily challenges. The continued use of marijuana dulls the mind, affects enthusiasm and decreases drive. It harms work and school achievement. A regular user may also feel irritable and have trouble getting along with friends and family.

◆ *Dependence Potential*

Users can experience mild physical and psychological dependence on the drug and can develop a tolerance to the drug. When tolerance develops, the user needs more or stronger forms of marijuana to achieve the same level of drug high. When users become dependent, they can suffer from nausea, diarrhea, sleep disturbances, irritability, weight loss, anorexia and sweating if they don't have the drug.

Marijuana Controversy

Directions: Write a response to each of the following statements in the space provided, using information from **Fact Sheet—Marijuana** and from previous lessons.

1. Marijuana is the most dangerous drug.

2. Marijuana involves only a minimal risk to the user.

3. Some people have smoked marijuana and hash for a long time, and feel fine.

4. If millions of people have smoked marijuana for years, how can it not be safe?

**LESSON
7**

COCAINE: CRACK AND DEATH

Objectives

Students will be able to describe the physical, social and mental-emotional effects of cocaine.

Students will be able to identify types of cocaine most commonly used (including crack and freebase).

Students will be able to explain why cocaine use has become prevalent in today's society.

Overview

It is important that students understand the physical, social and mental-emotional effects of cocaine. This lesson provides information about the types of cocaine most commonly used today and why cocaine use has become prevalent in our society. Students begin the lesson by working in groups to discuss the possible consequences of discovery of possession of cocaine. Students' responses are reviewed in a class discussion, and a mini-lecture offers more information on cocaine. Students then complete a worksheet that reviews this information.

Time

One 50-minute class period.

Teacher Materials and Preparation

HAVE:

- ✓ Pen for marking on transparency.

MAKE:

- ✓ Transparency of **What's the Best/Worst that Can Happen?**
- ✓ Transparency of **Cocaine**.

COPY:

- ✓ **What's the Best/Worst that Can Happen?** worksheet, one for each group of five or six students.
- ✓ **Matching Terms About Cocaine** worksheet, one for each student.

REVIEW:

- ✓ **Teacher Background Information**.
- ✓ **What's the Best/Worst that Can Happen? Sample Responses**.
- ✓ **Matching Terms About Cocaine Key**.

Key Points

- Cocaine is a powerful stimulant that can cause physical and psychological dependence.
- Cocaine is an illicit drug that has become a social drug.
- Cocaine has legitimate medical uses.

Procedure

■ Divide students into groups of five or six. Give each group a copy of the **What's the Best/Worst that Can Happen?** worksheet. One student in each group should read aloud the situation described on the worksheet. Groups should then brainstorm at least three responses to the following questions:

- What is the best that can happen?
- What is the worst that can happen?
- What is most likely to happen?

Allow groups about ten to twelve minutes to brainstorm their responses. Using the **What's the Best/Worst that Can Happen?** transparency, read the situation, ask groups for their responses and write the responses on the transparency. Review student responses to each of the questions, and discuss their practicality. Consider legal, health, social and vocational concerns that relate to this situation.

■ Ask students why cocaine has become such a popular drug today. The following are some possible responses:

- Cocaine is easily obtainable, and some forms of it are affordable.
- Although cocaine use is illegal, it has become socially acceptable in some circles.
- It is a recreational drug.
- The high from cocaine is more intense than that from amphetamines or some other drugs.
- When using, users report they feel playful, joyous, insightful, witty, extra attractive to everyone around, "in tune" with people's moods and have feelings of extreme self-confidence and superiority.
- Cocaine is a quick-acting drug with pleasurable effects.

Ask students what other experiences in life increase arousal of the brain, which seems to permit the individual to think about and emotionally respond to more things.

Discuss whether it is possible to have this kind of experience without drugs. Perhaps riding on a roller coaster, playing baseball, reading, parachuting, riding a motorcycle or other activities are equally arousing for some people.

Ask students what activities they find exciting or what might give them the feelings people report they get from cocaine. Ask students if they have ever experienced a nondrug high similar to that reported for cocaine. What caused this feeling?

■ Present a mini-lecture on cocaine, using **Teacher Background Information** and the **Cocaine** transparency.

Evaluation

Have students complete the **Matching Terms About Cocaine** worksheet. Have students write a paragraph on the back of the worksheet explaining the reasons cocaine use has become so prevalent. Use these activities to assess students' ability to identify types of cocaine, describe cocaine's effects and explain why cocaine use has become so prevalent.

Teacher Background Information

Cocaine

IDENTIFICATION

Cocaine is a powerful central nervous system stimulant made from the leaves of a shrub native to South America. It is used medically as a local anesthetic with a vasoconstricting action (constricts the blood vessels).

HISTORY

Cocaine was used for thousands of years by South American Indians, who chewed coca leaves to obtain the stimulating, appetite-suppressing, mountain sickness-reducing effects. Later, in the United States, a pharmacist mixed extracts of coca leaves and kola nuts to produce Coca-Cola, claimed to be refreshing, exhilarating, invigorating and a cure for all nervous afflictions. Today, Coca-Cola no longer contains cocaine. Sigmund Freud cited the use of cocaine as a mood elevator and a possible antidote to depression and a treatment for morphine addiction. However, after he witnessed a friend's severe psychotic reaction to cocaine, he became disillusioned with the drug's virtues.

FORMS

- In its pure form, cocaine is a white crystalline powder that looks like sugar.
- Rock is a semi-solid product that must be crushed or diluted, sometimes with kerosene or gasoline or ether, to be smoked.
- "Street coke" or powder includes about 60 percent active ingredient, which is usually diluted with procaine, benzocaine and speed.
- Crack or freebase is created when cocaine hydrochloride, a salt, is neutralized with a high-yielding solvent such as ether to extract the freebase. The freebase is skimmed or filtered off, dried and smoked. Crack is sold in small quantities, and the cost varies. The crack form makes cocaine available to

people who previously could not afford to buy it.

METHODS OF USE

Sniffed (snorted) in powder form, liquefied and injected, smoked or added to tobacco and inhaled with the smoke.

NAMES

Coke, crack, rock, snow, powder.

PHYSICAL EFFECTS

Cocaine is rapidly metabolized in the body, and its effects wear off in 30 to 60 minutes. It increases the heart rate, blood pressure and body temperature (hyperthermia) and dilates the pupil of the eye. Applied to the skin or injected close to a nerve, cocaine blocks the sensory impulses, an asset for surgery. Cocaine also prolongs anesthetic action during surgery. Overdose can induce seizures, heart stoppage and cessation of breathing. Continued use of the drug can cause loss of appetite, weight loss, malnutrition, sleep disturbance, altered thought and mood patterns. Frequent cocaine sniffing can inflame the nasal passages and possibly cause permanent damage to the nasal septum (ulcers on the nose and eroded sinus cavities, producing a lifelong headache). A lethal dose is approximately 1.2 grams (depending on strength and type of cocaine), and death is usually due to respiratory failure or a "coke heart attack."

MENTAL-EMOTIONAL EFFECTS

In doses of 25-100 mg. (of pure cocaine) taken through the nose (intranasally), cocaine produces its maximum effect in 15 to 30 minutes. These effects include feelings of exhilaration and lasting euphoria, an increase of self-control, a greater capability for work, long-lasting

mental or physical work performed without fatigue, complete elimination of the need for food and sleep. Some users think it is the "perfect drug." They think they are smarter, sexier and more competent, vigilant, masterful, confident, productive and full of energy. Large doses or chronic use may lead to anxiety, hallucinations, impotence, paranoia and insomnia.

SOCIAL EFFECTS

The user feels strong and cheerful, capable of undertaking anything, like the life of the party. Fatigue is reduced, and often pleasant feelings of power are experienced. But the sense of exhilaration wears off, and as the effects wear off, feelings of depression and fatigue often set in, accompanied by headache, discomfort and a strong desire to get high again.

DEPENDENCE POTENTIAL

Psychological and physical dependence do occur. In the past, because smaller doses were usually delivered through membranes in the nose, it was thought that only psychological dependence occurred. But very high blood levels are achieved by using cocaine intravenously and by snorting it, which leads to the development of tolerance and physical dependence (addiction). Heavy cocaine users report getting physically sick (experiencing withdrawal) upon abrupt termination of cocaine. Post-use depression and paranoia are probably the worst effect. The cocaine high is so euphoric and the mental depression that follows withdrawal is so intolerable that the user feels compelled to return to the drug.

What's the Best/Worst that Can Happen?

Sample Responses

Directions: Read the situation and answer the questions.

Situation: A 16-year-old student was discovered to be in possession and under the influence of cocaine during school hours.

1. What's the best that can happen?

- ◆ *Student caught and parents informed (may also appear in "worst" category).*
- ◆ *Student referred to treatment.*
- ◆ *Student treated and has drug problem under control.*

2. What's the worst that can happen?

- ◆ *Police called and student arrested.*
- ◆ *Student's parents informed (may also appear in "best" category).*
- ◆ *Student overdoses and sent to hospital.*
- ◆ *Student dies from overdose.*
- ◆ *Student goes to juvenile hall, does time and continues to use drugs.*
- ◆ *Student returns to environment where drug use originated.*

3. What is most likely to happen?

- ◆ *Police and parents called and student arrested.*
- ◆ *Student jailed and sent for rehabilitation.*
- ◆ *Student returns to environment where drug use originated.*

Cocaine

Identification

- Central nervous system stimulant
- Medically, a local anesthetic

History

- Used by South American Indians
- Pharmacist mixed coca leaves and kola nuts, producing Coca-Cola
- Sigmund Freud cited its virtues, but became disillusioned

Forms

- Powder
- Rock
- Crack or freebase

Methods of Use

- Sniffed (snorted)
- Injected
- Smoked (or added to tobacco)

Names

- Coke
- Crack
- Rock
- Snow
- Powder

Physical Effects

- Rapidly metabolized, effects wear off in 30 to 60 minutes
- Increases heart rate
- Increases blood pressure
- Causes hyperthermia (increased body temperature)
- Dilates pupils
- Prolongs anesthetic action during surgery
- Overdose can induce
 - seizures
 - heart stoppage
 - cessation of breathing

- Continued use leads to
 - loss of appetite
 - weight loss
 - malnutrition
 - sleep disturbance
 - altered thought and mood patterns

- Frequent cocaine sniffing can
 - inflame the nasal passages
 - damage the nasal septum

Mental-Emotional Effects

- Feelings of
 - exhilaration
 - lasting euphoria
 - increase of self-control
 - greater capability for work
 - long-lasting mental or physical work without fatigue
 - elimination of the need for food and sleep

Social Effects

- User feels
 - strong
 - cheerful
 - capable of undertaking anything
 - like the life of the party
 - reduced fatigue
 - powerful

- As effects wear off, user feels
 - depression
 - fatigue
 - headache
 - discomfort
 - strong desire to get high again

Dependence Potential

- Psychological dependence
- Physical dependence
- Tolerance

Matching Terms About Cocaine

Directions: Write the number of the word in the first column next to the correct explanation.

- | | | |
|-------------------------------|-------|--|
| 1. Stimulant | _____ | Once a mixture of coca leaves and kola nuts |
| 2. Crack | _____ | Physical sickness when cocaine use stops |
| 3. Exhilaration | _____ | Classification and main action of this drug |
| 4. Snorting | _____ | Higher body temperature caused by body's processing of cocaine |
| 5. Anesthetic | _____ | Emotion that follows when a user suddenly stops the use of cocaine |
| 6. Overdose | _____ | Can cause seizures or breathing and heart to stop |
| 7. Coca-Cola | _____ | Using through the nose |
| 8. Physical Dependence | _____ | Effect or feeling produced by use of cocaine |
| 9. Hyperthermia | _____ | Medical use during surgery |
| 10. Withdrawal | _____ | Frequent use causes tolerance and this |
| 11. Depression | _____ | A salt, usually mixed with ether, also known as freebase |

Matching Terms About Cocaine Key

Directions: Write the number of the word in the first column next to the correct explanation.

- | | |
|-------------------------------|--|
| 1. Stimulant | <u>7</u> Once a mixture of coca leaves and kola nuts |
| 2. Crack | <u>10</u> Physical sickness when cocaine use stops |
| 3. Exhilaration | <u>1</u> Classification and main action of this drug |
| 4. Snorting | <u>9</u> Higher body temperature caused by body's processing of cocaine |
| 5. Anesthetic | <u>11</u> Emotion that follows when a user suddenly stops the use of cocaine |
| 6. Overdose | <u>6</u> Can cause seizures or breathing and heart to stop |
| 7. Coca-Cola | <u>4</u> Using through the nose |
| 8. Physical Dependence | <u>3</u> Effect or feeling produced by use of cocaine |
| 9. Hyperthermia | <u>5</u> Medical use during surgery |
| 10. Withdrawal | <u>8</u> Frequent use causes tolerance and this |
| 11. Depression | <u>2</u> A salt, usually mixed with ether, also known as freebase |

**LESSON
8**

EMERGING DRUG PROBLEMS

Objectives

Students will be able to analyze emerging drug problems.

Students will be able to formulate strategies for solving drug problems in the school, in the community and in our society.

Overview

Note: Although we (the authors) clearly recognize that there are many prescription and nonprescription drugs that are emerging as problems for both youth and society in general, we are unable, in the space provided, to do justice to all of these drugs. We have chosen to identify and describe a few of these potential and recognized problem substances and to provide suggestions for further reporting by students to give a better scope and depth to identifying the drug problems of today and tomorrow.

Students need to understand the crisis and problems revolving around prescription and nonprescription drugs of today. This lesson provides background information about emerging drug problems and an opportunity for students to discuss issues related to the problems. In this lesson, students explore drug problems and solutions on a worksheet and in small group and full class discussions. An optional pamphlet writing assignment contributes to

student awareness and comprehension of the problem and the resources available to address the problem.

Time

One 50-minute class period.

Teacher Materials and Preparation

HAVE:

- ✓ Pen for marking on transparency.

MAKE:

- ✓ Transparency of **Emerging Drug Problems—Truth and Consequences** worksheet.
- ✓ Transparency of **Levels of Prevention of Drug Abuse—The Public Health Model** worksheet.

COPY:

- ✓ **Emerging Drug Problems—Truth and Consequences** worksheet, one for each student and one extra copy for each group of students.
- ✓ **Levels of Prevention of Drug Abuse—The Public Health Model** worksheet, one for each student.
- ✓ **List of Drugs Sign-up Sheet** (optional), one for each class.
- ✓ **Directions for Writing Drug Problems Pamphlet** (optional), one for each student.

REVIEW:

- ✓ **Emerging Drug Problems—Truth and Consequences Key.**

Procedure

- Ask students what they think are the emerging drug problems. Possible answers might be over-the-counter drugs such as aspirin, inhalants, PCP and LSD, cocaine.

Ask students to complete individually the **Emerging Drug Problems—Truth and Consequences** worksheet. Review the directions to assign a “truth” number from 1 to 10 to each of the statements.

After students have given a truth value to each statement, divide them into groups of five or six. Have them repeat the process as a group, using their individual worksheets as a reference. One student, acting as recorder, should note the group's consensus for each problem statement and then write a group answer to the fill-in questions.

After groups have finished, use the transparency of the **Emerging Drug Problems—Truth and Consequences** worksheet to record each of the groups' truth numbers for each statement. Ask a student to calculate the mean or average number for each problem. Review the answers with students using the **Emerging Drug Problems—Truth and Consequences Key** and discuss the potential health problems of the drugs.

■ Ask students to brainstorm strategies that could be used to solve emerging drug problems.

