

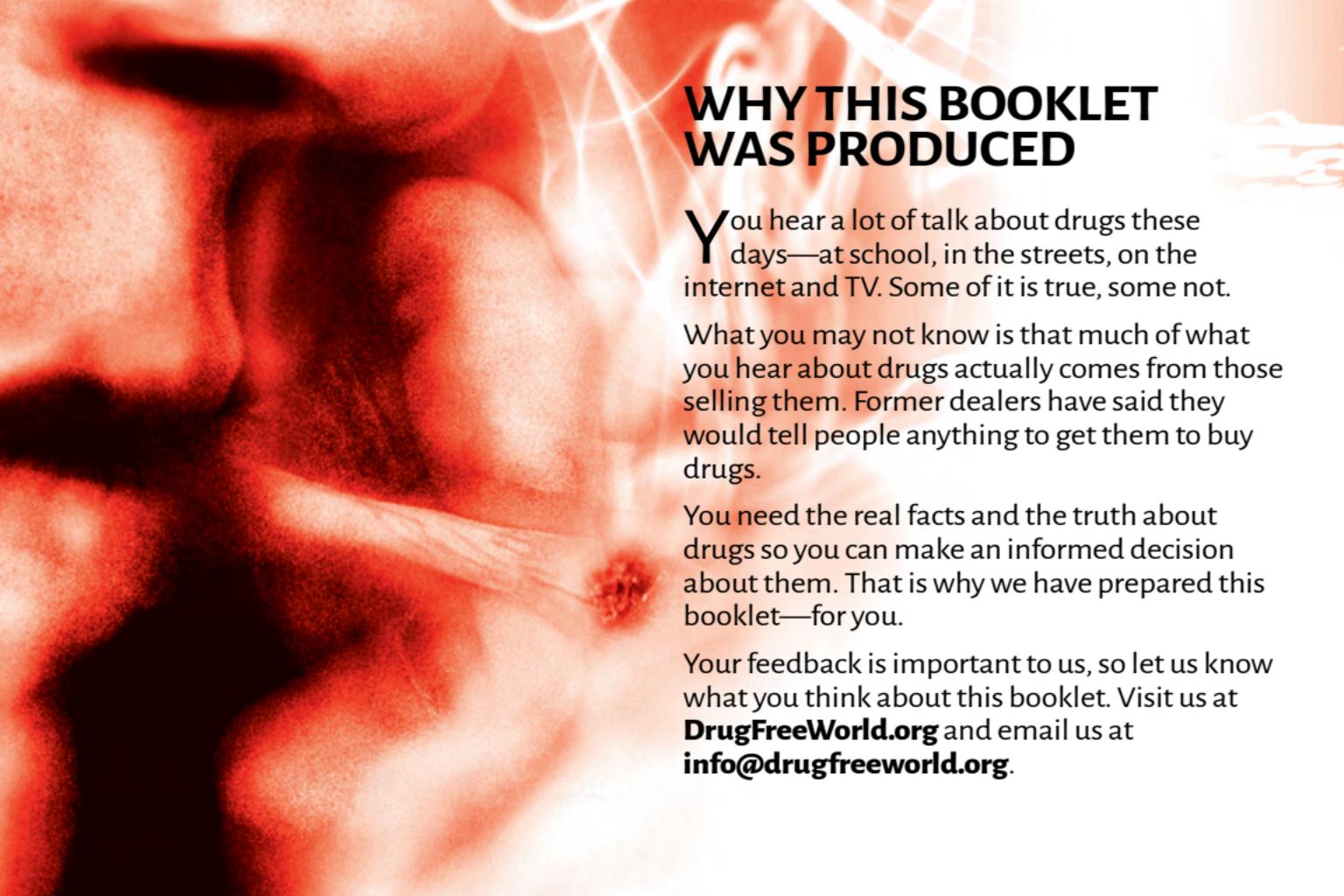
The background of the poster is a collage of various images related to marijuana. On the left, a large, bright white plume of smoke dominates the frame. In the center, a close-up of a marijuana plant with visible leaves and buds is shown. To the right, several people are depicted in different scenarios: one person is lying down, another is sitting at a table with a lit candle, and others are standing or sitting in what appears to be a social gathering. The overall color palette is warm, with reddish-orange tones.

THE TRUTH ABOUT

MARIJUANA

drugfreeworld.org

Chronic
Herb
Smoke
Pot
Weed
Grass
Dope



WHY THIS BOOKLET WAS PRODUCED

You hear a lot of talk about drugs these days—at school, in the streets, on the internet and TV. Some of it is true, some not.

What you may not know is that much of what you hear about drugs actually comes from those selling them. Former dealers have said they would tell people anything to get them to buy drugs.

You need the real facts and the truth about drugs so you can make an informed decision about them. That is why we have prepared this booklet—for you.

Your feedback is important to us, so let us know what you think about this booklet. Visit us at **DrugFreeWorld.org** and email us at **info@drugfreeworld.org**.

WHAT IS MARIJUANA

Marijuana is one of the most commonly abused drugs in the world. According to the World Health Organization, 200 million people use marijuana each year. In the United States, marijuana is the most commonly used psychotropic drug (a drug that affects a person's mental state) after alcohol, with nearly 12 million young adults reporting marijuana use within one year.

There is a significant gap between the scientific facts about marijuana and the myths surrounding it. Many people believe that, because it is legal in some places, marijuana must be harmless. However, the body doesn't know the difference between a legal drug and an illegal one—it only knows

the effect the drug creates. The purpose of this publication is to clear up some of the misconceptions about marijuana.

Marijuana comes from the cannabis plant. The mind-altering substance is mainly found in the flowers (commonly called *buds*), with smaller amounts in the seeds, leaves and stems.

Hashish is a dark to light brown substance scraped from the surface of the cannabis plant and pressed into a solid mass. It is then dried and formed into bars, sticks or balls.

CHEMICAL CONTENT

Marijuana and hashish contain over 500 chemicals. The chemical responsible for intoxication is *THC* (short for *tetrahydrocannabinol*). *THC* creates the psychoactive effects (affecting the brain and altering mood, perception or consciousness) that classify marijuana as a drug.

Plants have traits to protect themselves in the wild, such as toxins that make animals sick or weak. *THC* serves as the protective mechanism of the marijuana plant.

*Delta-8** and other *THC* products are derived from the cannabis plant. These substances,

often sold for vaping or as edibles, are largely unregulated and can have dangerous side effects. They are often modified to increase potency and may contain harmful chemicals.

Some people believe marijuana is harmless because it is a plant and therefore “natural.” However, many natural plants can be harmful or poisonous.

Burning dried leaves and inhaling the smoke is not natural. Inhaling marijuana smoke also involves inhaling other harmful chemicals.

You may have heard of “medical marijuana.” Marijuana contains a chemical called *CBD*



(short for *cannabidiol*), which is associated with potential health benefits, especially for epilepsy and chronic pain. Unlike THC, CBD does not cause a high, but studies show that use over a long period of time or at high dosages can cause liver damage and stomach issues.

Marijuana is a drug and, like other drugs, has harmful side effects, which this booklet will cover.

* Delta-8: a form of THC derived from the cannabis plant. Delta-8, Delta-9 and other Delta products are different forms of THC used in edibles and vapes.

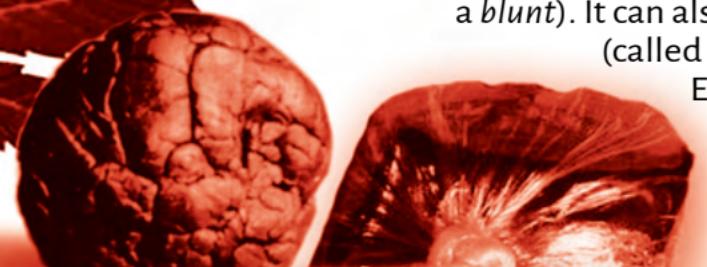


HOW IS IT USED?

Marijuana can be smoked as a cigarette (called a *joint*), in a dry pipe or in a water pipe (called a *bong*). Chemically extracted and genetically modified molecules from the cannabis plant can be vaped. Sometimes users open up cigars and replace the tobacco with marijuana (called a *blunt*). It can also be mixed into food (called *edibles*) or brewed as tea.

