



mind
matters

THE BODY'S RESPONSE TO

MARIJUANA

Hi there! Mind Matters is a series that explores the ways that different drugs affect your brain, body, and life. In this issue, we are going to talk about marijuana.

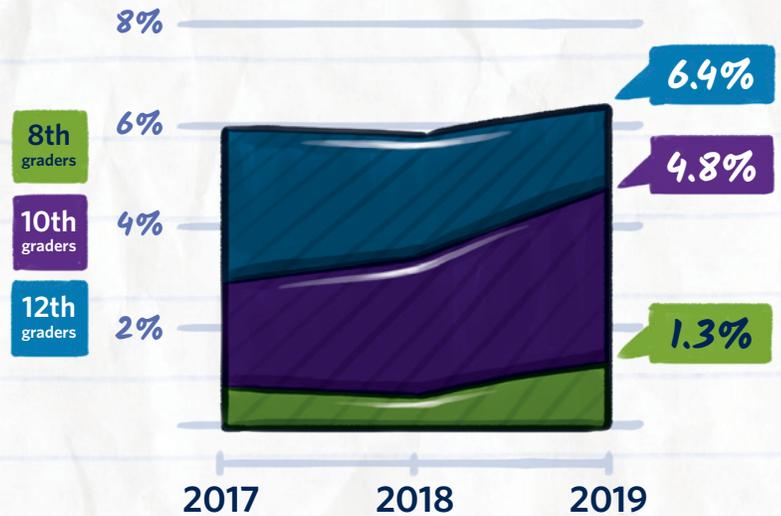
What is marijuana?

Marijuana is made of dried flowers, leaves, and seeds from the *Cannabis* plant. Many people use marijuana to get high, but some also use it as medicine. You might have heard marijuana called other names, like **"weed"** or **"pot."**

People think that because marijuana is a plant, it can't be bad for them. But many dangerous drugs like cocaine, heroin, and tobacco also come from plants and are "natural" like marijuana. In fact, marijuana has **hundreds of chemicals** in it, some of which can harm your brain.