The following are some possible strategies:

- education for both students and parents
- stronger laws
- drug testing
- crisis intervention
- treatment programs
- resource centers (for information about drugs)
- reduction of supply (lowering or restricting the availability of a drug or eliminating it)
- reduction of demand (lessening the need for individuals to use drugs that are not medically prescribed or that disrupt human development and functioning)
- legalization of drugs (students will invariably recommend this as a strategy)

Use the transparency of the **Levels of Prevention—The Public Health Model** worksheet to discuss levels of prevention. Ask students to which level of prevention their suggested strategies would apply.

Evaluation

Have students take home the **Levels of Prevention—The Public Health Model** worksheet and brainstorm with parents or other adults strategies for preventing drug-related problems in our soci-

ety and in the community. When the worksheets are completed and returned to class, explore and assess the responses.

Follow-up/ Extension

As an optional assignment for more advanced students, use **List of Drugs Sign-up Sheet** to have students select one drug to write a pamphlet about. Tell students that this will be done in groups and only three students may sign up per drug. Coordinate the groups, and distribute and review **Directions for Writing Drug Problems Pamphlet**. Give groups one to two weeks to complete the pamphlet-writing assignment. Have groups make one copy for each student in the class and one copy for the teacher. (If duplicating costs are prohibitive, have students make copies for each member of the group and a copy for the teacher.)

Note: This assignment will (1) familiarize students with drug problems and concerns common among their peers, (2) assist students to identify signs and symptoms associated with drug use that their peers might display, (3) assist students to identify interventions they could use to deal with or solve the drug problem, (4) apprise students of community resources available to help deal with the drug problem, and (5) encourage students to use a variety of resources to research the drug problem.

Emerging Drug Problems—Truth and Consequences

Directions: Circle the number that best represents your decision about the truth of each of the following statements; then answer the question following each statement.

The numbers mean:

10 = Absolutely True

•

•

•

5 = Unsure/Don't Know

•

•

•

1 = Absolutely False

| Emerging Drug Problem | AMOUNT OF TRUTH Absolutely False Absolutely True |
|---|--|
| 1. There is a drug to cure male baldness. <i>What are other consequences of using this drug?</i> | 1 2 3 4 5 6 7 8 9 10 |
| 2. Pregnant women who are addicted to heroin may give birth to addicted babies. <i>What are other consequences of using this drug?</i> | 1 2 3 4 5 6 7 8 9 10 |
| 3. Antibiotics may be losing their effectiveness in treating some human infections. <i>What are other consequences of using this drug?</i> | 1 2 3 4 5 6 7 8 9 10 |

| Emerging Drug Problem | AMOUNT OF TRUTH | | | | | | | | | |
|---|-------------------------|---|---|---|---|------------------------|---|---|---|----|
| | Absolutely False | | | | | Absolutely True | | | | |
| 4. Antacids may cause hardening of the arteries. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 5. Drinking alcohol during pregnancy can cause birth defects. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 6. Steroids have health risks but are also used medically to treat growth problems. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 7. Aspirin use can cause dizziness, tone deafness, coma and birth defects. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 8. Lookalike drugs look identical to the prescription drug but contain OTC drugs. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 9. The acne drug Retin-A may cause burning of the skin upon sun exposure. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 10. The "peashooter" Co-caine contains no cocaine. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Emerging Drug Problems—Truth and Consequences Key

Directions: Circle the number that best represents your decision about the truth of each of the following statements; then answer the question following each statement.

The numbers mean:

10 = Absolutely True

•

•

•

5 = Unsure/Don't Know

•

•

•

1 = Absolutely False

| Emerging Drug Problem | AMOUNT OF TRUTH | | | | | | | | | |
|---|-------------------------|---|---|---|---|------------------------|---|---|---|----|
| | Absolutely False | | | | | Absolutely True | | | | |
| 1. There is a drug to cure male baldness. | ① | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| <i>What are other consequences of using this drug?</i> | | | | | | | | | | |
| <i>Minoxidil (trade name: Rogaine) is a drug used to treat high blood pressure that may also cause hair to grow in some men. It is not a cure for baldness but a treatment. It increases the risk of rapid heart rate, rapid weight gain, difficulty breathing and heart failure for people with cardiovascular disorders.</i> | | | | | | | | | | |
| 2. Pregnant women who are addicted to heroin may give birth to addicted babies. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | ⑩ |
| <i>What are other consequences of using this drug?</i> | | | | | | | | | | |
| <i>What the mother consumes the unborn baby consumes. Once the baby is delivered, the baby can go through withdrawal, including convulsions, coma and death. If the drugs or the needles used to inject them were contaminated, the baby could be born infected with HIV, the AIDS virus, or with other health problems.</i> | | | | | | | | | | |
| 3. Antibiotics may be losing their effectiveness in treating some human infections. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | ⑩ |
| <i>What are other consequences of using this drug?</i> | | | | | | | | | | |
| <i>Indiscriminate and overuse of antibiotics may lead to the development of organisms resistant to the effects of antibiotics. This has happened with gonorrhea. Allergic</i> | | | | | | | | | | |

reactions to antibiotics such as penicillin can occur. Antibiotics can upset the normal balance of microorganisms in the human body and can cause yeast infections in the vagina. They can also cause skin rashes, upset stomach, irritation of the mouth or diarrhea.

| | |
|--|------------------------|
| 4. Antacids may cause hardening of the arteries. | 1 2 3 4 (5) 6 7 8 9 10 |
|--|------------------------|

What are other consequences of using this drug?

Too much of anything can be harmful. Antacids, which contain calcium carbonate, are being advertised as diet supplements. Some people may be taking more than needed, and if such people have atherosclerosis (hardening of the arteries), the antacids may exacerbate the condition. Antacids can also cause constipation, diarrhea and acid rebound (a reaction by which the stomach produces more acid in response to the antacid).

| | |
|---|------------------------|
| 5. Drinking alcohol during pregnancy can cause birth defects. | 1 2 3 4 5 6 7 8 9 (10) |
|---|------------------------|

What are other consequences of using this drug?

Mothers who drink alcohol heavily during pregnancy may have babies with abnormalities known as fetal alcohol syndrome (FAS), including reduced weight and size before and after birth, mental retardation, learning disabilities and abnormal facial development. When children have one or two of the symptoms, but not FAS, they have fetal alcohol effects (FAE).

| | |
|---|------------------------|
| 6. Steroids have health risks but are also used medically to treat growth problems. | 1 2 3 4 5 6 7 8 9 (10) |
|---|------------------------|

What are other consequences of using this drug?

True, these drugs have medical uses, but used illegally for body building and strength enhancement, they can cause liver tumors, birth defects, psychotic episodes, atherosclerosis and acne. They can also increase breast development in men, decrease male hormone levels and sperm production and cause prostate enlargement and impotence. For women, steroids can cause hair growth or baldness, deepening of the voice, stop menstruation and shrink the breasts and uterus.

| | |
|---|------------------------|
| 7. Aspirin use can cause dizziness, tone deafness, coma and birth defects | 1 2 3 4 5 6 7 8 9 (10) |
|---|------------------------|

What are other consequences of using this drug?

Used as directed, aspirin may be safe, but overdoses can cause these effects. Aspirin may be beneficial in preventing strokes and heart attacks, but it may irritate the stomach lining and cause bleeding and gastritis, contributing to anemia (in the regular user). It should not be given to youth ages 1-18 years of age who have flu-like symptoms or the chicken pox (it may cause Reye's syndrome and coma and death). Aspirin is known to cause birth defects.

| | |
|---|------------------------|
| 8. Lookalike drugs look identical to the prescription drug but contain OTC drugs. | 1 2 3 4 5 6 7 8 9 (10) |
|---|------------------------|

What are other consequences of using this drug?

Sedative drugs usually contain antihistamine (doxylamine) like that found in Formula 44 and Nyquil. Sometimes they have fatal combinations of substances. Speed lookalikes usually contain caffeine, ephedrine and phenylpropanolamine (PPA). Methaqualone lookalikes are typically acetaminophen and aspirin. These drugs, when combined with other drugs, can cause poisoning or can even be fatal.

| | |
|---|------------------------|
| 9. The acne drug Retin-A may cause burning of the skin upon sun exposure. | 1 2 3 4 5 6 7 8 9 (10) |
|---|------------------------|

What are other consequences of using this drug?

This is a chemical cousin of vitamin A, known as Isotretinoin or Accutane. It makes a person more sensitive to the burning rays of the sun (whether used systemically or topically) and is known to cause miscarriages and severe birth defects. When taken orally, it has been linked to irritable bowel syndrome and a condition mimicking a brain tumor.

| | |
|--|------------------------|
| 10. The "peashooter" Co-caine contains no cocaine. | 1 2 3 4 5 6 7 8 9 (10) |
|--|------------------------|

What are other consequences of using this drug?

This is usually sold as "incense" and contains no cocaine but has large amounts of PPA, caffeine and benzocaine in it. It can stimulate the heart, affect metabolism; cause insomnia, nausea, restlessness and seizures; and raise blood pressure.

Levels of Prevention—The Public Health Model

Directions: Take this worksheet home and discuss with your parents the possible strategies for drug use prevention that correspond to each level of prevention. Write your answers in the space provided.

1. **Primary Prevention:** (activities begun before the drug use occurs)

2. **Secondary Prevention:** (activities applied during the early stages of drug use)

3. **Tertiary Prevention:** (activities begun during the later or advanced stages of drug use, including rehabilitation and treatment of user and family)

List of Drugs Sign-up Sheet

Sign your name under one of the drugs or group of drugs below. No more than three students may sign up per drug.

Anabolic steroids

Tobacco smoking during pregnancy

Alcohol use during pregnancy

Caffeine use during pregnancy

Designer drugs

OTC drugs (select one of the following)

Phenylpropanolamine (for dieting)

Laxatives (Correctol, Metamucil, Ex-Lax, etc.)

Antacids (Rolaids, Maalox, Milk of Magnesia, etc.)



Caffeine-containing products (Vivarin, No-Doz)

Aspirin and aspirin-like products (Anacin, Excedrin, Bayer, Tylenol, Panadol, Datril, Advil, Nuprin, etc.)

Cough and cold remedies

Prescription drugs (select *one* of the following)

Retin-A (Accutane)

Minoxinol

Antibiotics

Ritalin

Oral contraceptives

Directions for Writing *Drug Problems Pamphlet*

General Directions

Your group assignment is to prepare a pamphlet about the selected drug concern or problem. You must conduct library research on the identified problem and use information published within the past four years. You may conduct personal interviews to obtain information about community resources. The development of pamphlets must follow the specified guidelines. They should be typed or neatly printed on 8 1/2" x 11" paper, back-to-back, and folded in thirds. A diagram has been provided as an example. The pamphlets should include specific information on each numbered panel as shown in the sample diagram. Use subheadings on each page except the title page.

Specific Directions

Panel 1: *Title Page.*

The title page identifies the drug problem your group has selected, your group members' names, your teacher's name, class (e.g., "Health"), semester and year, and date.

Panels 2 and 3: *The Drug Problem, Scope and Risk Factors.*

These panels describe the following:

1. The drug problem and how it affects students physically, mentally-emotionally and socially.
2. How the drug problem is likely to affect student behavior inside and outside the classroom.
3. The prevalence of the drug problem within the school population (the numbers of teens and young adults who use the drug or have a problem with the drug.)
4. Possible physical, mental-emotional or social factors that cause students to be at risk for the drug problem.

Panel 4: *Signs and Symptoms.*

This panel describes the signs and symptoms associated with the drug problem (e.g., staggered walk, slow reaction time, poor coordination, hallucinations).

Panel 5: *Community Resources.*

This panel identifies three community resources that can assist with the specified drug problem. Information for each community resource should include the following:

- | | |
|---------------------------|--|
| ↔ agency name | ↔ cost of basic services |
| ↔ agency address | ↔ any restriction of services to school-age children and adolescents |
| ↔ agency telephone number | |
| ↔ services provided | |

**LESSON
9**

LEGAL ISSUES AND DRUG USE

Objectives

Students will be able to explain local, state and federal laws and penalties that pertain to drug use and youth.

Students will be able to explain school and school district policies on substance use and abuse.

Students will be able to describe legal issues related to drug testing (screening).

Overview

Students need to be aware of the legal ramifications of drug use and abuse. This lesson provides an overview of federal laws that affect youth and adults with regard to drug use and abuse. Cartoons related to legal issues are used to promote discussion of laws and rules related to drugs. Students also create a hypothetical legislative amendment. A variety of activity options are suggested to explore policies related to drugs.

Time

One 50-minute class period.

Teacher Materials and Preparation

MAKE:

- ✓ Transparency of **Legal Questions** cartoons.
- ✓ Poster or sign with a list of names and phone numbers of local and state senators and representatives.

COPY:

- ✓ **Drug Legislation—Write an Amendment** worksheet, one for each student.
- ✓ **Illegal Situations** worksheet, one for each student.

REVIEW:

- ✓ **Legal Questions—Example Answers**.
 - ✓ **Drug Legislation—Write an Amendment Key**.
-

Key Points

- Federal, state and local laws relating to drug use and abuse are written to protect the general public.
 - Schools and school districts may have different policies and procedures for handling drug use and abuse on school campuses.
-

Procedure

■ Tell students that they should be aware of the rules and laws related to drug use and abuse that exist to protect them. These laws and decisions by the Supreme Court and lower federal courts affect students in the public school setting and apply to search and seizure, right to privacy, suspension and expulsion, student conduct and disciplinary action.

Use the transparencies of the **Legal Questions** cartoons as a basis for a discussion about legal issues. **Legal Questions—Example Answers** provides teacher background information summarizing legal decisions related to the issues presented in the cartoons. It is important that you read this information before the

lesson and review any related district policies to prepare for the discussion.

■ **Distribute the Drug Legislation—Write an Amendment worksheet to students.** Tell students to read the hypothetical Senate Bill 51562, “Mandatory Drug Testing in School.” Then divide students into groups of five or six to identify a list of pros and cons of the proposed legislation. *Optional:* Ask students to suggest amendments to the proposed legislation. (Explain amendments, if necessary.)

Groups should discuss the reasons for their answers on the worksheet. Then have each group select a representative to report results of the discussion to the class.

■ Depending on the time available and the ability level of students, select one of the following activity options to more fully address policy issues related to drug use.

▲ *Option A:* Have students interview school officials (school administrator or principal) to determine school and district policies regarding the use, sale and possession of drugs. Ask students to identify the disciplinary actions or procedures to be used. *Or* ask a school official to visit the class and explain policies regarding the use, sale and possession of drugs on school grounds.

▲ *Option B:* Have students interview local police or invite law enforcement officials to class to discuss drug use, trafficking and possession, especially laws relating to minors (individuals under the age of 18). Ask police officials about special laws or mandates regarding marijuana, such as decriminalization, that may be in effect. Ask them what happens to first offenders found in possession of or using drugs.

▲ *Option C:* Have students investigate worksites and occupations that require drug testing, e.g., athletic and other organizations. Have students determine who is tested, how frequently, which drugs are being tested for.

▲ *Option D:* Have students determine if the school has a policy regarding smoking on campus for students, faculty and school personnel. If no policy exists, have students develop a policy that “provides employees and students with a safe working and

learning environment." The "Smoke-Free Policy" should consider the following:

- Will all school areas be restricted from cigarette smoking?
- Will there be designated smoking areas for students or school personnel?
- Will public performances (where smoking is a necessary part of the performance) be excluded from the policy?
- Where will smoking be prohibited (laboratories, classrooms, conference rooms, kitchens, auditorium, multipurpose rooms, gymnasium, lobbies, hallways, stairwells, restrooms, libraries, machine shops, elevators, food service areas)?
- Students may want to contact other school districts to identify their policies.