Edibles are covered in detail later in this booklet.

Marijuana consists of dried leaves, stems, flowers and seeds of the cannabis plant. It is usually green, brown or gray.

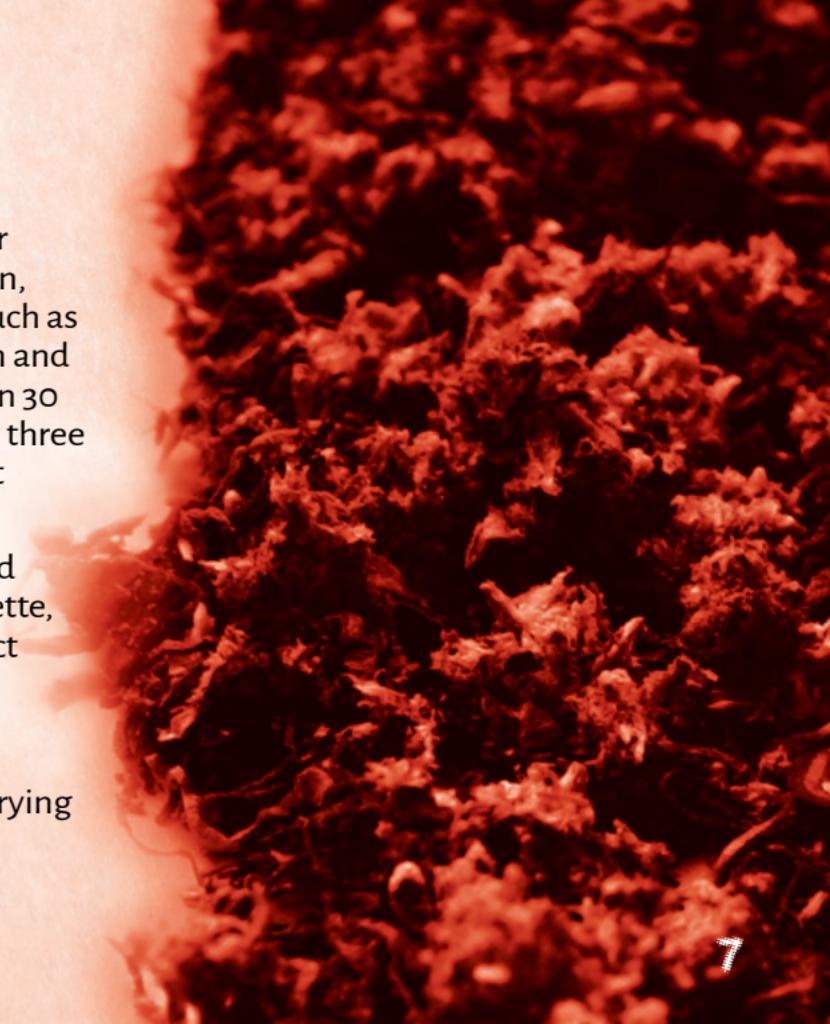


Hashish is tan, brown or black resin that is dried and formed into bars, sticks or balls. When smoked, both marijuana and hashish give off a distinctive odor.

When a person inhales marijuana smoke, they usually feel the effects within minutes. THC quickly passes from the lungs into the

bloodstream, reaching the brain and other organs. THC overactivates parts of the brain, causing a high. Immediate sensations—such as increased heart rate, reduced coordination and balance and a “dreamy” state—peak within 30 minutes. These effects typically last two to three hours or longer, depending on the amount taken and the THC’s potency.

As the typical user inhales more smoke and holds it longer than he would with a cigarette, smoking marijuana creates a severe impact on the lungs. Researchers have found that marijuana smokers inhale similar toxins to those inhaled by cigarette smokers, but marijuana reduces the blood’s oxygen-carrying ability five times more than cigarettes.



DABBING

Dabbing refers to using highly concentrated forms of marijuana, like hash oil, made by extracting THC from cannabis. The concentrated THC forms a dark brown or yellow, sticky, gummy substance.

Dabbing involves heating the THC concentrate and inhaling it, either with an e-cigarette, vaporizer or special apparatus, sometimes called a *dab rig* or an *oil rig*.

THE EFFECTS OF DABBING

Dabbing intensifies the effects of smoking marijuana. THC levels in marijuana typically range from 15–30 percent but, when dabbing, can reach as high as 99 percent.

Dabbing can cause rapid heartbeat, blackouts, skin crawling sensations, loss of consciousness and psychotic symptoms like paranoia and hallucinations.

Due to its high potency, dabbing can lead to accidents and falls, as well as

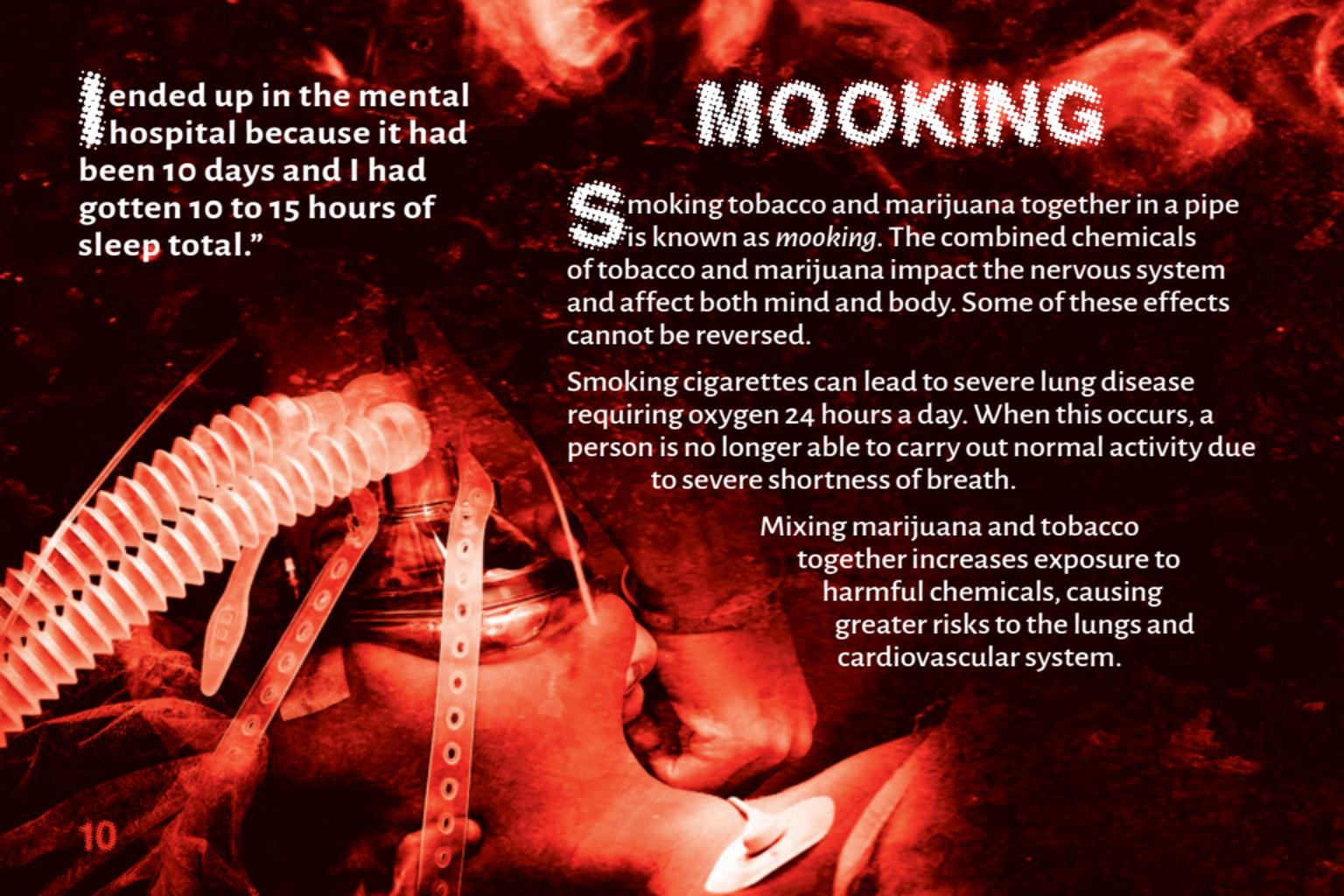


uncontrollable vomiting, known as *Cannabinoid Hyperemesis** Syndrome (CHS). Dabbing can even lead to death.