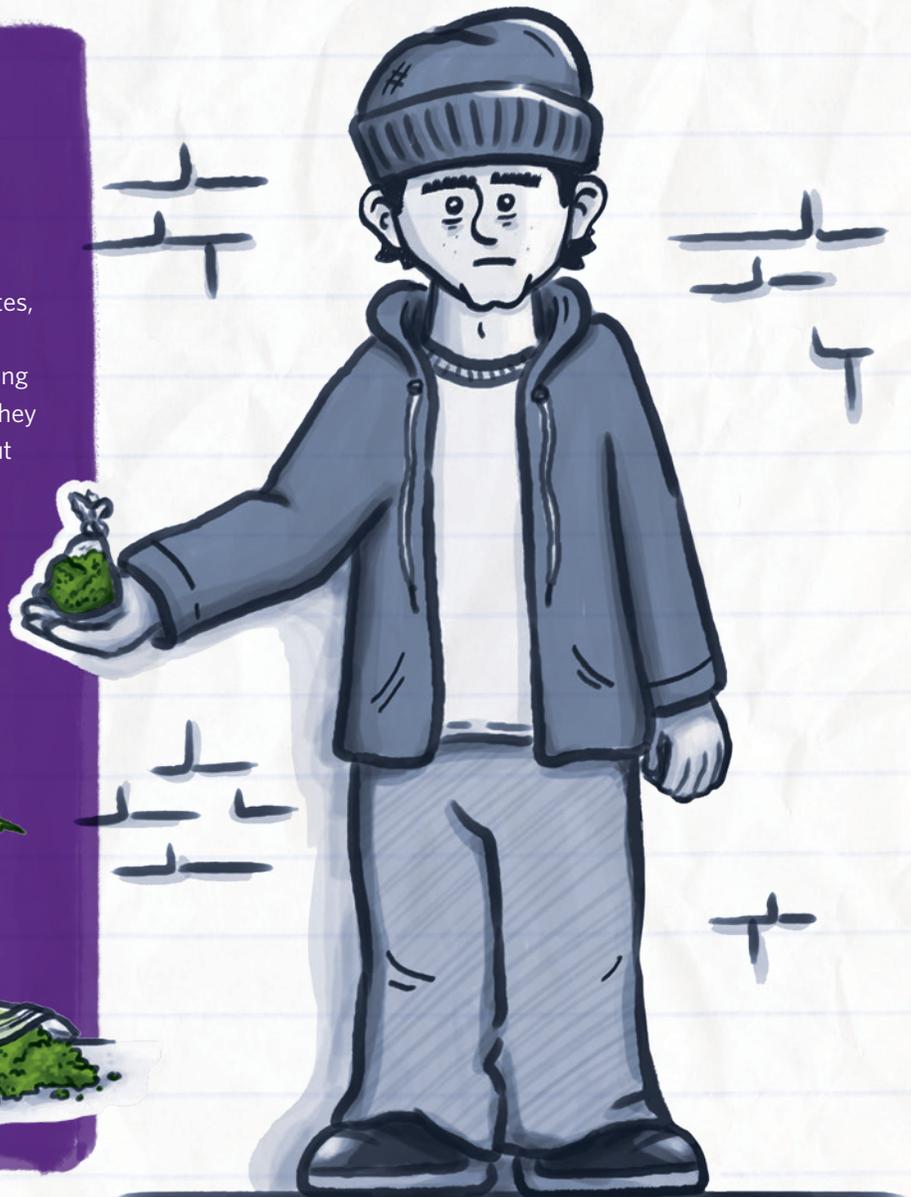
DAILY MARIJUANA USE

sees significant increase among 8th and 10th graders since 2018



How do people use marijuana?

People can smoke marijuana rolled up like cigarettes, put it into tea, or cook it into food or candy. Some people think that it is safer to inhale marijuana using electronic cigarettes, or vaping devices, because they are not inhaling smoke. This is called **"vaping."** But studies show that vaping can be harmful because you still inhale the same brain-altering chemicals.



How does marijuana work?

Marijuana changes how the brain works.

It affects brain cells (neurons) in parts of the brain that control body coordination, memory, pleasure, and judgment.