Evaluation

Have students complete the **Illegal Situations** worksheet as homework or as a class assignment at a later date. Assess students' ability to identify laws and policies related to drugs and to suggest what may happen in each situation.

Legal Questions

Cartoon 1

HOW CAN THE PRINCIPAL GET IN MY LOCKER AND MY PURSE AND SEARCH FOR DRUGS WITHOUT A WARRANT? SHE DIDN'T EVEN TELL ME THAT THE LOCKERS WERE GOING TO BE SEARCHED!



Legal Questions

Cartoon 2



Legal Questions

Cartoon 3

CAN THEY USE DOGS TO LOOK FOR DRUGS IN MY DESK OR EVEN TO SNIFF MY POCKETS IF I HAVE A SMOKE IN THE BATHROOM?



Legal Questions

Cartoon 4



Legal Questions

Cartoon 5

NOBODY WILL EVER
FIND OUT IT'S IN MY
SCHOOL RECORDS. IT'S
MY RIGHT TO PRIVACY!



Legal Questions

Example Answers

Note: The following information has been adapted from *What Works: Schools Without Drugs*, published by the U. S. Department of Education (1988). It summarizes the decisions of the Supreme Court and lower federal courts. Your state, local community and school may have different rules related to the drug use problem. Prior to the lesson, review district policy and guideline statements and if possible, discuss these legal questions with your school district's legal consultant and/or your principal.

Cartoon 1:

"How can the principal get in *my* locker and *my* purse and search for drugs without a warrant? She didn't even tell me that the lockers were going to be searched!"

Fact: The Supreme Court has held that school officials may institute a search if there are "reasonable grounds" to believe the search will reveal evidence that the student has violated or is violating either the law or school rules. Reasonable grounds to believe that a particular student locker contains evidence of such a violation will generally justify a search of that locker. Some school policies authorize school officials to inspect student lockers at any time. Administrators can disseminate a written drug search policy to all students and school personnel.

Courts generally require more than general suspicion, curiosity, rumor or a hunch to justify searching a student or his or her possessions. Factors that will help sustain a search include the observations of specific and describable behavior or activities leading one reasonably to believe that a given student is engaging in or has engaged in prohibited conduct. The more specific the evidence in support of searching a particular student, the more likely the search will be upheld. For example, courts have upheld the right of school officials to search the following:

- ◆ a student's purse, after a teacher saw the student smoking in a restroom and the student denied having smoked or being a smoker
- ◆ a student's purse, after several other students said that the student had been distributing firecrackers
- ◆ a student's pockets, based on a phone tip about drugs from an anonymous source believed to have previously provided accurate information

A warrant is not needed if the search is carried out independently of police or other law enforcement officials. More stringent legal standards may apply if law enforcement officials are involved in the search.

Cartoon 2:

"What do you mean I'm suspended for five days? I want a hearing now! I don't have any dope! I'm not using it. I just sold it!"

“We treat every student here the same if they deal dope, especially if they sell to other students.”

Fact: The Supreme Court has held that students facing suspension or expulsion from school are entitled under the U. S. Constitution to the basic due process protections of notice and an opportunity to be heard. The nature and the formality of the hearing depend on the severity of the sanction being imposed. A formal hearing is not required when a school seeks to suspend a student for ten days or less. Due process in that situation requires only that

- ◆ the school inform the student, either orally or in writing, of the charges and of the evidence to support those charges;
- ◆ the school give the student an opportunity to deny the charges and present his or her side of the story.

As a general rule, notice to the student and a rudimentary hearing should precede a suspension unless a student’s presence poses a continuing danger to persons or property or threatens to disrupt the academic process. Then the hearing should follow as soon as possible after the student’s removal. More formal procedures may be required for suspensions longer than ten days and for expulsions. Special rules govern suspension and expulsions of handicapped students. States and school districts may have additional procedures.

Cartoon 3:

“Can they use *dogs* to look for drugs in my desk or even to sniff my pockets if I have a smoke in the bathroom?”

Fact: Searches may include the use of specially trained dogs. Courts have generally held that the use of dogs to detect drugs on or in objects such as lockers, ventilators or desks is legal. According to some courts, dogs cannot be used to search a person, but may be used to inspect student lockers and school property. In some instances, the dogs are led down hallways or classroom aisles. Having the dogs actually touch parts of the students’ bodies is considered intrusive and would require specific justification.

Cartoon 4:

“I don’t have to consent to a search.”

Fact: If a student consents to a search, the search is permissible, whether or not there were reasonable grounds for the search. The student must knowingly and voluntarily give consent. School officials may find it helpful to explain to students that they need not consent to a search. In some cases, standardized consent forms may be useful. If a student refuses to be searched, the refusal does not mean that the search cannot be conducted. In the absence of consent, school officials retain the authority to conduct a search when there are reasonable grounds to justify it.

Cartoon 5:

“Nobody will ever find out it’s in my school records. It’s my *right to privacy!*”

Fact: School officials must comply with federal and state laws and must report drug-related crimes to police and assist local law enforcement authorities in detecting and prosecuting drug offenders. The Family Educational Rights and Privacy Act (FERPA) federal law limits the disclosure of certain information about students that is contained in educational records. Unless the parents or an eligible student (of legal age) provides written consent, the school may not turn over educational records or disclose information from such records to the police. If a court order or subpoena is obtained or if disclosure is warranted by a health or safety emergency, the disclosure is permitted. Reasonable efforts must be made to notify the student's parents before the disclosure is made.

Disclosure of information not found in educational records is not limited under FERPA. Thus, information obtained by personal observation may be provided to police (e.g., a teacher who witnessed a drug transaction may, when the police arrive, report what he or she witnessed).

Drug Testing at School

Student Assistance Programs (SAPs) were developed in response to society's demand that schools identify chemically dependent students as early as possible. SAP officials are faced with a dilemma when attempting to identify students with alcohol and other drug problems. It is often difficult to identify students who are under the influence of alcohol or other drugs in the school setting; identification procedures can be ambiguous, and school officials can be placed in tenuous positions.

A school district in Milton, Wis., has had a drug testing policy since 1984 and has not been challenged. The purpose of this screening program is to identify students who demonstrate intoxicated behavior and to place them in assessment programs where education and treatment can be provided. The policy includes standards for determining "reasonable suspicion": (1) Students in question begin by exhibiting a distinct behavior change and by displaying exaggerated behavior. (2) At this point, the student is generally referred to the administration for further evaluation. (3) School officials then must decide how far out of context the behavior is compared to normal behavior referrals. (4) The student's response when confronted with the evidence is evaluated.

A student under reasonable suspicion is offered several options: (1) If the student admits involvement in drug abuse, the student is required to arrange for an assessment. (2) If the student denies involvement, he or she is asked to submit a urine sample for testing. If the sample tests positive, the student is required to submit to an assessment program; if negative, no further action is taken.

Note: See "A Nation of Suspects: Drug Testing and the Fourth Amendment" in the *American Journal of Public Health* 79, No. 10 (October 1989) for a complete discussion of drug testing.

Drug Legislation—Write an Amendment

Title: *Senate Bill 51562: Mandatory Drug Testing in Schools*

According to Senate Bill 51562, all students graduating from senior high school (twelfth grade) will be required to complete a blood serum test or urinalysis for detection of illegal substances not medically prescribed for personal use by that individual. The substances to be tested for include, but are not limited to, any and all narcotics, cocaine and amphetamines, marijuana (and its related chemicals), tobacco, barbiturates, tranquilizers, sedatives and steroids (intended for human or veterinary use). The test must be conducted within six (6) weeks prior to commencement (graduation).

Pros of Proposed Legislation

Cons of Proposed Legislation

| | |
|---|---|
| <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> | <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
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Amendments

Drug Legislation—Write an Amendment

Key

Title: *Senate Bill 51562: Mandatory Drug Testing in Schools*

According to Senate Bill 51562, all students graduating from senior high school (twelfth grade) will be required to complete a blood serum test or urinalysis for detection of illegal substances not medically prescribed for personal use by that individual. The substances to be tested for include, but are not limited to, any and all narcotics, cocaine and amphetamines, marijuana (and its related chemicals), tobacco, barbiturates, tranquilizers, sedatives and steroids (intended for human or veterinary use). The test must be conducted within six (6) weeks prior to commencement (graduation).

Pros of Proposed Legislation

Cons of Proposed Legislation

May decrease drug use on campus

Who pays for testing?

Less drug trafficking on campus

Are tests available for all drugs?

Fewer sales and transactions on or near campus

May decrease drug use only prior to graduation

May identify users and refer them for treatment, rehabilitation and counseling

Who will conduct test?

Prevent accidents and deaths

May interfere with students' civil rights

Do schools have right to regulate students' behavior outside of school setting?

May contribute to unreasonable search and seizure (and witch hunts)

Amendments

1. Only students who have a known history of drug use, drug trafficking or sale or drug possession to be tested, as specified in SB 51562.

2. Students will be tested for only the drugs of school officials' choice.

Illegal Situations

Directions: Using the legal information about drugs, search and seizure, and suspension and expulsion that you have received in class, explain what is likely to happen when the student in each of the following situations is caught.

Situation #1:

A high school student is distributing drugs on the local elementary school grounds.

Situation #2:

A high school student is selling drugs on the high school grounds.

Situation #3:

A high school student is in possession of, is using or is under the influence of alcohol or other drugs while at a school-related activity.

LESSON
10

RESISTING PRESSURES

Objectives

Students will be able to describe the relative risks for the individual and society of behaviors related to drug use.

Students will be able to describe strategies and decision-making techniques to help resist pressures to use drugs.

Overview

This lesson includes activities that promote critical thinking and decision-making skills related to substance abuse. Students discuss pressures on teens and ways to cope with stress. They discuss the definition of *risk* and complete a worksheet on high-risk behaviors. After a mini-lecture about decision making, groups apply decision-making concepts to hypothetical situations. Finally, students read a story and apply their understanding of these issues to describe what happens to the boy in the story.

Time

Two 50-minute class periods.

Teacher Materials and Preparation

MAKE:

- ✓ **What Would You Do? Situations** by cutting out pages on dotted lines.
- ✓ **Transparency of The Decision-Making Process.**

COPY:

- ✓ **High-Risk Behavior Inventory** worksheet, one for each student.
- ✓ **But You Promised** worksheet, one for each student

REVIEW:

- ✓ **Teacher Background Information.**
- ✓ **"What Would You Do?" Situations.**
- ✓ **But You Promised Key.**

Key Points

- Individuals who use drugs are not only taking personal risks but also placing others at risk.
- Drug use is a risk-taking behavior that is related to other high-risk behaviors, such as drinking and driving.
- Understanding and using the decision-making process is essential to making wise and informed decisions about drug use.

Procedure

- Ask students what kinds of pressures encourage teens to use drugs. Possible responses might be peer pressure, wanting to appear mature, doctors and trainers, advertising, role models, to feel better, etc.

Then ask students how teenagers might resist the pressure to use drugs. The following are some possible responses:

- Be honest and say you don't want to use drugs.
- Make up a response or story.
- Avoid the situation.
- Find new friends.

Ask students how they cope with pressures placed on them. For example, if they don't want to use drugs and honestly let the person offering the drugs know this, how *do* they cope with the stresses in

their lives? Do they take a hike, ride a bike, go for a run, go to a friend's house, listen to music, write, read? (Note: another module in the Contemporary Health Series, *Entering Adulthood: Balancing Stress for Success*, deals in depth with ways to cope with life's stresses in a positive manner.)

■ Ask students to think of a definition of the term *risk* and to share their definitions of the term. Ask students for some examples of high-risk behaviors. (Review **Teacher Background Information** for this discussion.)

Distribute the **High-Risk Behavior Inventory** worksheet to students and ask them to complete it. Discuss the results. Ask students to volunteer the three greatest risks they take. (These do not have to be risks listed on the inventory.) Then ask, "Why are they risks? What are the rewards of these risks?" Be sure to emphasize high-risk behaviors such as drug use drinking and driving, sexual intercourse without contraception or protection.

■ Review the decision-making process in **Teacher Background Information**. Present a mini-lecture on the terms and steps of the decision-making process, using **The Decision-Making Process** transparency. Ask students to give examples of each step. (Another module in the Contemporary Health Series, *Connecting Health, Communication and Self-Esteem*, contains related activities on problem solving and decision making.)

Divide the students into small groups and hand out one **What Would You Do?** situation to each group. Allow groups approximately ten minutes to discuss the situation and come to a group decision. Remind students to use the steps of the decision-making process in dealing with the situation. One member of each group should report the group's decision to the class. You may want to ask groups for more information about their decisions and give groups the opportunity to ask questions of other groups.

Evaluation

When students are back in the full group, distribute the **But You Promised** worksheet. Have students read the story and complete the worksheet. Discuss the answers with the students, using the **But You Promised Key** for reference. Assess student responses based on students' ability to describe strategies and decision-

making techniques useful to understanding how to resist pressures to use drugs.

Homework

Tell students that people have access to a variety of information sources that help them make decisions about products and services they choose to purchase and use. Tell them also that similar sources are available for help in making decisions about drug use.

Have students select a movie, video or television show of at least 30 minutes in length and evaluate how drug use is presented in that medium.

Tell students that outrageous movies such as those with Cheech and Chong, "Animal House" and others that portray unrealistic drug-taking behaviors are unacceptable for this assignment. No X-rated movies or animated cartoons are acceptable.

Tell students to indicate and clarify the extent of the drug use depicted in the movie, video or TV show and what closure was reached regarding the use. (For example: If the drug use is glamorized and begins as social or occasional, does it then progress to regular dependence on the drug?)

A fully developed version of this activity has been prepared by K. J. Redican, R. L. Redican and C. R. Baffi in "Teaching Idea: Drug Use, Misuse and Abuse as Presented in Television and Movies," *Health Education* (December 1988/January 1989): 34-35.

Teacher Background Information

Terminology and the Decision-Making Process*

Coping: dealing with, reducing or stopping stress in one's daily life.

Risk: placing oneself in a situation of possible injury, harm or discomfort for momentary or brief pleasure or comfort. Experimentation with drugs is an example of a high-risk behavior.

Decision-Making Process

The following are the steps in the decision-making process:

- 1. Recognizing the problem:** acknowledging, recognizing or identifying that a problem exists; defining as clearly as possible the issue to be resolved or the goal to be reached.
- 2. Owning the problem:** realizing that the problem is our own and that we have to make our own decisions.
- 3. Breaking the problem down into smaller parts:** providing a more manageable piece of the problem with which to deal.
- 4. Gathering information:** identifying resources (including experts on the subject), reading books or articles about the issue and asking others for their opinion about the problem.
- 5. Trial solutions:** brainstorming the multiple possible solutions, without evaluating them; then evaluating them individually, considering values, realistic potential, consequences.
- 6. Time to act:** implementing the decision selected from the trial solutions. If the first solution does not seem correct, try a second or third. Evaluate the process and the outcome of that solution; seek expert advice if needed.

*Adapted from S. J. Laing and C. E. Bruess, *Entering Adulthood: Connecting Health, Communication and Self-Esteem*. Santa Cruz, CA: Network Publications, 1989, 45-49.

High-Risk Behavior Inventory

Directions: For each risk behavior, circle the number that best applies to your idea of how high a risk it is for the individual and for society. Then write out answers to the questions below.