As legalization of marijuana expanded across the US, cannabis-related emergency visits of young people increased.

Dabbing exposes users to harmful chemicals and poisonous solvents employed in extracting marijuana concentrates.

* hyperemesis: excessive or severe vomiting (comes from the Greek words *hyper*, meaning “excessive,” and *emesis*, meaning “vomiting”)



I ended up in the mental hospital because it had been 10 days and I had gotten 10 to 15 hours of sleep total."

MOOKING

Smoking tobacco and marijuana together in a pipe is known as *mooking*. The combined chemicals of tobacco and marijuana impact the nervous system and affect both mind and body. Some of these effects cannot be reversed.

Smoking cigarettes can lead to severe lung disease requiring oxygen 24 hours a day. When this occurs, a person is no longer able to carry out normal activity due to severe shortness of breath.

Mixing marijuana and tobacco together increases exposure to harmful chemicals, causing greater risks to the lungs and cardiovascular system.

EDIBLES

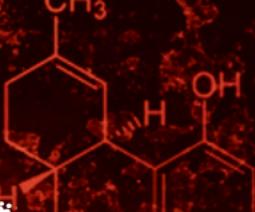
Edibles are food and beverages infused with THC, such as brownies, cookies, candy, sodas and tea. A lot of edible packaging resembles familiar candy and snacks that kids recognize, creating the impression that these high-content THC products are harmless. They are not.

When a person smokes marijuana, he feels the effects immediately. When a person consumes marijuana-infused food or drinks, it may take 30 to 60 minutes to digest, so the length of time for the drug to become activated is longer. Because of this, people often eat more. When the effects finally hit, the chances of becoming extremely intoxicated are greatly increased.

The THC content in edibles can vary widely, resulting in reports of extreme paranoia

and anxiety and, in some cases, even psychotic episodes. Here are just a few notable cases involving edibles:

- A reporter for *The New York Times* who ate a marijuana-infused candy bar said he spent the next eight hours curled up in a "hallucinatory state."
- A Wyoming teen ate a sixth of a marijuana-infused cookie. After about an hour he didn't feel anything, so he ate the rest of the cookie. After the effects of the drug kicked in, he jumped to his death from a fourth-floor balcony.



VAPING

Vaping marijuana involves placing it (or THC oil pods or cartridges containing 70–90 percent THC concentrate) in a vaporizer or e-cigarette and inhaling the heated vapor.

In addition to the harmful effects of high-potency THC on the brain and the rest of the body, vaping marijuana and tobacco, especially among teenagers and young adults, can cause another type of lung injury. It is called *EVALI* (*E-cigarette or Vaping product use-Associated Lung Injury*), which can lead to respiratory failure and death.

According to the Centers for Disease Control and Prevention (CDC), EVALI has caused nearly 70 deaths and over 2,700 hospitalizations in one year. Many of these victims suffer lifelong lung damage. One hospitalization resulted in a double-lung transplant for a 17-year-old.

The CDC also concluded that 82 percent of the vape cases investigated in connection with EVALI were found to contain marijuana. Due to this, the CDC and the US Food and Drug Administration (FDA) have advised people to stop using THC vapes altogether.

STREET NAMES

MARIJUANA

Blaze
Buds
Dagga
Dope
420
Ganja
Grass
Herb
Homegrown

J

Mary Jane
Pot
Puff
Reefer
Skunk
Texas Tea
Trees
Weed

HASHISH

Budder
Crumble
Hash
Honey Oil
Kush

TERMS FOR THE AMOUNT

Dime Bag: one gram of marijuana

Dub of Bud: two grams of marijuana

Quarter of Bud: a quarter-ounce of marijuana

Half a Zip: a half-ounce of marijuana

Zip: one ounce (28 grams) of marijuana

QP: a quarter-pound of marijuana

HOW MARIJUANA HAS CHANGED OVER TIME

The cannabis plant, from which drugs like marijuana and hashish are made, has been cultivated for over 2,000 years.

The amount of THC in the plant determines the strength of the drug. The quantity of THC found in marijuana is not consistent and has increased steadily in recent decades.

Using modern techniques, marijuana growers have developed strains of cannabis with much higher levels of THC than in the past. The average THC content of marijuana in the US today is 17–28 percent, with the highest level around 37 percent.

For comparison:

- The pot smoked from the late 1960s through the 1970s contained less than 2 percent THC.
- By the 1990s, THC levels had grown to about 4 percent.
- In the 2020s, the average potency is up to almost 30 percent.
- Dabs and edibles contain even more THC, sometimes reaching nearly 100 percent.

INCREASE OF THC IN MARIJUANA OVER TIME

The more THC, the more psychoactive the drug and the higher the potential for abuse, addiction and other harmful effects—not only for teenagers and young adults, but also for anyone using high-potency marijuana.

1960

1970

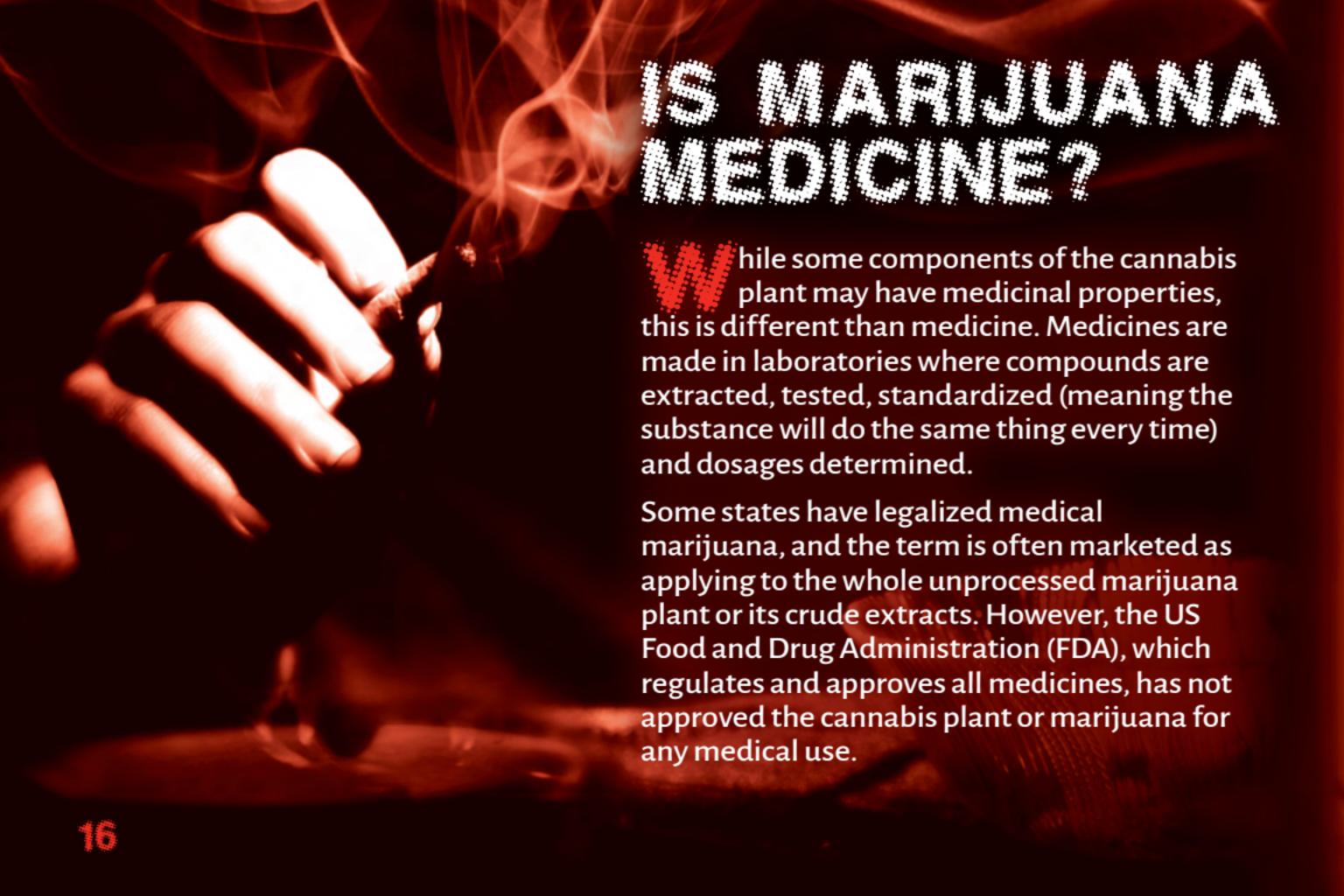
1980

1990

2000

2010

2020



IS MARIJUANA MEDICINE?