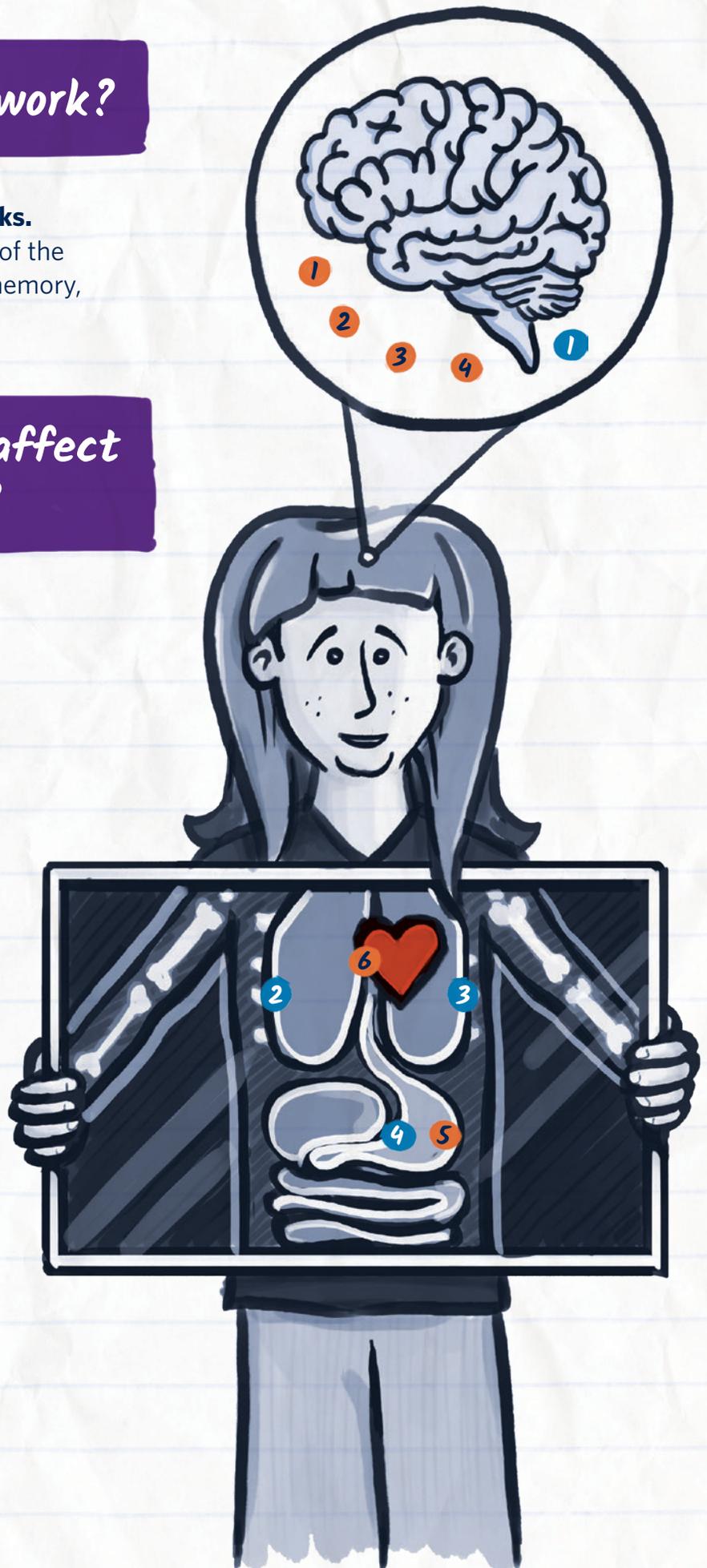
How does marijuana affect your brain and body?

Short-Term Effects

- 1 Loss of coordination and slower reactions
- 2 Altered sense of time
- 3 Feeling relaxed
- 4 Anxiety, fear, distrust, or panic (in some users or when taken in high doses)
- 5 Increased hunger
- 6 Faster heart rate

Long-Term Effects

- 1 Problems with memory and learning skills
- 2 Problems with breathing
- 3 Cough or lung sickness
- 4 Severe nausea and vomiting



Can you become addicted to marijuana?

Yes, you can. Over time, your body can get used to marijuana, so you feel bad if you don't take it. You might take it all the time just to feel normal and keep taking it even if it gets in the way of school, work, or friendships. **This is called addiction.**

Anyone can become addicted to marijuana. It doesn't matter how smart you are or where you live. There is no way to predict who is likely to become addicted.



What about medical marijuana?

Research shows that some of the chemicals in marijuana might be helpful with some kinds of pain, nausea, or possibly other conditions. Some states allow people with a wide range of illnesses to get marijuana legally as medicine, even though science hasn't proved it works for many of these illnesses. The government has also approved a few medicines in pill form that have marijuana chemicals in them but don't make you high.

Only a doctor can give you these medicines. Scientists are looking at ways that chemicals in marijuana can help with other conditions, but it will take years of research.

Did you know that using marijuana as a teen can change how your brain grows?

That's because your brain is still growing and changing until you get into your 20s.

Is marijuana legal?

Laws about marijuana for recreational use vary by state but it is **not legal for teens** in any state.





What if someone I know needs help?

If you think a friend or family member has a problem with drugs, talk to an adult you trust — like a parent, coach, or teacher — right away. Remember, treatment is available and people can get better.

For more information, go to nida.nih.gov.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
NIH Publication No. 20-DA-8050
Revised April 2022

*This publication is available for your use and may be reproduced **in its entirety** without permission from NIDA. Citation of the source is appreciated, using the following language:*

Source: National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.

*Johnston, et al. (2020). *Monitoring the Future national survey results on drug use: 1975–2019: Overview, key findings on adolescent drug use*. Ann Arbor: Institute for Social Research, The University of Michigan.