The numbers mean:

- 5 = Highest risk
- 4 = High risk
- 3 = Moderate risk
- 2 = Low risk
- 1 = Lowest risk

| Type of Risk | Degree of Risk to Individual | | | | | Degree of Risk to Society | | | | |
|------------------------------|-------------------------------------|---|---|---|----------------|----------------------------------|---|---|---|----------------|
| | <i>Lowest</i> | | | | <i>Highest</i> | <i>Lowest</i> | | | | <i>Highest</i> |
| Smoking cigarettes | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Drinking beer | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Drinking alcohol and driving | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using marijuana | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Sexual intercourse | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using aspirin | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Snorting cocaine | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using barbiturates | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using diet pills | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Sniffing glue | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

| | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|
| Drinking coffee colas or tea | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Marriage | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Stealing | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Intravenous drug use | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Sexual inter- course without protection | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Mixing drugs (e.g., alcohol and barbiturates) | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

List the three risks of greatest concern to you. (They do not have to be listed above.)

Why are they risks?

Are there positive benefits to these risks?

Are there negative consequences to these risks?

The Decision-Making Process

The following are the steps in the decision-making process.

- 1. Recognize the problem**
- 2. Own the problem**
- 3. Break the problem down into smaller parts**
- 4. Gather information**
- 5. Try solutions**
- 6. Time to act**

What Would You Do? Situations

Situation 1. A student who is a junior at your high school is rumored to drink alcohol and use illegal drugs at school. You are also a junior and share a gym locker with that person. One day you find drugs in the locker when you pull your gym clothes out.

- ☛ How would you feel about finding the drugs?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 2. A boy at your high school has been arrested for possession of drugs on school grounds. You suspect that he sells drugs, too. You are the principal at the school. Other students' parents are angry and say they will remove their children from the school if this student is allowed to return.

- ☛ How would you feel about this student's arrest?
 - ☛ How would you feel about the parents' concerns?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 3. As the owner of a business, you have to decide what to do about one of your employees who drinks alcohol on the job. You have considered firing her.

- ☛ How would you feel about your employee drinking on the job?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 4. You own an apartment complex. One of the families who rents an apartment may be manufacturing drugs in the apartment. You know other renters in the complex are upset about this situation.

- ☛ How would you feel about confronting the family who might be manufacturing the drugs?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 5. You have made a date with a very good looking and popular student at your school. You heard that this person likes to have a good time and goes to parties where other people drink alcohol and use other drugs. You are worried that you might be asked to use drugs.

- ☛ How would you feel about being asked to use drugs?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

But You Promised*

by Iron Eyes Cody

Many years ago, Indian braves would go away in solitude to prepare for manhood. One young Indian hiked into a beautiful valley, green with trees, bright with flowers. There, as he looked up at the surrounding mountains, he noticed one rugged peak, capped with dazzling snow.

"I will test myself against that mountain," he thought. He put on his buffalo-hide shirt, threw his blanket over his shoulders and set off to climb the pinnacle.

When he reached the top, he stood on the rim of the world. He could see forever, and his heart swelled with pride. Then he heard a rustle at his feet. Looking down, he saw a snake. Before he could move, the snake spoke.

"I am about to die," said the snake. "It is too cold for me. Put me under your shirt and take me down to the valley."

"No," said the youth. "I know your kind. You are a rattlesnake. If I pick you up, you will bite and your bite will kill me."

"Not so," said the snake. "I will treat you differently. If you do this for me, I will not harm you."

The youth resisted awhile, but this was a very persuasive snake. At last, the youth tucked it under his shirt and carried it down to the valley. There he laid it down gently. Suddenly the snake coiled, rattled and leaped, biting him on the leg.

"But you promised..." cried the youth.

"You knew what I was when you picked me up," said the snake as it slithered away.

* Used with permission from *Guideposts* (July 1988), Carmel, NY 10512.

But You Promised **Questions**

1. What promise did the snake make?
2. Why did the boy help the snake?
3. How does this story relate to making decisions (based on information from an unreliable source)?
4. How does this story relate to advertising and the media?
5. How does this story relate to making a decision about trying drugs? Keep in mind the statement, "You knew what I was when you picked me up."
6. How do you think that drug dealers might use similar tactics to sell their products?

But You Promised

Key

1. What promise did the snake make?
The snake promised not to bite the boy, to treat him differently and not to harm him.

2. Why did the boy help the snake?
The boy was trying to show that he was a "man"; he was testing himself. He was empathetic with the snake; he was gullible; and he was convinced that the snake was vulnerable and would not hurt him. He wanted to believe the snake.

3. How does this story relate to making decisions?
First, the individual recognizes or identifies the problem. In this case, it was the snake who told the boy that he was dying from the cold.

Second, the individual should own the problem, realize that the problem is his own.

Third, the individual should break the problem down into smaller parts. The boy broke the problem down into one part—if I pick the snake up.

Fourth, the individual should gather sufficient information about the problem to make a wise decision. In this case, the boy informed the snake that he knew of the risks involved in picking up the snake. The snake assured the boy that there were no risks involved.

Fifth, the individual should identify the trial solutions or the positive and negative consequences involved in the decision. In this case, the snake was so persuasive that the boy neglected to consider the consequences.

Sixth, the individual should make a decision to act on the problem. In this case, the boy decided he was going to pick up the snake. He picked up the snake, and the probable consequence occurred—the boy was bitten by the snake and would probably die.

3. How does this story relate to advertising and the media?
The media can be quite convincing in their efforts to sell products and services we may not be particularly interested in purchasing, using emotional, social and scientific appeals to persuade us. Also, the repetition used in an ad, as well as the repetition of seeing the ad over and over again—on television, in the newspaper, on billboards, in magazines—and repeatedly hearing it on the radio, serves as a persuasive technique to sell all kinds of products and services. Although the snake in the story did not need to be too repetitious, he was sufficiently convincing to persuade the boy to help him.

4. How does this story relate to making a decision about trying drugs? Keep in mind the statement, "You knew what I was when you picked me up."
Even though teens may have heard warnings about the problems associated with drug use, they may still want to try drugs. Some people may experience the social pressure to try drugs and hear the promise that "you won't get hooked," but people do get hooked. For example, about 25 percent of the people who use cocaine, beginning with occasional use, become dependent on the drug (can't live without it).

5. How do you think that drug dealers might use similar tactics to sell their products?
Drug dealers promise that drugs are pure, clean and quality controlled, although if the drugs are illegally manufactured, they may be adulterated. There are no quality assurances with drugs sold on the street.

**LESSON
11**

WHERE TO GET HELP

Objectives

Students will be able to identify community resources that provide counseling, rehabilitation and treatment services related to drug use.

Students will be able to identify school counseling and guidance services related to drug use that are available through the school.

Overview

Students need to know about the variety of school and community resources available to help individuals with problems related to drug use—their own or someone else's. This lesson provides students with the opportunity to investigate sources of information for professional help for themselves, their peers, family members and significant others who may have problems related to drug use. After a mini-lecture, students work in groups using phone books and other materials to identify school and community resources for dealing with drug use problems. Groups present the information on a poster or bumper sticker. Finally, students complete a worksheet about community resources.

Time

One 50-minute class period.

Teacher Materials and Preparation

COPY:

- ✓ **Community Resources** worksheet, one for each student.

HAVE:

- ✓ Phone books.
- ✓ Poster boards for each group of students.
- ✓ Colored paper strips, 5" x 13", or colored contact paper.
- ✓ Colored felt-tip markers.
- ✓ Scissors, glue, tape.
- ✓ Magazines.

REVIEW:

- ✓ **Teacher Background Information.**
 - ✓ **Community Resources Key.**
-

Key Points

- A variety of community resources exist to provide counseling, rehabilitation and treatment services for problems related to drug use.
 - Counseling and guidance services are available through the school for problems related to drug use.
 - Many alternatives to drug use are available to students.
-

Procedure

■ Present a mini-lecture about school and community resources related to dealing with drug problems, using **Teacher Background Information**. An option is to invite a qualified guest speaker to present this information. Any of the following possible local resources may have a speaker's bureau:

- a worksite Employee Assistance Program
 - Alcoholics Anonymous, Al-Anon or Alateen
 - the school guidance counselor, who may be responsible for handling the Student Assistance Program or a group for Children of Alcoholics
-

(Refer to the Introduction of this module for guidelines about using guest speakers.)

■ (Optional) Have groups present findings from the *Drug Problem Pamphlets* they developed in Lesson 8, emphasizing the community resources available to deal with each specific drug problem. Give each group approximately three to five minutes for the presentation.

■ Have groups develop posters that include (1) the name of the drug whose use may have related problems; (2) name, address and phone number(s) of community resources that deal with problems related to this drug. (If students did not do the optional *Drug Problem Pamphlets* activity in Lesson 8, phone books will need to be available for students to research this information.) Hang posters in the classroom, or obtain permission from the school administration to post them around the campus.

As an option to making posters, have groups make bumper stickers, using colored paper cut into 5" x 13" strips or colored contact paper, colored markers and pictures from magazines. Tell students to include community resource phone numbers and messages. The bumper stickers may be posted around the campus (with permission), placed on bumpers of cars or displayed in the classroom for parents to view during various school functions.

■ Hand out the cards with the questions that students wrote in Lesson 1. Tell students to write the correct answer to the question on the card. Collect and shuffle the cards, then distribute to students to read to the class. Correct any misconceptions. (You may wish to prepare responses to the questions in advance.)

Evaluation

Have students complete the **Community Resources** worksheet as homework. When students return worksheets, review answers with students using the **Community Resources Key**. Assess student ability to identify the resources available to them at school and in the community for problems related to drug use.

Review optional student *Drug Problem Pamphlets*, checking the accuracy of drug information and community resources.

Teacher Background Information

School and Community Resources for Help with Drug Problems

A variety of support networks and emergency and long-term treatment programs for drug problems exist to help the individual, family members and others.

EMERGENCY TREATMENT

Drugs can cause life-threatening situations for several reasons, including overdose, a synergistic effect between two or more drugs or using a drug adulterated with a toxic substance. When an individual is in physical distress—with breathing difficulty, convulsions or possible coma—medical treatment needs to be obtained *immediately*. The paramedics or your local hospital or fire department should be contacted to transport the individual to a hospital emergency room to deal with the drug crisis. Any delay can be life threatening. Note that reports of hospital treatment of drug problems cannot be released to the police.

Telephone hotlines offer emergency counseling when individuals are in distress as a result of an adverse effect of a drug. These telephone services offer a calm, nonjudgmental approach to an individual's concerns and to confusion the individual may be experiencing. A poison prevention hotline in your area is also useful, not only for information about a drug (or poison) ingested, but also as an excellent resource for a guest speaker.

LONG-TERM TREATMENT

There are several methods for treating drug dependency. Most experts realize that there are physical and psychological reasons for the problem.

COUNSELING AND MEDICAL TREATMENT SERVICES

Most hospitals, community health clinics, mental health centers and free clinics offer drug counseling and medical treatment services.

Medical treatment may include detoxification (eliminating the drugs from the body); drug therapy (to offset the withdrawal symptoms, especially in the withdrawal from barbiturates and other depressants) and for heroin addicts, methadone maintenance; aversion therapy (the use of drugs or techniques that result in negative reactions when a drug is used), including offensive sensations—electroshock, vomit-inducing drugs—intended to change behavior; and individual and group therapy.

Therapeutic communities are full-time, highly organized, drug-free residential (live-in) programs. Members are given responsibilities during their stay, which can last six weeks to one year. They are required to perform jobs in the facility, attend meetings and obtain counseling, as well as give and receive peer support. The drop-out rate is usually highest within the first two weeks.

Outpatient programs vary in their offerings. Some offer highly structured groups that operate like a day-care therapeutic community. Other programs provide group discussions and recreational activities in a drug-free atmosphere, with counseling. Most members stay in the programs for approximately six months.

Counseling programs are usually conducted on an outpatient basis within a clinic or medical

center and offer psychotherapy and group counseling for individuals with similar problems. In addition, many programs are now being offered for members of the drug user's family.

Other forms of outpatient programs include individual and group therapy. Individuals may seek out individual therapy (one-to-one) with a licensed drug abuse counselor, psychologist, psychiatrist, licensed clinical social worker or a marriage, family and child counselor; or they may choose to be involved in group sessions with other individuals who share a drug problem. Other outpatient programs include methadone maintenance clinics, where patients are tested for narcotics and given their daily dosage of methadone in addition to individual or group therapy.

Alcoholics Anonymous and other anonymous groups (Narcotics Anonymous, Cocaine Anonymous, etc.) are fellowships of recovering individuals who share overpowering feelings to be involved in self-destructive behavior. Alcoholics Anonymous (AA) is considered to be the strongest, most successful force against alcoholism and is used in many hospital and clinic programs. AA is a nonprofit, private group that meets throughout the community at various times during the day and evening. AA members believe that recovering alcoholics can help other alcoholics. Members anonymously share their experiences and help each other to avoid drinking one day at a time. Meetings are led by members rather than drug abuse specialists or experts. AA's philosophy is based on a 12-step approach, which is outlined in the meetings and in printed materials.

Inspired by Alcoholics Anonymous, *Al-Anon* and *Alateen* are programs for the friends and families of alcoholics. These programs use

many of the same group discussion principles as AA and offer help to friends and family members in learning how to deal with an alcoholic without feeling guilty or responsible for the alcoholic's behavior.

Children of Alcoholics (COAs) and Adult Children of Alcoholics (ACAs) are programs that provide emotional support to children and adults who live with a parent who is addicted to alcohol or other substances or who grew up in a home where substances were abused. Frequently, these individuals have been physically, emotionally and sexually abused. These programs exist in the community, and many schools are now providing such programs for students who have been affected by another person's use of alcohol or other drugs.

Employee Assistance Programs (EAPs) are programs found at most large corporations and worksites. They are intended to serve as referral services for employees (and sometimes for their families) who have personal and family problems that interfere with their ability to work. These may include substance abuse problems. Corporations have found that it is more efficient and cost effective and caring to help employees learn to deal with their problems than to hire and train new employees. Most often the cost incurred from the referred treatment program is offset by health insurance or by workers' compensation. Usually a supervisor, foreman or department head identifies a problem and refers the employee to the EAP counselor. At that point, an evaluation is made and a decision for a referral for counseling or treatment is made.

Student Assistance Programs (SAPs) are a systematic and professional response to students' problems in school. They respond to aberrant student behaviors by assessing the nature and extent of the problems and taking

action as defined by the school district policies and procedures. These programs may be operated through the school's guidance department and are characterized by adults working with students.

Peer Assistance Programs (PAPs) are another way schools have attempted to inter-

vene and assist students with problems and potentially high-risk behavior. Individual students are trained by professional counselors to be peer counselors or peer advocates. They use their peer influence and skill to help students with problems by helping students contact community resources.

(This information was compiled from resources listed in the References.)

Community Resources

Directions: Match the number of the program with the correct definition. Write the letter of the definition in the space to the left of the number. Use each letter only once.

Program

- _____ 1. Alcoholics Anonymous
- _____ 2. hotlines
- _____ 3. SAPs
- _____ 4. outpatient programs
- _____ 5. Al-Anon
- _____ 6. COAs
- _____ 7. Peer Assistance Programs
- _____ 8. methadone maintenance
- _____ 9. medical treatment
- _____ 10. emergency treatment

Definition

- A. Includes detoxification, drug therapy, aversion therapy, individual and group therapy.
- B. Treatment of individuals in life-threatening situations.
- C. Offer emergency telephone counseling.
- D. Trained students act as counselors for other students.
- E. Substitute drug therapy for heroin abusers.
- F. Members rely on each other for strength and support to avoid alcohol one day at a time.
- G. Response to students' problems by guidance department at school.
- H. Treat recovering addicts through counseling, group discussions and recreational activities.
- I. Helps relatives and friends of alcoholics by discussing and sharing common problems.
- J. Support groups for children who have a parent who is addicted to alcohol or other drugs.