While some components of the cannabis plant may have medicinal properties, this is different than medicine. Medicines are made in laboratories where compounds are extracted, tested, standardized (meaning the substance will do the same thing every time) and dosages determined.

Some states have legalized medical marijuana, and the term is often marketed as applying to the whole unprocessed marijuana plant or its crude extracts. However, the US Food and Drug Administration (FDA), which regulates and approves all medicines, has not approved the cannabis plant or marijuana for any medical use.

A chemical found in the cannabis plant called *cannabidiol* (CBD) has been approved for treating seizures caused by two rare and severe forms of epilepsy in children. The FDA also approved several medicines made in pill form from synthetic THC, which can cause anxiety, paranoia, impaired memory and dizziness when taken over a long period of time or in high doses. More long-term studies are needed to fully understand the effects of both compounds on mental and physical health.

MARKETING MARIJUANA

Marketing marijuana as medicine has changed the perception of the drug, but the basic facts about its dangers remain. And while the debate over legalization presses on, legal does not equal safe or harmless.

Cigarettes are legal, but there is no debate about the fact that smoking is a health risk. Alcohol is legal, but look at the number of people battling alcohol addiction or illnesses associated with alcohol abuse.

Heroin was once sold as a cure for morphine addiction and included in cough syrup until research caught up with the marketing and found it to be highly addictive.

The bottom line: smoking marijuana can damage a person's lungs and cardiovascular system (heart and blood vessels) and, whether smoked, vaped or eaten, the THC in marijuana has damaging effects on the mind and body.

HOW MARIJUANA AFFECTS DRIVING

Marijuana significantly impairs judgment, motor coordination and reaction time—all crucial skills for driving safely. It is the second most common psychoactive substance after alcohol found among drivers involved in crashes, and studies have found a direct

relationship between blood THC content and impaired driving ability.

Two European studies found that drivers with THC in their systems were roughly twice as likely to be at fault for a fatal crash than drivers who had not used drugs or alcohol. Similarly, crashes



involving drivers with higher levels of THC in their blood showed they were three to seven times more likely to be responsible for the accident. While many marijuana users believe they can drive safely after smoking, the risks are significant.

A report from the American Automobile Association (AAA)

revealed that the number of drivers testing positive for marijuana after fatal crashes in Washington State doubled following legalization of marijuana. Before legalization, marijuana-impaired drivers accounted for around 8.8 percent of all drivers involved in traffic fatalities; this rate more than doubled after legalization.

THE HARMFUL EFFECTS OF MARIJUANA

The immediate effects of using marijuana include rapid heartbeat, disorientation and lack of physical coordination. Users may also experience feelings of anxiety, paranoia, distrust or panic. But the problem does not end there. According to scientific studies, the active ingredient in cannabis, THC, can be detected in the body for weeks or even months.

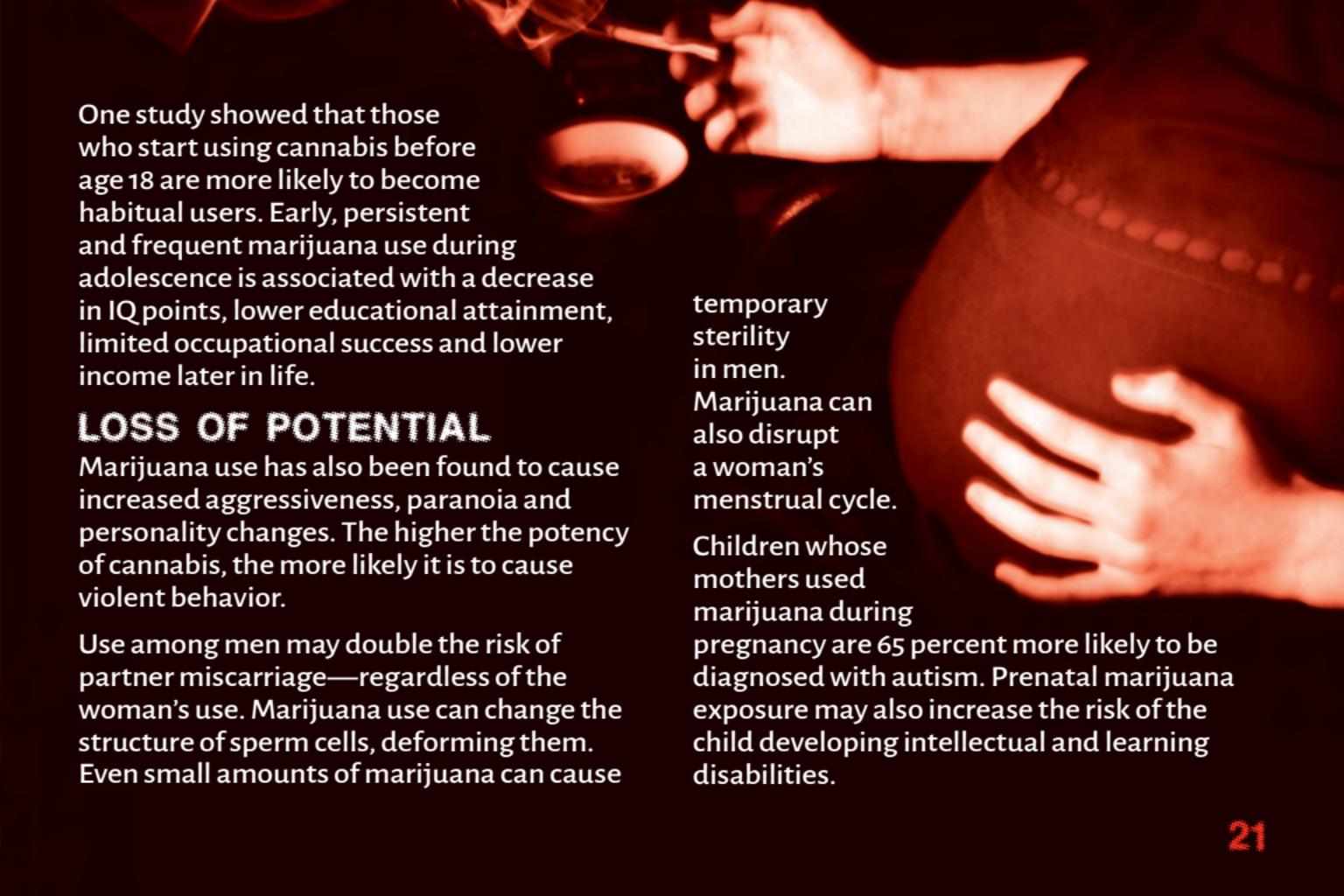
Heavy use can lead to many health problems. Marijuana contains 50 percent more cancer-causing chemicals than tobacco smoke and impairs the blood's oxygen-carrying capacity up to five times more than cigarettes.

In terms of adverse effects on the lungs, one cannabis joint is equivalent to between 2.5 and 5 cigarettes.

ADDICTION?

Contrary to earlier beliefs, marijuana has been found to be an addictive drug. Around 30 percent of marijuana users suffer from marijuana addiction. Youth who begin using marijuana before the age of 18 are four to seven times more likely to develop an addiction to marijuana.



A close-up photograph of a pregnant woman's belly. Her right hand is resting on her belly, and her left hand is holding a lit cigarette between her fingers. A glass of red wine is also visible in her left hand.

One study showed that those who start using cannabis before age 18 are more likely to become habitual users. Early, persistent and frequent marijuana use during adolescence is associated with a decrease in IQ points, lower educational attainment, limited occupational success and lower income later in life.

LOSS OF POTENTIAL

Marijuana use has also been found to cause increased aggressiveness, paranoia and personality changes. The higher the potency of cannabis, the more likely it is to cause violent behavior.

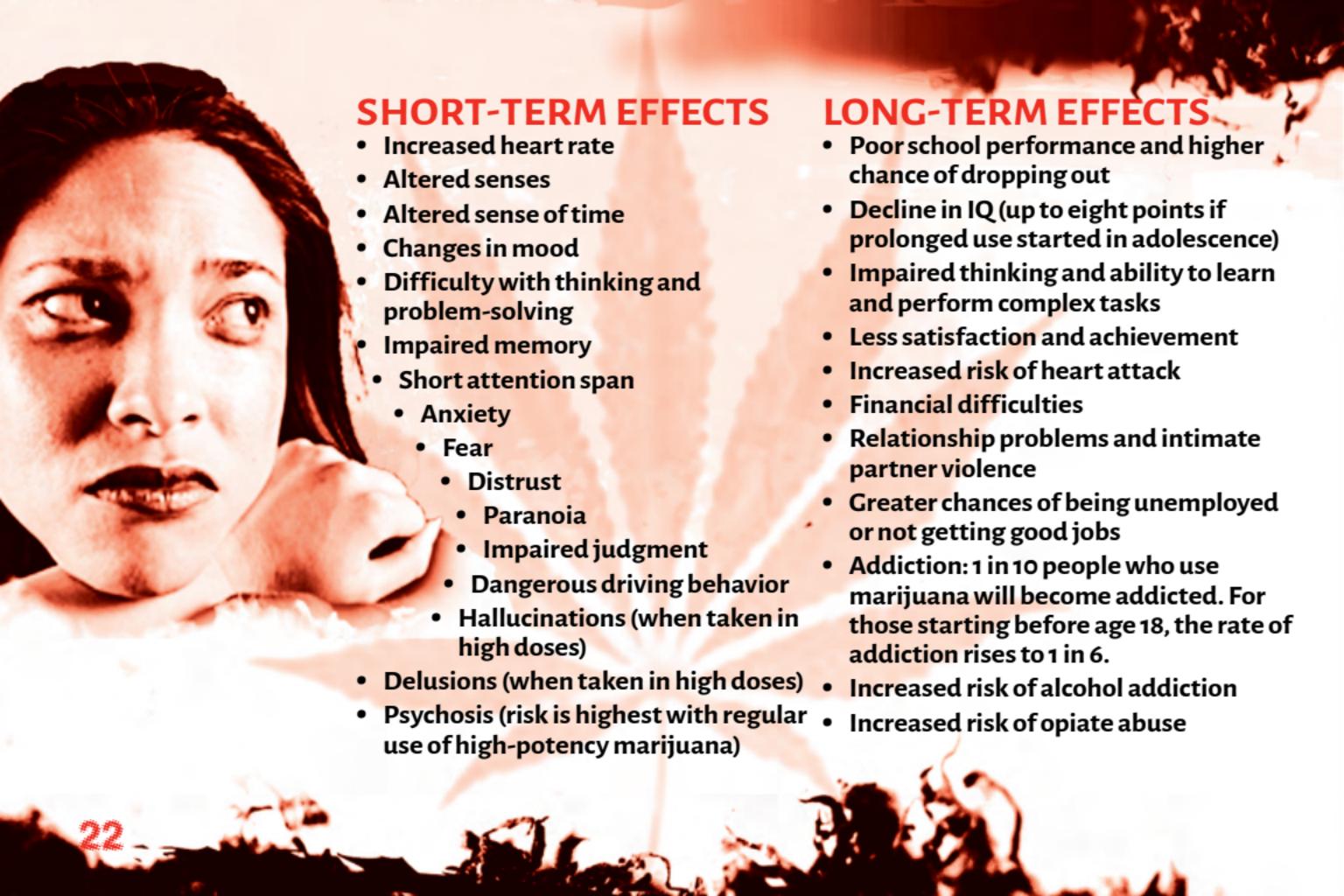
Use among men may double the risk of partner miscarriage—regardless of the woman's use. Marijuana use can change the structure of sperm cells, deforming them. Even small amounts of marijuana can cause

temporary sterility in men.

Marijuana can also disrupt a woman's menstrual cycle.

Children whose mothers used marijuana during

pregnancy are 65 percent more likely to be diagnosed with autism. Prenatal marijuana exposure may also increase the risk of the child developing intellectual and learning disabilities.

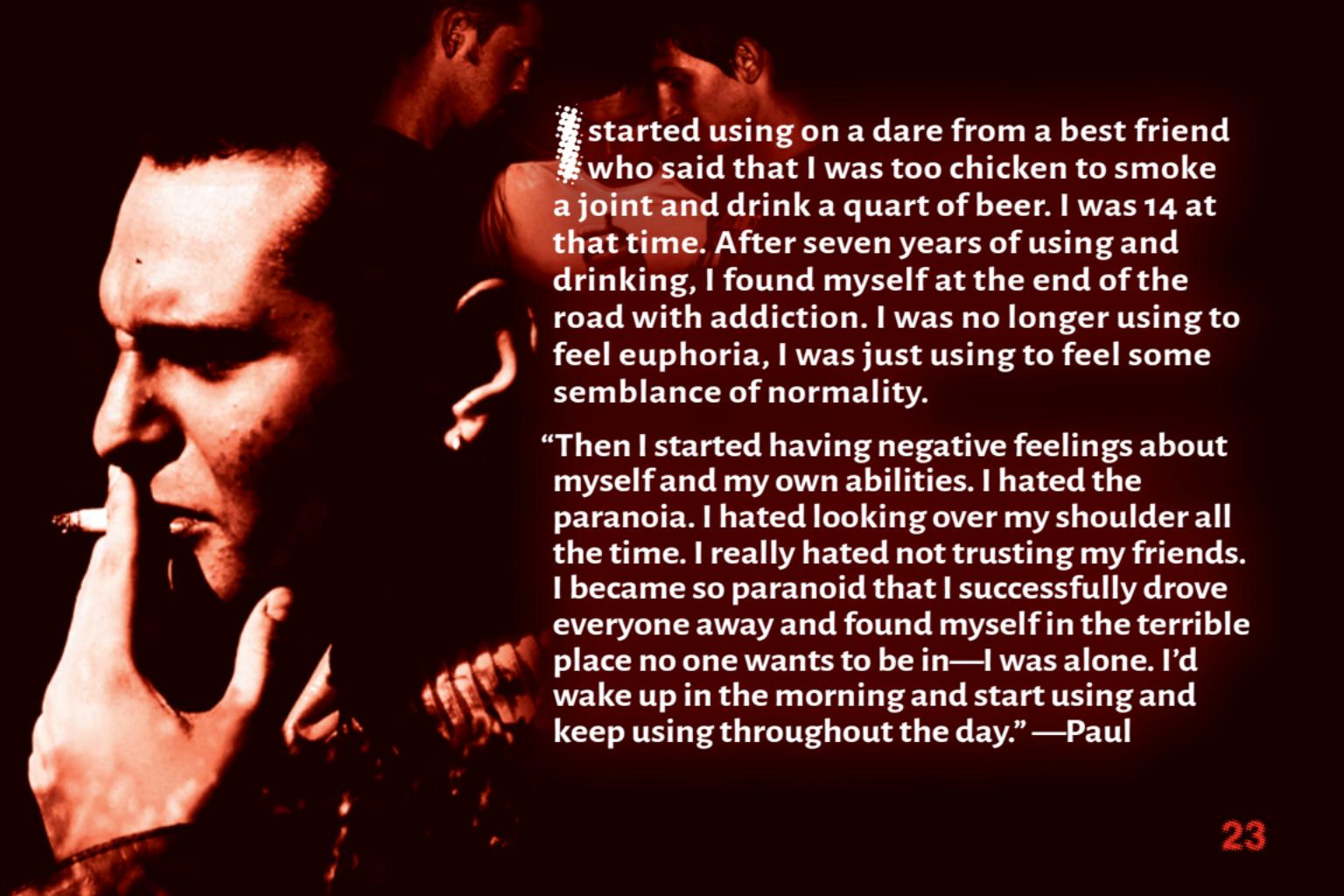


SHORT-TERM EFFECTS

- Increased heart rate
- Altered senses
- Altered sense of time
- Changes in mood
- Difficulty with thinking and problem-solving
- Impaired memory
- Short attention span
 - Anxiety
 - Fear
 - Distrust
 - Paranoia
 - Impaired judgment
 - Dangerous driving behavior
 - Hallucinations (when taken in high doses)
- Delusions (when taken in high doses)
- Psychosis (risk is highest with regular use of high-potency marijuana)