Community Resources Key

Directions: Match the number of the program with the correct definition. Write the letter of the definition in the space to the left of the number. Use each letter only once.

Program

- F** 1. Alcoholics Anonymous
- C** 2. hotlines
- G** 3. SAPs
- H** 4. outpatient programs
- I** 5. Al-Anon
- J** 6. COAs
- D** 7. Peer Assistance Programs
- E** 8. methadone maintenance
- A** 9. medical treatment
- B** 10. emergency treatment

Definition

- A. Includes detoxification, drug therapy, aversion therapy, individual and group therapy.
- B. Treatment of individuals in life-threatening situations.
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- I. Helps relatives and friends of alcoholics by discussing and sharing common problems.
- J. Support groups for children who have a parent who is addicted to alcohol or other drugs.

GLOSSARY

Absorption—Process by which drugs enter the bloodstream from the intestine and stomach or through the respiratory tract.

Abstinence—Not consuming or using any drug.

Addiction—Physical or psychological condition of dependence on a drug.

Alcoholism—Physical and psychological addiction to or dependence on alcohol; condition that creates social, physical, economic and health problems for the individual and family. A progressive, treatable illness, characterized by uncontrolled drinking.

Analgesics—Pain-relieving drugs.

Antibiotics—Drugs used to prevent, inhibit or destroy disease-producing organisms (primarily bacteria) in the body.

Antihistamine—Drug used to reduce swelling of nasal passages and runny nose.

Aversion therapy—Technique that uses negative associations to change a drug abuser's behavior.

Base, baseball—Freebase cocaine or crack.

Black rock—Crack cocaine.

Blood Alcohol Concentration (BAC)—Also known as Blood Alcohol Level (BAL), the amount or concentration of alcohol in the blood (affected by body weight and size and amount of alcohol consumed).

Carbon monoxide—Colorless, odorless, poisonous gas.

Carcinogen—Cancer-causing substance.

Central nervous system—The part of the nervous system that controls and coordinates the other systems of the body.

Cirrhosis—Scarring of and fatty accumulation in the liver, causing blood flow to decrease and impairing liver function.

Convulsion—Uncontrollable seizure characterized by violent shaking, muscle spasms and possible loss of consciousness.

Cross tolerance—Condition of tolerance developed for one drug that causes development of tolerance for another drug within the same classification (for example, alcohol and barbiturates or tranquilizers).

Delirium tremens (D.T.s, tremors)—Symptoms of withdrawal from alcohol, characterized by sweating, nausea and vomiting, headache, hallucinations.

Dependence—Physical condition arising from repeated administration or consumption of a drug on a periodic or continuous basis, in which the body relies on the effect produced by the drug. Without the drug, the body suffers discomfort or painful withdrawal symptoms. Psychological dependence also occurs, causing users to be convinced that they need the effect(s) of a drug.

Depressants—Drugs that tend to slow down certain body functions (including heart rate, blood pressure and breathing) and reactions; can lead to physical and psychological dependence.

Detoxification—Process of withdrawing from the toxic effects of drugs; withdrawal from drugs.

Diuretics—Drugs that help relieve the body of excess water; sodium, potassium and other electrolytes may also be lost and need to be replaced.

Drug—Substance or medicine that changes or alters the function of the body or mind.

Drug abuse—Taking drugs in ways not medically intended, use of drugs by minors, using illegal substances or using substances not intended to be taken into the body. A level of use that impairs a person's ability to function socially, at school or on the job.

Drug misuse—Using drugs in ways not medically intended, such as taking more frequent or larger doses than prescribed or directed.

Emphysema—Destruction of the tiny air sacs (alveoli) in the lungs, causing little or no air to flow in and out of the sacs; interferes with normal respiration.

Habituation—Mental dependence on a drug; compulsion to continue using a drug; the repeated use of a drug because the use increases pleasurable feelings or reduces anxiety, fear or stress.

Hallucinogen—Drug capable of producing hallucinations, including smell, auditory, visual and tactile sensations that are not real.

Hangover—Unpleasant sensations experienced after excessive drinking of alcohol; symptoms include nausea, headache, thirst, fatigue and vomiting.

Hit—One drag or inhalation of a drug.

Illicit—Improper or unlawful; used synonymously with illegal.

Joint—Rolled marijuana cigarette.

Leukoplakia—Thickened, white leathery-appearing spots on the inside of the mouth; precancerous or potentially cancerous tissue.

Locker room, kick—Butyl nitrite, an inhalant.

Narcotic—Drug that relieves pain and induces sleep. Includes opiates—heroin, morphine, codeine and opium—and synthetic chemicals such as methadone and Darvon.

Nicotine—Dependence-causing drug that functions as a stimulant but can also have depressant qualities.

O.D., overdose—To take an amount of drugs that produces life-threatening effects.

Pop, popping—To inject drugs just under the skin.

Proof—Number on an alcoholic beverage label, equals twice the percentage of the actual alcohol content.

Psychoactive drugs—Substances that affect the nervous system, including stimulants, depressants, narcotics (opiates and synthetic narcotics), hallucinogens and marijuana; mind-altering drugs.

Reverse tolerance—A condition in which the body needs smaller doses of a drug to feel the drug's effects. This condition is known to occur in the late stage of alcoholism and with cocaine dependence.

Rock, Roxanne—Crack, cocaine.

Sherm, supercool—PCP-dipped cigarette.

Shoot—To inject drugs intravenously (“shoot up”).

Shooting gallery—Place where several people may be using drugs intravenously, possibly sharing the same needle.

Spacebasing, ghostbusters—PCP-sprinkled crack.

Stimulants—Drugs that stimulate the central nervous system, affecting heart rate, blood pressure, pulse, body temperature and pupil size; may interfere with muscle control and body movement; may cause loss of appetite; may cause depression when drug is withdrawn.

Synergism—Combining two or more drugs from the same classification (e.g., alcohol and barbiturates) to produce intensified effects. May cause coma and death.

Tolerance—The body's adjustment to the effects of a drug dose, causing one to crave or need more of the drug over time in order to feel the drug's effects.

Trip—To be high on drugs.

Windowpane—LSD sprinkled on squares of paper or wax.

Withdrawal—The discomfort or pain experienced when a drug-dependent individual stops using the drug; pain can be both psychological and physical.

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ABOUT THE BOOK: *Entering Adulthood: Examining Drugs and Risks* presents in-depth coverage of the full range of content related to drugs, including tobacco, alcohol, marijuana, cocaine, narcotics and hallucinogens. In addition to the abundance of subject matter content, this 11-lesson curriculum unit involves high school students in activities that enhance decision-making, problem-solving and coping skills and help them develop effective personal strategies for resisting drug use. The well-developed lessons are designed to give teachers the flexibility to choose, modify and combine the appropriate content for students.

Entering Adulthood: Examining Drugs and Risks

- ◆ fits within a comprehensive health education program
- ◆ provides extensive content on commonly abused drugs
- ◆ explores the legal issues involved in drug use
- ◆ examines the personal and social costs of drug use
- ◆ stimulates critical thinking and motivates high school students toward healthy behavior
- ◆ identifies community and school resources that provide counseling, rehabilitation and treatment services for drug users.

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To the Teacher

Introduction

Health educators know that a well-designed curriculum, tailored to meet students' developmental needs and desires, greatly increases the likelihood of positive classroom experiences. And when these experiences are provided early in life and often, students can begin to build a comfortable sense of self and a sense of personal responsibility for their own health behaviors.

The **Contemporary Health Series** was created to help teachers provide the most sensitive, individually responsive skills and cognitive training possible in a comprehensive health environment. Health topics are addressed in a collection of modules, allowing the teacher to choose one module for in-depth study or mix-and-match according to broader health program needs. Activities challenge students to acquire and use knowledge, encourage the development of personal integrity and build decision-making skills. All lessons are structured to promote teacher-student communication and focus on personal growth as well as academic learning.

Contemporary health teachers need resources that affirm the learning partnership that exists between student and teacher. We believe this series promotes both a partnership and a bridge to encourage healthful decisions by young people.

About the Workbook

This workbook has been designed for students participating in the curriculum *Entering Adulthood: Examining Drugs and Risks*. All student pages and most transparency masters from the curriculum are included. Answer keys have not been provided in the workbook because we feel teachers must control the use of these tools.

Specific pages from *Entering Adulthood: Examining Drugs and Risks* that are not found in this workbook are:

- **Drug Information Card and Drug Information Key Card** in Lesson 1.
- **List of Drugs Sign-up Sheet** in Lesson 3.

Motivations for Drug Use

Peer Pressure

Medical/Health

Spiritual/Religious

Mystical

Recreational

Feel Better or Feel Different

Coping

Enhance Creativity

Escaping

Role Modeling

Media Influence/Advertising

Risk Taking

Athletic Performance

Social Interaction

Parents' Use

Drug Classifications

| Drug Category | Effects |
|--|---------|
| <i>Narcotics (Opiates)</i> | |
| Derived from Opium Poppy | |
| Opium | |
| Morphine | |
| Codeine | |
| Heroin | |
| Synthetic Narcotics (Synthetic Opiates) | |
| Dilaudid | |
| Percodan | |
| Methadone | |
| Demerol | |
| <i>Stimulants</i> | |
| Cocaine | |
| Crack | |
| Rock | |
| Amphetamines | |
| Ice | |
| Benzedrine | |
| Dexedrine | |
| Methedrine | |
| Caffeine | |
| Coffee | |
| Tea | |
| Colas | |
| OTC Stimulants | |
| OTC Analgesics | |
| Nicotine | |
| Ritalin | |
| Meratran | |
| Preludin | |
| <i>Marijuana (THC)</i> | |

Depressants

Barbiturates

Phenobarbital (Nembutal, Reds)

Seconal

Amytal

Alcohol

Tranquilizers

Librium

Valium

Dalmane

Sedatives

Methaqualone

Quaaludes

Sopors

Ludes

Hallucinogens

LSD

PCP

Angel Dust

Hog

Rocket Fuel

Mescaline

STP

Peyote

Inhalants

Gasoline

Aerosol Sprays

Cleaning Fluids

Paint Thinner

Glue

Amyl Nitrite

Poppers

Snappers

Butyl Nitrite

Locker Room

Liquid Incense

Isobutyl Nitrite

Rush

Drug Use—My Opinion

Directions: Read each statement and then rate each situation as one where drug use is *Acceptable* or *Unacceptable*. Circle your answer.

- | | | |
|--|-------------------|---------------------|
| 1. Drinking alcohol (beer, wine, wine cooler, liquor) at a party. | Acceptable | Unacceptable |
| 2. Drinking alcohol after work to relax at home. | Acceptable | Unacceptable |
| 3. Drinking alcohol after school by anyone under 21 years of age. | Acceptable | Unacceptable |
| 4. Drinking alcohol before driving. | Acceptable | Unacceptable |
| 5. Drinking alcohol alone after an argument. | Acceptable | Unacceptable |
| 6. Riding in a car while someone who has been drinking alcohol is driving. | Acceptable | Unacceptable |
| 7. Using a narcotic drug, such as morphine, in a hospital for relief of pain after an operation. | Acceptable | Unacceptable |
| 8. Use of a narcotic drug by the head of a household (parent or guardian). | Acceptable | Unacceptable |
| 9. Use of a narcotic drug by a student in high school. | Acceptable | Unacceptable |
| 10. Use of a narcotic drug by a physician. | Acceptable | Unacceptable |
| 11. Use of a narcotic drug, such as codeine, as a cough suppressant. | Acceptable | Unacceptable |
| 12. Smoking tobacco while riding with other people in a car. | Acceptable | Unacceptable |
| 13. Smoking tobacco at school, in designated smoking areas. | Acceptable | Unacceptable |
| 14. Smoking tobacco in a high school restroom. | Acceptable | Unacceptable |
| 15. Smoking tobacco at a party. | Acceptable | Unacceptable |

| | | |
|---|-------------------|---------------------|
| 16. Using a sedative or tranquilizer, such as Quaaludes (Ludes), to commit suicide. | Acceptable | Unacceptable |
| 17. Using a sedative or tranquilizer to sleep because of a loud roommate or noisy neighbor. | Acceptable | Unacceptable |
| 18. Use of a sedative or tranquilizer prescribed by a physician, followed by heavy drinking of alcoholic beverages. | Acceptable | Unacceptable |
| 19. Using a sedative or tranquilizer or drinking alcohol before making a speech to a large group of students. | Acceptable | Unacceptable |
| 20. Using marijuana at a party. | Acceptable | Unacceptable |
| 21. Using marijuana to relax after work or school. | Acceptable | Unacceptable |
| 22. Refusing a joint handed to you by your best friend. | Acceptable | Unacceptable |
| 23. Using marijuana before a big test. | Acceptable | Unacceptable |
| 24. Using marijuana on a daily basis. | Acceptable | Unacceptable |
| 25. Starting each day with a cup of coffee before doing anything else. | Acceptable | Unacceptable |
| 26. Snorting or doing a few lines of cocaine at a party. | Acceptable | Unacceptable |
| 27. Snorting or doing a few lines of cocaine before making a speech to your class. | Acceptable | Unacceptable |
| 28. Using laxatives or water pills to lose weight. | Acceptable | Unacceptable |
| 29. Taking aspirin every time you feel any pain. | Acceptable | Unacceptable |
| 30. Using steroids (roids) to develop muscles and increase strength. | Acceptable | Unacceptable |