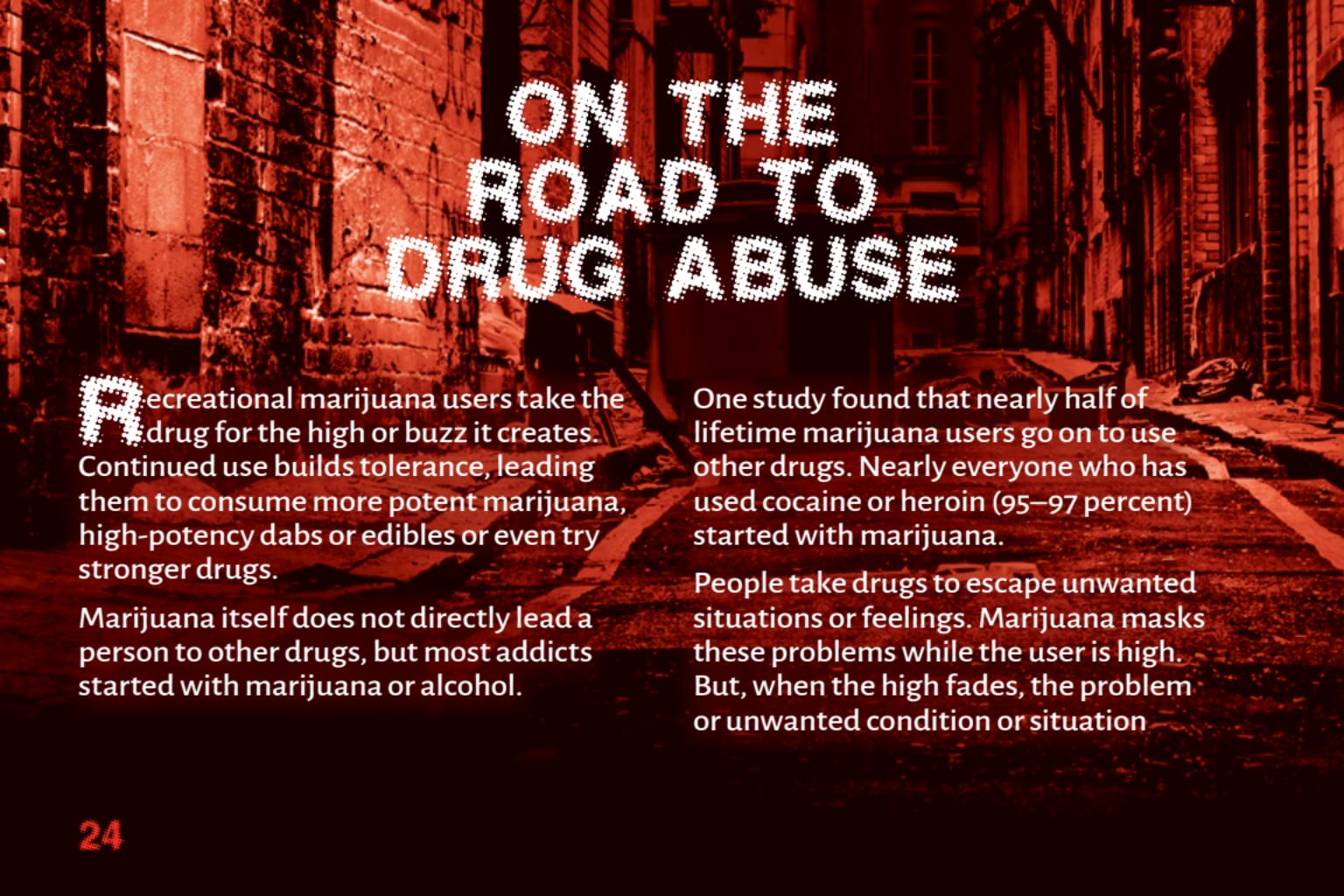
LONG-TERM EFFECTS

- Poor school performance and higher chance of dropping out
- Decline in IQ (up to eight points if prolonged use started in adolescence)
- Impaired thinking and ability to learn and perform complex tasks
- Less satisfaction and achievement
- Increased risk of heart attack
- Financial difficulties
- Relationship problems and intimate partner violence
- Greater chances of being unemployed or not getting good jobs
- Addiction: 1 in 10 people who use marijuana will become addicted. For those starting before age 18, the rate of addiction rises to 1 in 6.
- Increased risk of alcohol addiction
- Increased risk of opiate abuse

A close-up photograph of a man's face in profile, looking towards the left. He has short, light-colored hair and is holding a lit cigarette between his fingers, with smoke rising. In the background, slightly out of focus, is the profile of a woman's head, also facing left. The lighting is dramatic, with strong shadows.

I started using on a dare from a best friend who said that I was too chicken to smoke a joint and drink a quart of beer. I was 14 at that time. After seven years of using and drinking, I found myself at the end of the road with addiction. I was no longer using to feel euphoria, I was just using to feel some semblance of normality.

“Then I started having negative feelings about myself and my own abilities. I hated the paranoia. I hated looking over my shoulder all the time. I really hated not trusting my friends. I became so paranoid that I successfully drove everyone away and found myself in the terrible place no one wants to be in—I was alone. I’d wake up in the morning and start using and keep using throughout the day.” —Paul



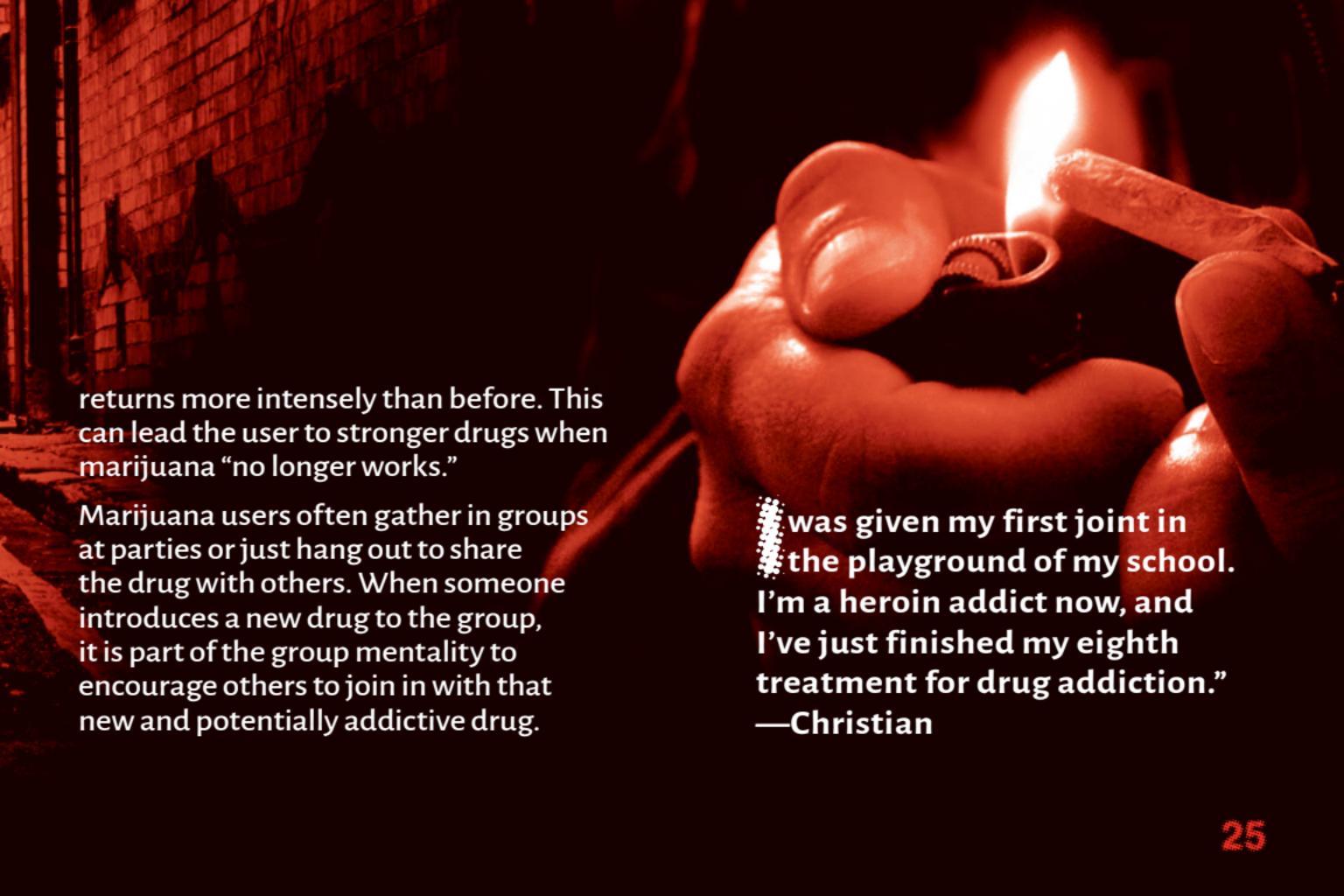
ON THE ROAD TO DRUG ABUSE

Recreational marijuana users take the drug for the high or buzz it creates. Continued use builds tolerance, leading them to consume more potent marijuana, high-potency dabs or edibles or even try stronger drugs.

Marijuana itself does not directly lead a person to other drugs, but most addicts started with marijuana or alcohol.

One study found that nearly half of lifetime marijuana users go on to use other drugs. Nearly everyone who has used cocaine or heroin (95–97 percent) started with marijuana.

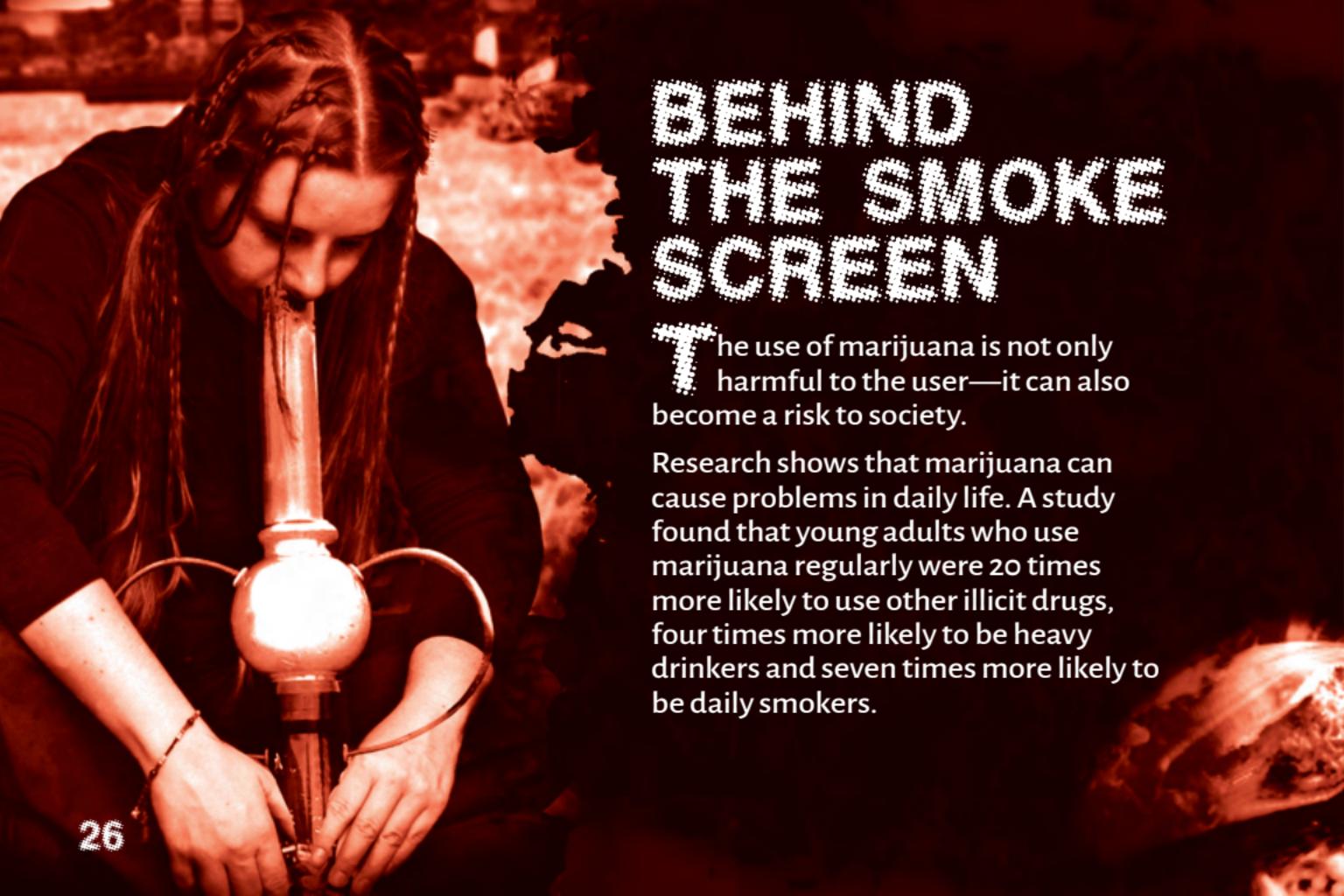
People take drugs to escape unwanted situations or feelings. Marijuana masks these problems while the user is high. But, when the high fades, the problem or unwanted condition or situation

A close-up photograph of a person's hand holding a lit cigarette or joint. The hand is positioned in the lower right corner, with the fingers gripping the end of the cigarette. A bright, glowing flame is visible at the top of the cigarette. The background is dark and out of focus.

returns more intensely than before. This can lead the user to stronger drugs when marijuana "no longer works."

Marijuana users often gather in groups at parties or just hang out to share the drug with others. When someone introduces a new drug to the group, it is part of the group mentality to encourage others to join in with that new and potentially addictive drug.