Crossword Puzzle

Directions: Complete the puzzle using the clues below. Each clue refers to one of these terms:

tolerance
synergistic
rock
dependence
inhaled
OTC

abuse
proof
PCP
freebase
alcoholism

use
gateway
stimulant
amphetamine
coffee

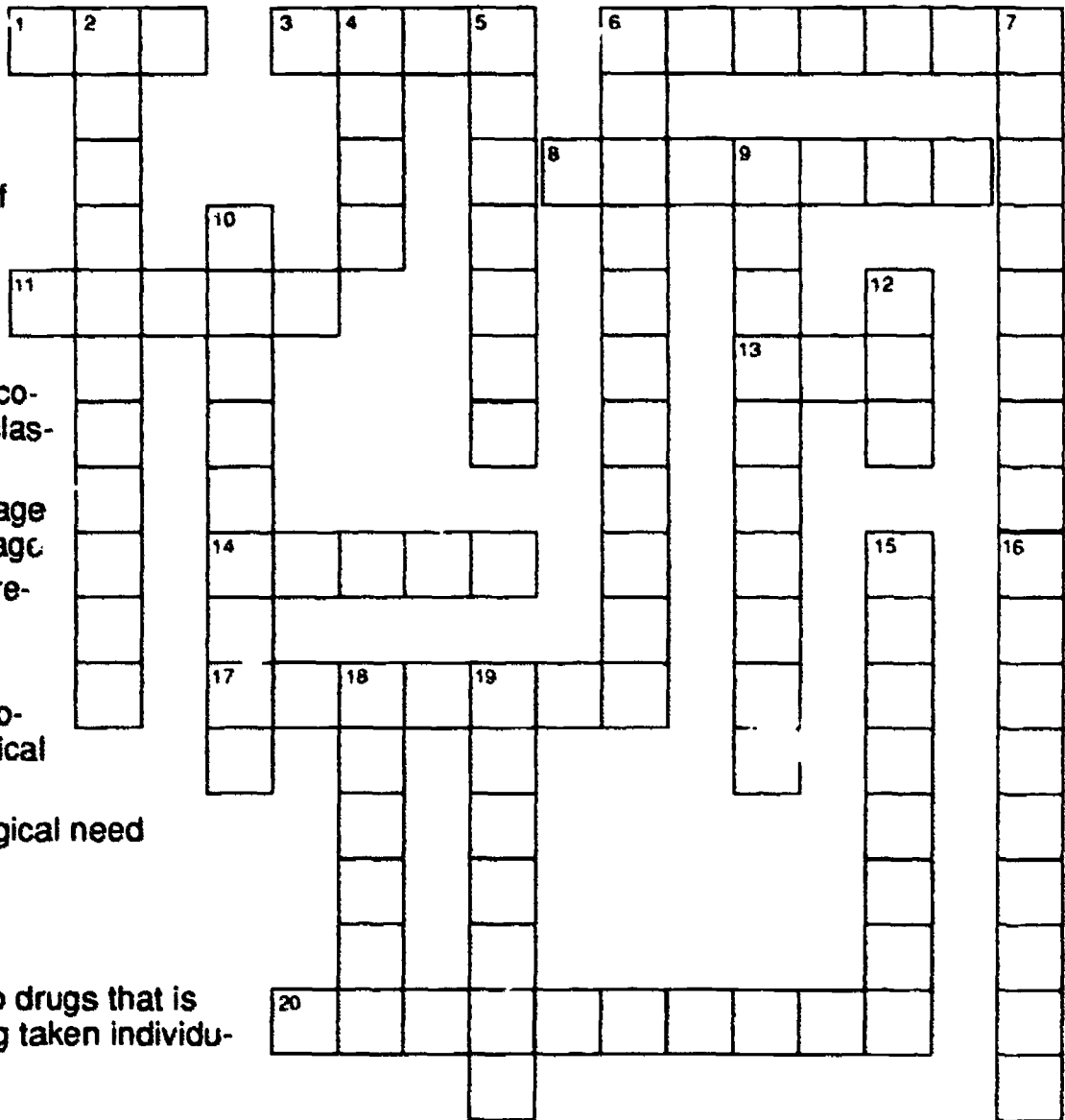
drug
opiates
aspirin
narcotics
cocaine

Across

1. Taking a drug
3. A substance that changes the function of the body
6. Drug that reduces pain, inflammation and fever
8. Heroin, morphine and codeine are in this drug classification
11. Two times the percentage of alcohol in the beverage
13. Over-the-counter (abbreviation)
14. Use of an illegal drug
17. A stimulant that can produce strong psychological dependence
20. Physical and psychological need for the drug

Down

2. Effect of combining two drugs that is greater than either drug taken individually
4. A form of cocaine
5. Marijuana, alcohol and tobacco are considered to be this type of drug
6. A type of stimulant
7. Another term for 8 across
9. When alcohol controls an individual's life
10. A condition of needing increasing doses of a drug to feel the desired effects
12. Angel dust
15. Type of cocaine that is smoked
16. Drug that produces wakefulness and reduces fatigue
18. Beverage that contains caffeine
19. Way that gasoline, aerosol sprays and glue are taken into the body



Terms of Use

Addiction

- ◆ dependence on a drug
- ◆ strong physical or psychological need for a drug

Drug Abuse

- ◆ any use of a drug to a point where one's health is adversely affected or one's ability to function in society is impaired
- ◆ an underage person's use of drugs that are legal for adults (illegal use of a drug)
- ◆ use of any illegal substance

Habituation

- ◆ mental dependence on a drug
- ◆ the need or compulsion to continue using a drug because it increases pleasurable feelings or reduces feelings of anxiety, fear or stress

Physical Dependence

- ◆ drug-induced change in a person
- ◆ the overpowering physical or emotional urge to use a drug repeatedly
- ◆ use accompanied by tolerance for the drug
- ◆ withdrawal symptoms if drug use ends

Psychological Dependence

- ◆ a condition in which a person is convinced that she or he needs to feel the effect(s) of a drug
- ◆ may feel withdrawal symptoms when not using the drug

Tolerance

- ◆ body's ability to adapt to a drug
- ◆ need for increasing doses of a drug to produce the same effect

Withdrawal

- ◆ result of stopping use of a drug after developing physical dependence
- ◆ characterized by sweating, delirium, nausea, vomiting and shaking
- ◆ also called detoxification
- ◆ usually a crisis, with varying degrees of physical and emotional severity

Patterns of Use

Experimental

- ◆ drugs used out of curiosity
- ◆ majority of people use drugs this way, at a party or social event
- ◆ experiment often not repeated

Occasional

- ◆ drug use not integrated into the person's life
- ◆ drugs used socially or occasionally
- ◆ risks of this type of use are low

Situational

- ◆ use associated with particular activities
- ◆ people feel they need the effects of a drug to get through certain situations
- ◆ serious risk of developing dangerous psychological dependence

Intense

- ◆ characterized by high doses over long periods of time
- ◆ users habitually turn to drugs for help whenever faced with a problem
- ◆ users believe they cannot function without drugs, although usually they can
- ◆ on the verge of becoming dependent on drugs

Compulsive

- ◆ cannot control drug use
- ◆ emotionally dependent on the drug
- ◆ cannot function without it
- ◆ may also be physically dependent
- ◆ drugs come before family and friends
- ◆ may be incapable of holding a steady job

Impact of Drug Use

Drug Used: OTC Cough Suppressant

Impact:

Social:

Health:

Economic:

Vocational:

Drug Used: Alcohol

Impact:

Social:

Health:

Economic:

Vocational:

Drug Used: Marijuana

Impact:

Social:

Health:

Economic:

Vocational:

Drug Used: Cocaine

Impact:

Social:

Health:

Economic:

Vocational:

Drug Blanks

Directions: Fill in the blank word in each of the following statements. Then use the letters of these words to complete the message at the bottom of the next page.

1. A level of drug use that impairs the ability of the individual to function socially, vocationally or otherwise is called drug _____.

1 2 3 4 5

2. The habitual use of alcohol that can lead to both physical and psychological addiction is called _____.

1 2 3 4 5 6 7 8 9 10

3. This stimulant is found in coffee, cola drinks and many headache remedies; it is _____.

1 2 3 4 5 6 7 8

4. Drugs that are legal to obtain and do not require a prescription are called _____ drugs.

1 2 3 4 5 6 7 8 9 10 11 12 13 14

5. Unfortunately, about one-third of Americans smoke _____.

1 2 3 4 5 6 7 8 9 10

6. AIDS is transmitted by sexual intercourse and sharing intravenous drug _____.

1 2 3 4 5 6 7

7. Alcohol, barbiturates and tranquilizers are _____.

1 2 3 4 5 6 7 8 9 10 11

8. Cocaine is a short-acting central nervous system _____.

1 2 3 4 5 6 7 8 9

9. Drugs that interfere with the finances or assets are said to have an _____ impact.

1 2 3 4 5 6 7 8

10. When drugs interfere with the ability to maintain a job or attend work or school, this impact is considered _____.

1 2 3 4 5 6 7 8 9 10

11. When drugs interfere with the ability to function with peers, family and friends, this is said to be a social _____.

1 2 3 4 5 6

12. If drugs interfere with a physical or psychological condition, they have a _____ impact.

1 2 3 4 5 6

Fill in the message below by using letters from the words you filled in above.

Word 1

Statement 1, letter 3 = _____

Statement 1, letter 4 = _____

Statement 3, letter 5 = _____

Word 2

Statement 4, letter 1 = _____

Statement 3, letter 3 = _____

Word 3

Statement 6, letter 4 = _____

Statement 4, letter 4 = _____

Statement 8, letter 5 = _____

Statement 5, letter 3 = _____

Statement 5, letter 10 = _____

Word 4

Statement 9, letter 2 = _____

Statement 10, letter 9 = _____

Statement 4, letter 11 = _____

Word 5

Statement 10, letter 3 = _____

Statement 12, letter 3 = _____

Statement 8, letter 5 = _____

Statement 8, letter 1 = _____

Statement 5, letter 6 = _____

Word 6

Statement 11, letter 3 = _____

Statement 4, letter 4 = _____

Statement 10, letter 2 = _____

Statement 1, letter 2 = _____

Statement 6, letter 5 = _____

Statement 12, letter 2 = _____

Statement 8, letter 4 = _____

Statement 5, letter 10 = _____

Interview a Smoker

Part I

Directions: Use this form to interview an individual who is a regular tobacco smoker (someone who smokes at least one or two cigarettes a day). Ask the following questions and record the answers on this form.

Ask the smoker:

- Do you remember when you first started smoking? (circle) Yes No
- Approximately how old were you, or how long have you been smoking? _____
- Why did you first start smoking? _____

- Why do you continue to smoke? _____

- How many cigarettes or packs of cigarettes do you smoke each day? _____
- Do you smoke only in certain situations, such as in social situations, in stressful situations or on other occasions? (circle) Yes No
- If yes, what are the specific situations or occasions when you smoke? _____

- Do you know how much money you spend (approximately) on cigarettes per day, per week, per year? (circle) Yes No
- How much do you spend for one pack of your brand of cigarettes? \$ _____
- What brand of cigarette do you smoke? _____
- Are the cigarettes you smoke (circle as many as apply):
 - Low tar
 - Low nicotine
 - No filter
 - Other special type _____
- Are you aware of the long-term health hazards of smoking? (circle) Yes No

➡ Do your family members or friends smoke? (circle) Yes No

➡ Have you ever tried to stop smoking? (circle) Yes No

➡ If yes, what method(s) did you use to try to stop? _____

Part II

Directions: Answer the following questions about the interview in class. *Do not* use the name of the individual you interviewed on this form.

For student only:

Calculate the amount of dollars this person spends on cigarettes each:

a. day \$ _____ (cost of pack of cigarettes x number of packs smoked per day
or cost of pack of cigarettes/number of cigarettes in pack x number of cigarettes
smoked per day)

b. week \$ _____ (number from "a" x 7)

c. year \$ _____ (number from "b" x 52)

From your observations, is this smoker showing signs of (check all that apply)

- Habituation
- Psychological Dependence
- Physical Dependence

Tobacco Advertisement Critique

Directions: Use the six appeals below to critique your tobacco advertisement. Attach the advertisement to this worksheet when you have completed answering the questions that apply to your ad.

1. What is the ***"Proof of" Appeal*** used in this ad?

2. What is the ***Emotional Appeal*** used in this ad?

3. What is the ***Comparison Appeal*** used in this ad?

4. What is the ***Medical or Health Appeal*** used in this ad?

What health warning is used in this ad?

5. What is the ***Bandwagon Appeal*** used in this ad?

6. What is the ***Star or Glamour Appeal*** used in this ad?

Tobacco

Directions: Answer the following questions by circling the correct word, filling in the blank space or circling the letter of the correct answer.

1. If you smoke cigarettes, your risk of cardiovascular disease (circle) *increases* / *decreases*.
2. The more cigarettes you smoke, the (circle) *greater* / *lower* your risk of heart attack and stroke.
3. Name three effects of smoking on your cardiovascular system.

4. Name three effects on your health of using chewing tobacco.

5. Name two effects of passive smoke on the nonsmoker.

6. Name one effect of smoking during pregnancy.

7. What type of action do cigarettes have in the body? (Circle the letter of the best answer.)
 - a. stimulant
 - b. depressant
 - c. hallucinogenic
 - d. narcotic/opiate
 - e. stimulant and depressant

8. Name the six appeals used for advertising tobacco products.

Resources

**Alcoholism and Drug Addiction
Treatment Center(800) 382-4357**

Referrals to local facilities where adolescents and adults can seek help.

**Al-Anon Group Family
Headquarters(800) 356-9996**

Provides materials on alcoholism specifically aimed at helping families dealing with problems of alcoholics (available 24 hours a day, seven days a week).

National Council on Alcoholism..(800) NCA-CALL

Provides referrals to local affiliates, and written information on alcoholism (24 hours a day, seven days a week).

National Cocaine Hotline.....(800) COC-AINE

Answers questions on health risks of cocaine and provides counseling to cocaine users and their friends and families. Provides referrals.

**National Parent's Resource Institute
for Drug Education (PRIDE)(800) 241-7946**

Provides a broad range of educational and professional materials on drug-related issues, including alcohol and legal questions.

NIDA Helpline(800) 662-HELP

Provides general information on drug abuse and on AIDS as it relates to intravenous drug users. Referrals offered.

Office of Substance Abuse Prevention.....(800) 638-2045

Offers information and technical assistance to schools, parent groups, business and industry and national organizations in developing drug abuse prevention activities. Does not provide counseling, treatment referrals, information on pharmacology of drugs or criminal aspects.

Alcohol Attitudes Inventory

Directions: Read the following statements and circle the answer that best represents your attitude about each statement.

SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

1. The legal drinking age for consuming alcoholic beverages should be lower.....**SA A U D SD**
2. Even small amounts of alcohol can lower inhibitions and make people feel like doing things they wouldn't ordinarily do....**SA A U D SD**
3. Alcohol use increases the likelihood of developing cancer.**SA A U D SD**
4. Drinking alcohol may cause more stress in personal relationships.....**SA A U D SD**
5. Most people who have been arrested have been drinking alcohol.....**SA A U D SD**
6. One out of ten people who drink alcoholic beverages is an alcoholic.**SA A U D SD**
7. Alcoholism is a disease.**SA A U D SD**
8. A person who drinks alcohol on a full stomach will not be as affected as a person who drinks on an empty stomach.**SA A U D SD**
9. A person's mood when drinking alcoholic beverages can affect his or her experiences after drinking.....**SA A U D SD**
10. Alcohol can interfere with achievement of goals.**SA A U D SD**
11. Alcohol has no nutritional value.**SA A U D SD**
12. The "morning after" headache from alcohol can be avoided by taking aspirin before drinking alcoholic beverages.....**SA A U D SD**
13. At a cold football game, it makes sense to drink alcohol because alcohol increases body temperature.**SA A U D SD**
14. Alcohol is an aphrodisiac.**SA A U D SD**
15. One drink is not likely to impair driving skill.**SA A U D SD**

Facts About Alcohol

Directions: Write in the effects of alcohol on these body parts.

Brain

Lungs

Stomach

Liver

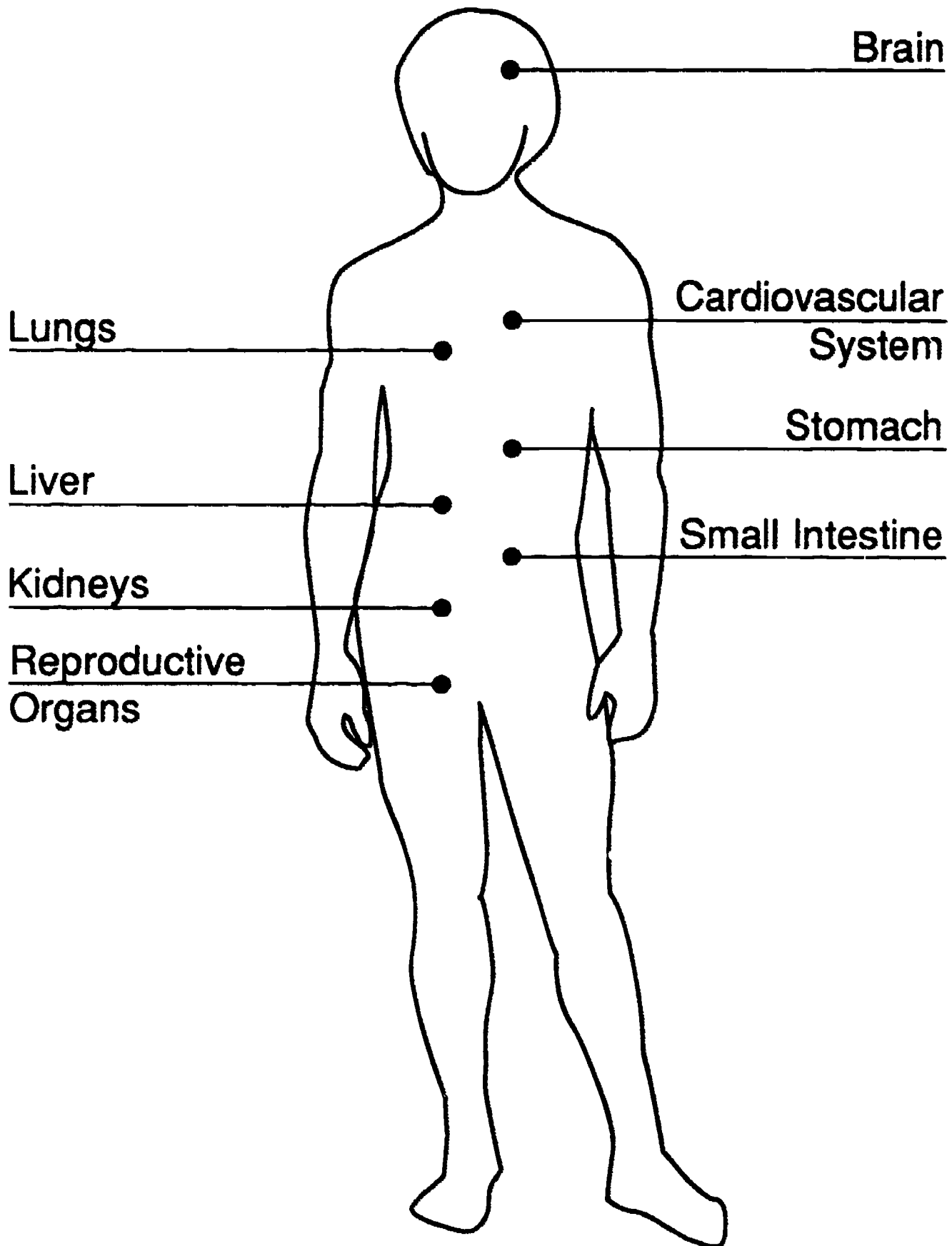
Small Intestine

Cardiovascular System—Bloodstream

Kidneys

Reproductive Organs

Effects on the Body



Factors Affecting Alcohol in the Body

Type of Drink

Amount of Alcohol Consumed

Time Elapsed Between Drinks

Body Weight

Empty or Full Stomach

Mental/Emotional State

Previous Experience with Alcohol

Blood Alcohol Concentration Chart

Directions: To estimate an individual's blood alcohol concentration, match the number of drinks consumed to the body weight. Subtract 0.015 for each hour since drinking began.

One drink equals an ounce of 86-proof liquor, a 12-ounce beer or a 5-ounce glass of table wine.
(Source: Mothers Against Drunk Drivers)

| Drinks | BLOOD ALCOHOL CONCENTRATION (BAC) | | | | | | | |
|--------|-----------------------------------|-----|-----|-----|-----|-----|-----|----------|
| 1 | .03 | .03 | .02 | .02 | .01 | .01 | .01 | |
| 2 | .06 | .05 | .04 | .04 | .03 | .03 | .03 | SOBER |
| 3 | .10 | .08 | .06 | .06 | .05 | .04 | .04 | |
| 4 | .13 | .10 | .09 | .07 | .06 | .06 | .05 | |
| 5 | .16 | .13 | .11 | .09 | .08 | .07 | .06 | IMPAIRED |
| 6 | .19 | .16 | .13 | .11 | .10 | .09 | .08 | |
| 7 | .22 | .18 | .15 | .13 | .11 | .10 | .09 | |
| 8 | .26 | .21 | .17 | .15 | .13 | .11 | .10 | |
| 9 | .29 | .24 | .19 | .17 | .14 | .13 | .12 | |
| 10 | .33 | .26 | .22 | .18 | .16 | .14 | .13 | ILLEGAL |
| 11 | .36 | .29 | .24 | .20 | .18 | .16 | .14 | |
| 12 | .39 | .31 | .26 | .22 | .19 | .17 | .16 | |
| | 100 | 125 | 150 | 175 | 200 | 225 | 250 | |

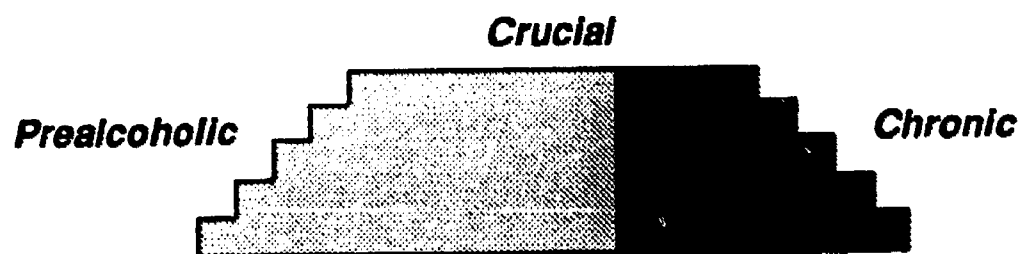
Body Weight (lbs.)

Example: If a 125-pound person drank 3 drinks, BAC = 0.08; in 2 hours, the estimated BAC would be

$$0.08 - (0.015 \times 2 \text{ hours} = 0.030) = 0.05 \text{ BAC.}$$

The Three Stages of Alcoholism

- 1. *Warning stage (prealcoholic and early alcoholic stages)***
 - ▲ Increased tolerance to alcohol
 - ▲ Drinking to escape from tension and frustration of daily living
 - ▲ Preoccupation with drinking (drink alone, gulp drinks)
 - ▲ Embarrassing behavior to significant others
 - ▲ Surreptitious drinking (sneaking drinks)
 - ▲ Blackouts (drinker has no recall of events that have taken place)
- 2. *Crucial stage***
 - ▲ Loss of control over how much one drinks (may not drink every day, but cannot control the amount of alcohol consumed once drinking has begun)
 - ▲ Conscious or unconscious guilt feelings about drinking
 - ▲ Rationalization of drinking behavior (drinker has "good reasons" for drinking)
 - ▲ Promises to stop drinking; may stop, but resumes drinking
 - ▲ May still hold down job or continue in school
- 3. *Chronic stage (true alcoholic phase and complete alcohol dependence)***
 - ▲ Everything revolves around alcohol—total dependence on alcohol (appearance, home relations, school, job, possessions neglected, disrupted and begin to deteriorate)
 - ▲ Periods of constant drinking
 - ▲ Can't stop after one drink
 - ▲ Health consequences may intensify (may have severe liver damage and possible damage to brain tissue)
 - ▲ Continued drinking needed to prevent withdrawal symptoms
 - ▲ Reverse tolerance—body needs smaller doses of alcohol to feel the effects
 - ▲ Drinking may continue for days ("bender")
 - ▲ Delirium tremens (D.T.'s) occur in absence of alcohol
 - ▲ After several years in chronic phase, symptoms may include delirium, muscle tremor, confusion and hallucinations; may last two days to two weeks; death occurs in about 10 percent of cases.



Each stage may last for years and never progress to the next stage.

How Much Do You Know About Marijuana?

Directions: Read the following statements about marijuana and decide whether they are *True* or *False*. Circle the word *True* or *False* on the line preceding each statement.

- True** **False** 1. Marijuana smoke is safer than tobacco smoke.
- True** **False** 2. The chemicals in marijuana stay in the body for only a short time after smoking a joint.
- True** **False** 3. Today's marijuana is stronger than varieties grown in the 1960s.
- True** **False** 4. Marijuana use decreases the heart rate.
- True** **False** 5. Marijuana use interferes with the user's ability to concentrate.
- True** **False** 6. Marijuana use improves driving ability.
- True** **False** 7. Marijuana use can reduce sperm count and cause reproduction problems.
- True** **False** 8. Marijuana use can cause irregular menstrual cycles.
- True** **False** 9. A marijuana user always has red eyes.
- True** **False** 10. Marijuana helps the lungs to get rid of bacteria and other foreign substances.
- True** **False** 11. Marijuana is safer than alcohol.
- True** **False** 12. Marijuana has no withdrawal effects.
- True** **False** 13. Marijuana use relieves stress.
- True** **False** 14. Marijuana use does not lead to use of other drugs.
- True** **False** 15. Marijuana use expands the mind.

Fact Sheet—Marijuana

◆ **Identification**

Marijuana is America's most widely used illegal drug. Even after much study, it is not completely understood.

Marijuana and hashish are made from the plant *Cannabis sativa*. The principal mind-altering ingredient in marijuana and hashish is a chemical compound called THC (tetrahydrocannabinol).

◆ **Forms**

Cannabis appears in different forms. Marijuana is olive green in color and looks like oregano leaves. Other types from countries other than the United States can be different colors (red, dark brown or yellow) and are stronger. The most powerful source of THC is the resin of the hemp plant, which may be mixed with leaves, stems and seeds. Sinsemilla is a type of marijuana grown without seeds from mature female plants. It is usually about ten times stronger than marijuana mixtures containing leaves and seeds.

◆ **Methods of Use**

Marijuana is usually smoked in a cigarette (joint) or pipe, and THC is inhaled in the smoke. Marijuana can also be eaten (in certain forms) or taken as a pill.

◆ **Names**

Grass, weed, MJ, Acapulco Gold, Panama Red, THC, hashish, hash oil, etc.

◆ **Physical Effects**

When marijuana is smoked, it travels down the windpipe (trachea) to the lungs. From the lungs, the THC passes into the bloodstream and to every cell in the body.

THC dilates the bronchial tubes, but frequent marijuana smokers may suffer from chronic cough ("joint cough"), bronchitis and obstruction of the blood supply from the heart to the lungs. Marijuana speeds up the heart rate and can temporarily weaken the heart. This means marijuana smoking can be dangerous for people with heart problems. Marijuana also can cause reddening of the eyes. THC is fat-soluble, and its breakdown products are stored in the brain, lungs, testes, ovaries and body fat. Therefore, these tissues may be more likely to be harmed.

When marijuana is eaten, it enters the stomach and is broken down by digestion. THC passes into the small intestine and then is absorbed into the bloodstream. This takes longer than smoking marijuana, and less THC goes into the bloodstream. Five to ten times more THC enters the bloodstream from smoking marijuana than from eating it.

THC in its active form may be retained in the body for as long as ten to 45 days after smoking.

Marijuana may reduce the body's natural immunity and harm the lungs and heart. It may also decrease fertility.

The following are some of the health dangers of continuing, long-term marijuana use:

- bronchitis caused by marijuana smoke
- increased heart rate and blood pressure
- slight decrease in immune system functions

Marijuana does have some medical uses. It can reduce the stomach upset and depression caused by chemotherapy (treatment for cancer). It can also reduce inner eye pressure, which lessens the pain caused by glaucoma.

◆ ***Mental-Emotional Effects***

In most people, low doses of THC produce a high with feelings of euphoria and relaxation. Occasionally, people experience an altered sense of space and time. Reactions may be slower, and short-term memory is affected. Driving a car or operating other machines while under the influence of THC is considered unsafe.

Sometimes marijuana use, especially among first-time or naive drug users, causes psychological reactions such as confusion, anxiety, panic, hallucinations and paranoia. Marijuana use may also worsen a prior mental health problem or negative mood. Long-term use is not known to cause permanent changes in brain function or reduce learning abilities.

◆ ***Social Effects***

The regular use of marijuana may cause "amotivational syndrome"—a loss of interest in long-term goals and activities. The user becomes easily tired, depressed and moody. He or she finds it difficult to cope with complex situations. As the marijuana user repeatedly smokes to block out pain, boredom and frustration, he or she is less successful at meeting daily challenges. The continued use of marijuana dulls the mind, affects enthusiasm and decreases drive. It harms work and school achievement. A regular user may also feel irritable and have trouble getting along with friends and family.

◆ ***Dependence Potential***

Users can experience mild physical and psychological dependence on the drug and can develop a tolerance to the drug. When tolerance develops, the user needs more or stronger forms of marijuana to achieve the same level of drug high. When users become dependent, they can suffer from nausea, diarrhea, sleep disturbances, irritability, weight loss, anorexia and sweating if they don't have the drug.

Marijuana Controversy

Directions: Write a response to each of the following statements in the space provided, using information from **Fact Sheet—Marijuana** and from previous lessons.

1. Marijuana is the most dangerous drug.

2. Marijuana involves only a minimal risk to the user.

3. Some people have smoked marijuana and hash for a long time, and feel fine.

4. If millions of people have smoked marijuana for years, how can it not be safe?

What's the Best/Worst that Can Happen?

Directions: Read the situation and answer the questions.

Situation: A 16-year-old student was discovered to be in possession and under the influence of cocaine during school hours.

1. What's the **best** that can happen?

2. What's the **worst** that can happen?

3. What is **most likely** to happen?

Cocaine

Identification

- Central nervous system stimulant
- Medically, a local anesthetic

History

- Used by South American Indians
- Pharmacist mixed coca leaves and kola nuts, producing Coca-Cola
- Sigmund Freud cited its virtues, but became disillusioned

Forms

- Powder
- Rock
- Crack or freebase

Methods of Use

- Sniffed (snorted)
- Injected
- Smoked (or added to tobacco)

Names

- Coke
- Crack
- Rock
- Snow
- Powder

Physical Effects

- Rapidly metabolized, effects wear off in 30 to 60 minutes
- Increases heart rate
- Increases blood pressure
- Causes hyperthermia (increased body temperature)
- Dilates pupils
- Prolongs anesthetic action during surgery
- Overdose can induce
 - seizures
 - heart stoppage
 - cessation of breathing

- Continued use leads to
 - loss of appetite
 - weight loss
 - malnutrition
 - sleep disturbance
 - altered thought and mood patterns

- Frequent cocaine sniffing can
 - inflame the nasal passages
 - damage the nasal septum

Mental-Emotional Effects

- Feelings of
 - exhilaration
 - lasting euphoria
 - increase of self-control
 - greater capability for work
 - long-lasting mental or physical work without fatigue
 - elimination of the need for food and sleep

Social Effects

- User feels
 - strong
 - cheerful
 - capable of undertaking anything
 - like the life of the party
 - reduced fatigue
 - powerful

- As effects wear off, user feels
 - depression
 - fatigue
 - headache
 - discomfort
 - strong desire to get high again

Dependence Potential

- Psychological dependence
- Physical dependence
- Tolerance

Matching Terms About Cocaine

Directions: Write the number of the word in the first column next to the correct explanation.

- | | | |
|-------------------------------|-------|--|
| 1. Stimulant | _____ | Once a mixture of coca leaves and kola nuts |
| 2. Crack | _____ | Physical sickness when cocaine use stops |
| 3. Exhilaration | _____ | Classification and main action of this drug |
| 4. Snorting | _____ | Higher body temperature caused by body's processing of cocaine |
| 5. Anesthetic | _____ | Emotion that follows when a user suddenly stops the use of cocaine |
| 6. Overdose | _____ | Can cause seizures or breathing and heart to stop |
| 7. Coca-Cola | _____ | Using through the nose |
| 8. Physical Dependence | _____ | Effect or feeling produced by use of cocaine |
| 9. Hyperthermia | _____ | Medical use during surgery |
| 10. Withdrawal | _____ | Frequent use causes tolerance and this |
| 11. Depression | _____ | A salt, usually mixed with ether, also known as freebase |

Emerging Drug Problems—Truth and Consequences

Directions: Circle the number that best represents your decision about the truth of each of the following statements; then answer the question following each statement.