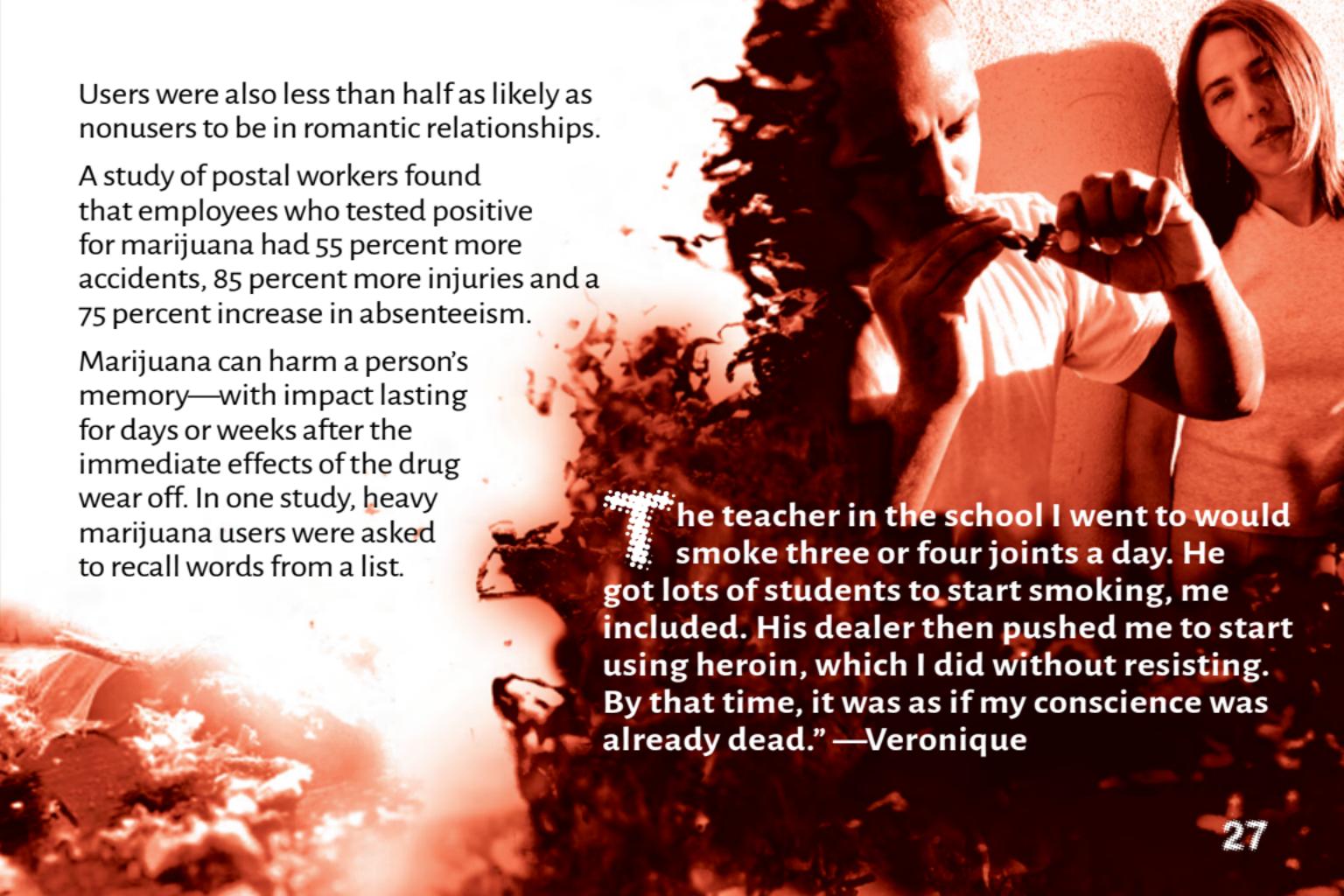
"I was given my first joint in the playground of my school. I'm a heroin addict now, and I've just finished my eighth treatment for drug addiction."
—Christian

A woman with long hair and braids is shown from the chest up, blowing a large plume of white smoke from a hookah pipe. She is wearing a dark long-sleeved shirt. In the background, another person's head is visible, also blowing smoke. The scene is set against a dark, moody background with some foliage.

BEHIND THE SMOKE SCREEN

The use of marijuana is not only harmful to the user—it can also become a risk to society.

Research shows that marijuana can cause problems in daily life. A study found that young adults who use marijuana regularly were 20 times more likely to use other illicit drugs, four times more likely to be heavy drinkers and seven times more likely to be daily smokers.

A dramatic, high-contrast photograph of a man and a woman. The man, on the left, is shown from the chest up, holding a lit joint in his right hand and taking a drag. A large plume of white smoke billows out from his mouth. He has short hair and is wearing a light-colored t-shirt. To his right, a woman with long, straight hair and a neutral expression looks towards the camera. She is also wearing a light-colored t-shirt. The background is dark and out of focus.

Users were also less than half as likely as nonusers to be in romantic relationships.

A study of postal workers found that employees who tested positive for marijuana had 55 percent more accidents, 85 percent more injuries and a 75 percent increase in absenteeism.

Marijuana can harm a person's memory—with impact lasting for days or weeks after the immediate effects of the drug wear off. In one study, heavy marijuana users were asked to recall words from a list.

The teacher in the school I went to would smoke three or four joints a day. He got lots of students to start smoking, me included. His dealer then pushed me to start using heroin, which I did without resisting. By that time, it was as if my conscience was already dead.” —Veronique

A close-up, low-angle shot of a person's face as they take a drag from a cigarette. The lighting is dramatic, casting deep shadows and highlighting the smoke. The person has dark hair and is wearing a dark shirt.

Their ability to remember the words did not return to normal until up to four weeks after they stopped smoking.

Students who use marijuana have lower grades and are less likely to get into college compared to nonusers. They do not have the same ability to remember and organize information.

WHAT DEALERS WILL TELL YOU

Whether legal or illegal, marijuana is big business, and the goal is to make lots of money.

When teens were surveyed to find out why they started using drugs, 55 percent replied that it was due to pressure from their friends. The marijuana industry and those selling the drug want to make it seem like using marijuana is harmless, that it will “help you out,” is something to “bring you up,” “help you fit in” or “make you cool.”

For the marijuana industry to thrive, they need addicted customers, as the majority

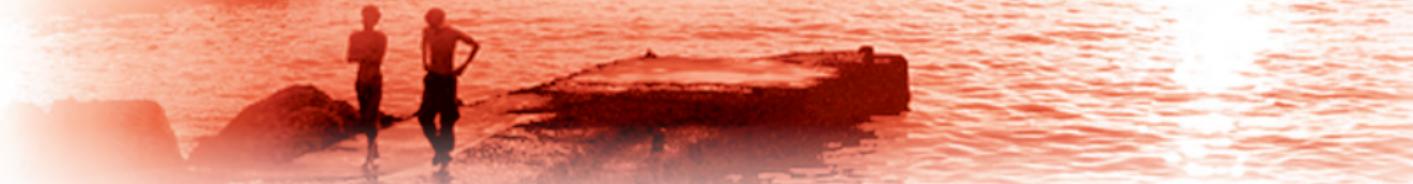
of their profits come from addicts, not casual users. Since people are more likely to become addicted if they start young, much of marijuana marketing targets young people like you.

Motivated by the profits, they will say anything to get you to buy their drugs.

Drug dealers don’t care if the drugs ruin your life as long as they get paid. All they care about is money.

Get the facts about drugs. Make your own decisions.

The Truth About Drugs



Drugs are essentially poisons. The amount taken determines the effect.

A small amount acts as a stimulant (speeds you up). A greater amount acts as a sedative (slows you down). An even larger amount poisons and can kill.

This is true of any drug. Only the amount needed to achieve the effect differs.

But many drugs have another liability: they directly affect the mind. They can distort the user's perception of what is happening around him or her. As a result, the person's actions may be odd, irrational, inappropriate and even destructive.

Drugs block off all sensations, the desirable ones along with the undesirable. So, while providing short-term help in the relief of pain, they also wipe out ability and alertness and muddy one's thinking.

Medicines are drugs that are intended to speed up, slow down or change something about the way your body is working to try to make it work better. Sometimes they are necessary. But they are still drugs: they act as stimulants or sedatives, and too much can kill you. So if you do not use medicines as they are supposed to be used, they can be as dangerous as illegal drugs.

WHY DO PEOPLE TAKE DRUGS?

People take drugs because they want to change something in their lives.

Here are some of the reasons young people have given for taking drugs:

- To fit in
- To seem grown-up
- To escape or relax
- To rebel
- To relieve boredom
- To experiment

They think drugs are a solution. But eventually, drugs become the problem.

Difficult as it may be to face one's problems, the consequences of drug use are always worse than the problem one is trying to solve with them.

The real answer is to get the facts and to not take drugs in the first place.

Millions of copies of booklets such as this have been distributed to people around the world in over 20 languages.

As new drugs appear on the streets and more information about their effects becomes known, existing booklets are updated and new ones created.

The booklets are published by the Foundation for a Drug-Free World, a nonprofit public benefit organization headquartered in Los Angeles, California.

The foundation provides educational materials, advice and coordination for its international drug prevention network. It works with youth, parents, educators, volunteer organizations and government agencies—anyone with an interest in helping people lead lives free from drug abuse.

REFERENCES:

For the references used to compile this booklet, go to DrugFreeWorld.org/refs.

PHOTO CREDITS: pages 20, 22: Alamy

FACTS YOU NEED TO KNOW



This booklet is one in a series of publications that covers the facts about marijuana, alcohol, fentanyl, synthetic drugs, Ecstasy, cocaine, crack cocaine, crystal meth and methamphetamine, inhalants, heroin, LSD and prescription drug abuse. Armed with this information, the reader can make the decision to live a drug-free life.

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