The numbers mean:

10 = Absolutely True

•

•

•

5 = Unsure/Don't Know

•

•

•

1 = Absolutely False

| Emerging Drug Problem | AMOUNT OF TRUTH | | | | | | | | | |
|---|-----------------------------|---|---|---|---|----------------------------|---|---|---|----|
| | Absolutely False | | | | | Absolutely True | | | | |
| 1. There is a drug to cure male baldness. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| <i>What are other consequences of using this drug?</i> | | | | | | | | | | |
| 2. Pregnant women who are addicted to heroin may give birth to addicted babies. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| <i>What are other consequences of using this drug?</i> | | | | | | | | | | |
| 3. Antibiotics may be losing their effectiveness in treating some human infections. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| <i>What are other consequences of using this drug?</i> | | | | | | | | | | |

| Emerging Drug Problem | AMOUNT OF TRUTH | | | | | | | | | |
|---|-------------------------|---|---|---|---|------------------------|---|---|---|----|
| | Absolutely False | | | | | Absolutely True | | | | |
| 4. Antacids may cause hardening of the arteries. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 5. Drinking alcohol during pregnancy can cause birth defects. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 6. Steroids have health risks but are also used medically to treat growth problems. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 7. Aspirin use can cause dizziness, tone deafness, coma and birth defects. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 8. Lookalike drugs look identical to the prescription drug but contain OTC drugs. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 9. The acne drug Retin-A may cause burning of the skin upon sun exposure. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 10. The "peashooter" Co-caine contains no cocaine. <i>What are other consequences of using this drug?</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Levels of Prevention—The Public Health Model

Directions: Take this worksheet home and discuss with your parents the possible strategies for drug use prevention that correspond to each level of prevention. Write your answers in the space provided.

1. **Primary Prevention:** (activities begun before the drug use occurs)

2. **Secondary Prevention:** (activities applied during the early stages of drug use)

3. **Tertiary Prevention:** (activities begun during the later or advanced stages of drug use, including rehabilitation and treatment of user and family)

Directions for Writing *Drug Problems* Pamphlet

General Directions

Your group assignment is to prepare a pamphlet about the selected drug concern or problem. You must conduct library research on the identified problem and use information published within the past four years. You may conduct personal interviews to obtain information about community resources. The development of pamphlets must follow the specified guidelines. They should be typed or neatly printed on 8 1/2" x 11" paper, back-to-back, and folded in thirds. A diagram has been provided as an example. The pamphlets should include specific information on each numbered panel as shown in the sample diagram. Use subheadings on each page except the title page.

Specific Directions

Panel 1: *Title Page.*

The title page identifies the drug problem your group has selected, your group members' names, your teacher's name, class (e.g., "Health"), semester and year, and date.

Panels 2 and 3: *The Drug Problem, Scope and Risk Factors.*

These panels describe the following:

1. The drug problem and how it affects students physically, mentally-emotionally and socially.
2. How the drug problem is likely to affect student behavior inside and outside the classroom.
3. The prevalence of the drug problem within the school population (the numbers of teens and young adults who use the drug or have a problem with the drug.)
4. Possible physical, mental-emotional or social factors that cause students to be at risk for the drug problem.

Panel 4: *Signs and Symptoms.*

This panel describes the signs and symptoms associated with the drug problem (e.g., staggered walk, slow reaction time, poor coordination, hallucinations).

Panel 5: *Community Resources.*

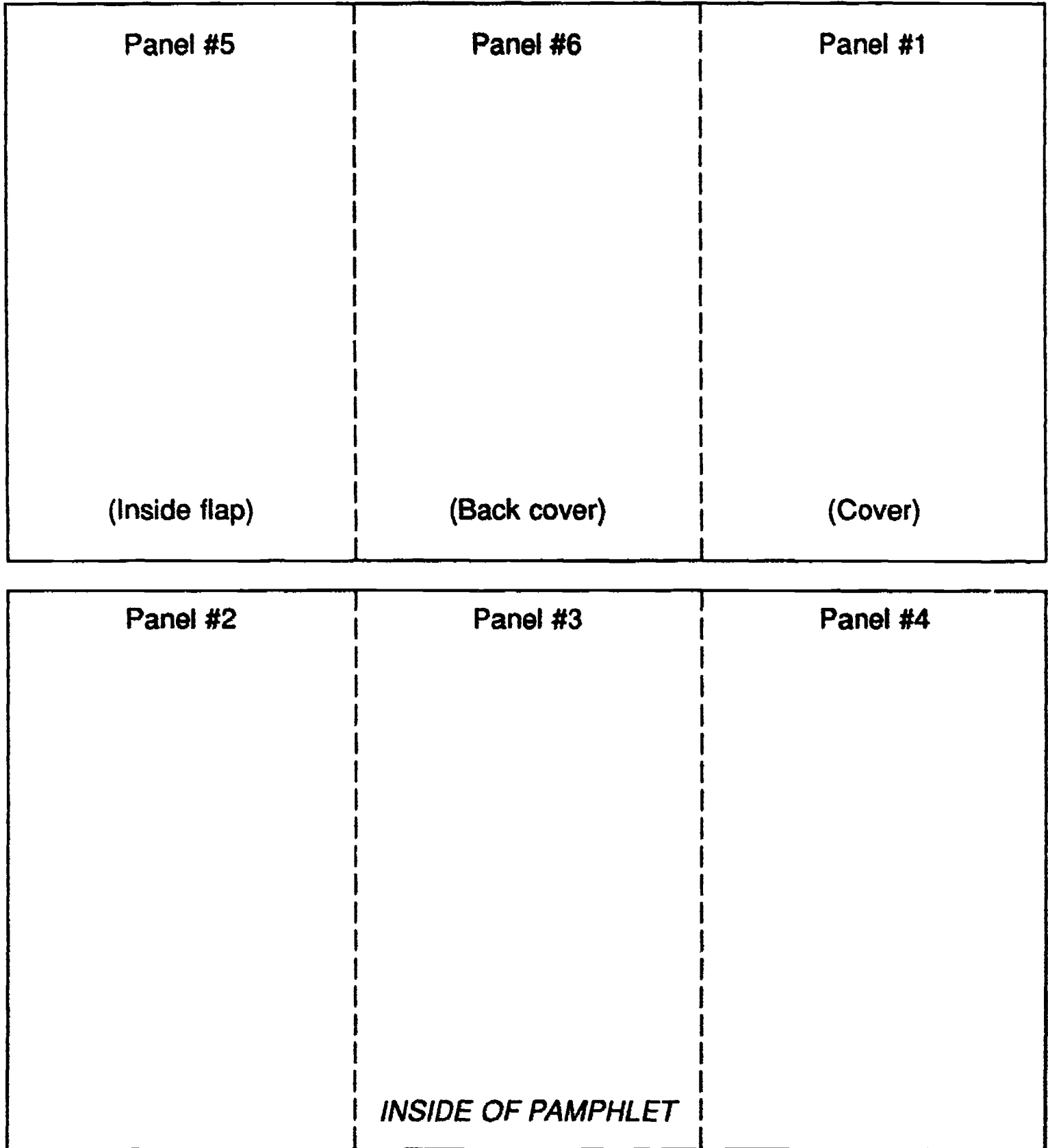
This panel identifies three community resources that can assist with the specified drug problem. Information for each community resource should include the following:

- | | |
|---------------------------|--|
| ↪ agency name | ↪ cost of basic services |
| ↪ agency address | ↪ any restriction of services to school-age children and adolescents |
| ↪ agency telephone number | |
| ↪ services provided | |

Panel 6: References.

This panel includes an alphabetized bibliography.

Pamphlet Layout



Legal Questions

Cartoon 1

HOW CAN THE PRINCIPAL GET IN MY LOCKER AND MY PURSE AND SEARCH FOR DRUGS WITHOUT A WARRANT? SHE DIDN'T EVEN TELL ME THAT THE LOCKERS WERE GOING TO BE SEARCHED!



Legal Questions

Cartoon 2

WHAT DO YOU MEAN I'M SUSPENDED FOR FIVE DAYS? I WANT A HEARING NOW! I DON'T HAVE ANY DOPE! I'M NOT USING IT. I JUST SOLD IT!

WE TREAT EVERY STUDENT HERE THE SAME IF THEY DEAL DOPE, ESPECIALLY IF THEY SELL TO OTHER STUDENTS.



Legal Questions

Cartoon 3

CAN THEY USE DOGS TO LOOK FOR DRUGS IN MY DESK OR EVEN TO SNIFF MY POCKETS IF I HAVE A SMOKE IN THE BATHROOM?



Legal Questions

Cartoon 4



Legal Questions

Cartoon 5

NOBODY WILL EVER
FIND OUT IT'S IN MY
SCHOOL RECORDS. IT'S
MY RIGHT TO PRIVACY!



Drug Legislation—Write an Amendment

Title: *Senate Bill 51562: Mandatory Drug Testing in Schools*

According to Senate Bill 51562, all students graduating from senior high school (twelfth grade) will be required to complete a blood serum test or urinalysis for detection of illegal substances not medically prescribed for personal use by that individual. The substances to be tested for include, but are not limited to, any and all narcotics, cocaine and amphetamines, marijuana (and its related chemicals), tobacco, barbiturates, tranquilizers, sedatives and steroids (intended for human or veterinary use). The test must be conducted within six (6) weeks prior to commencement (graduation).

Pros of Proposed Legislation

Cons of Proposed Legislation

Amendments

Illegal Situations

Directions: Using the legal information about drugs, search and seizure, and suspension and expulsion that you have received in class, explain what is likely to happen when the student in each of the following situations is caught.

Situation #1:

A high school student is distributing drugs on the local elementary school grounds.

Situation #2.

A high school student is selling drugs on the high school grounds.

Situation #3:

A high school student is in possession of, is using or is under the influence of alcohol or other drugs while at a school-related activity.

High-Risk Behavior Inventory

Directions: For each risk behavior, circle the number that best applies to your idea of how high a risk it is for the individual and for society. Then write out answers to the questions below.

The numbers mean:

- 5 = Highest risk
- 4 = High risk
- 3 = Moderate risk
- 2 = Low risk
- 1 = Lowest risk

| Type of Risk | Degree of Risk to Individual | | | | | Degree of Risk to Society | | | | |
|------------------------------|-------------------------------------|---|---|---|----------------|----------------------------------|---|---|---|----------------|
| | <i>Lowest</i> | | | | <i>Highest</i> | <i>Lowest</i> | | | | <i>Highest</i> |
| Smoking cigarettes | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Drinking beer | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Drinking alcohol and driving | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using marijuana | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Sexual intercourse | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using aspirin | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Snorting cocaine | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using barbiturates | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Using diet pills | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Sniffing glue | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Drinking coffee colas or tea | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Marriage | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Stealing | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Intravenous drug use | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Sexual inter- course without protection | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| Mixing drugs (e.g., alcohol and barbiturates) | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

List the three risks of greatest concern to you. (They do not have to be listed above.)

Why are they risks?

Are there positive benefits to these risks?

Are there negative consequences to these risks?

● **The Decision-Making Process**

The following are the steps in the decision-making process.

- 1. Recognize the problem**
- 2. Own the problem**
- 3. Break the problem down into smaller parts**
- 4. Gather information**
- 5. Try solutions**
- 6. Time to act**

What Would You Do? Situations

Situation 1. A student who is a junior at your high school is rumored to drink alcohol and use illegal drugs at school. You are also a junior and share a gym locker with that person. One day you find drugs in the locker when you pull your gym clothes out.

- ☛ How would you feel about finding the drugs?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 2. A boy at your high school has been arrested for possession of drugs on school grounds. You suspect that he sells drugs, too. You are the principal at the school. Other students' parents are angry and say they will remove their children from the school if this student is allowed to return.

- ☛ How would you feel about this student's arrest?
 - ☛ How would you feel about the parents' concerns?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 3. As the owner of a business, you have to decide what to do about one of your employees who drinks alcohol on the job. You have considered firing her.

- ☛ How would you feel about your employee drinking on the job?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 4. You own an apartment complex. One of the families who rents an apartment may be manufacturing drugs in the apartment. You know other renters in the complex are upset about this situation.

- ☛ How would you feel about confronting the family who might be manufacturing the drugs?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

Situation 5. You have made a date with a very good looking and popular student at your school. You heard that this person likes to have a good time and goes to parties where other people drink alcohol and use other drugs. You are worried that you might be asked to use drugs.

- ☛ How would you feel about being asked to use drugs?
 - ☛ What would you do?
 - ☛ Why would you take that action?
-

But You Promised*

by Iron Eyes Cody

Many years ago, Indian braves would go away in solitude to prepare for manhood. One young Indian hiked into a beautiful valley, green with trees, bright with flowers. There, as he looked up at the surrounding mountains, he noticed one rugged peak, capped with dazzling snow.

"I will test myself against that mountain," he thought. He put on his buffalo-hide shirt, threw his blanket over his shoulders and set off to climb the pinnacle.

When he reached the top, he stood on the rim of the world. He could see forever, and his heart swelled with pride. Then he heard a rustle at his feet. Looking down, he saw a snake. Before he could move, the snake spoke.

"I am about to die," said the snake. "It is too cold for me. Put me under your shirt and take me down to the valley."

"No," said the youth. "I know your kind. You are a rattlesnake. If I pick you up, you will bite and your bite will kill me."

"Not so," said the snake. "I will treat you differently. If you do this for me, I will not harm you."

The youth resisted awhile, but this was a very persuasive snake. At last, the youth tucked it under his shirt and carried it down to the valley. There he laid it down gently. Suddenly the snake coiled, rattled and leaped, biting him on the leg.

"But you promised..." cried the youth.

"You knew what I was when you picked me up," said the snake as it slithered away.

* Used with permission from *Guideposts* (July 1988), Carmel, NY 10512.

But You Promised

Questions

1. What promise did the snake make?
2. Why did the boy help the snake?
3. How does this story relate to making decisions (based on information from an unreliable source)?
4. How does this story relate to advertising and the media?
5. How does this story relate to making a decision about trying drugs? Keep in mind the statement, "You knew what I was when you picked me up."
6. How do you think that drug dealers might use similar tactics to sell their products?

Community Resources

Directions: Match the number of the program with the correct definition. Write the letter of the definition in the space to the left of the number. Use each letter only once.

Program

- _____ 1. Alcoholics Anonymous
- _____ 2. hotlines
- _____ 3. SAPs
- _____ 4. outpatient programs
- _____ 5. Al-Anon
- _____ 6. COAs
- _____ 7. Peer Assistance Programs
- _____ 8. methadone maintenance
- _____ 9. medical treatment
- _____ 10. emergency treatment

Definition

- A. Includes detoxification, drug therapy, aversion therapy, individual and group therapy.
- B. Treatment of individuals in life-threatening situations.
- C. Offer emergency telephone counseling.
- D. Trained students act as counselors for other students.
- E. Substitute drug therapy for heroin abusers.
- F. Members rely on each other for strength and support to avoid alcohol one day at a time.
- G. Response to students' problems by guidance department at school.
- H. Treat recovering addicts through counseling, group discussions and recreational activities.
- I. Helps relatives and friends of alcoholics by discussing and sharing common problems.
- J. Support groups for children who have a parent who is addicted to alcohol or other drugs.

