



THE BODY'S RESPONSE TO
**NICOTINE, TOBACCO,
AND VAPING**

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 nicotine, tobacco, and vaping.

What is nicotine?

Tobacco is a leafy plant grown all around the world. Tobacco is used by so many people because it contains a powerful drug called nicotine. **Nicotine is very addictive.**



How do people use tobacco and nicotine?

People can **smoke, sniff, chew, or inhale** the vapors of tobacco and nicotine products.

SOME PRODUCTS THAT YOU SMOKE OR INHALE:



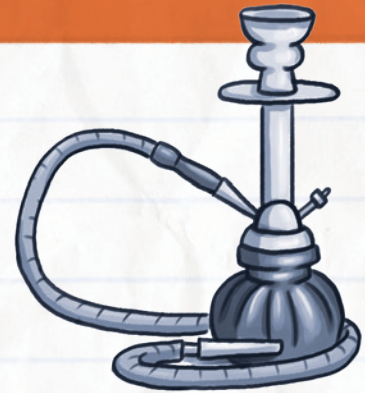
CIGARETTES



CIGARS



VAPING DEVICES



HOOKAHS

SMOKELESS PRODUCTS:



**CHEWING
TOBACCO**



SNUFF
*Ground tobacco that can be sniffed
or put between your cheek and gums*



DIP
Wet snuff that is chewed



SNUS
Small pouch of wet snuff

How does nicotine work?

Nicotine is absorbed into your bloodstream and goes to your adrenal glands just above your kidneys. The glands release adrenaline which **increases your blood pressure, breathing, and heart rate**. Adrenaline also gives you a lot of good feelings all at once.

Just being around people who are smoking can be dangerous.

Breathing other people's smoke can lead to lung cancer and heart disease.

What are other health effects?

While nicotine is addictive, most of the health effects come from other tobacco chemicals. Tobacco use harms every organ in your body. Smoking tobacco products can cause lung, mouth, stomach, kidney, and bladder cancers. It can also cause lung problems, like coughing, and lead to heart disease, eye problems, and yellow teeth.

Smokeless tobacco products are dangerous, too. They can cause oral cancer and heart and gum disease.



Eyes



Mouth



Heart



Stomach



Bladder



Kidney

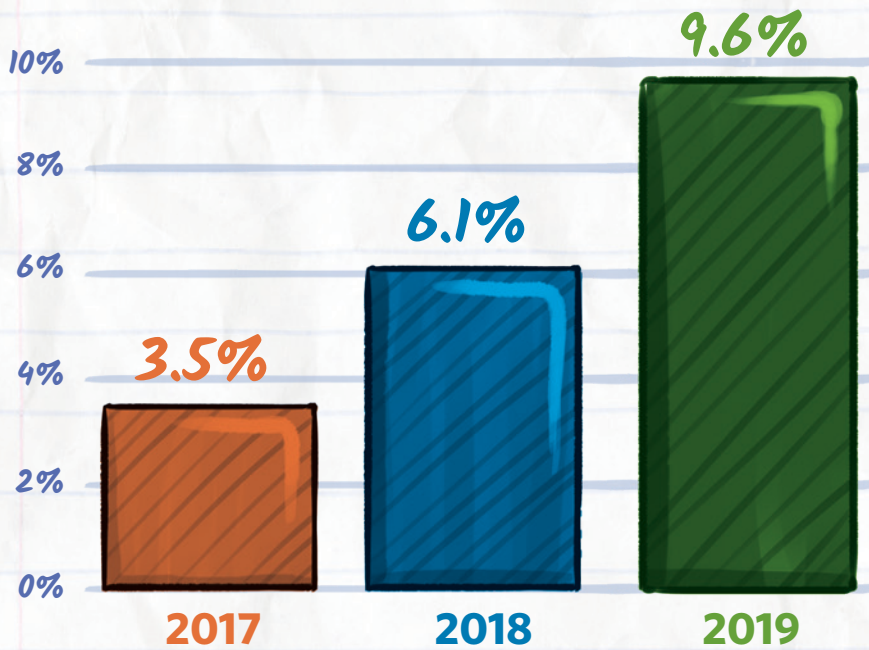
How do you become addicted to nicotine?

Over time, the nicotine in tobacco can change the way your brain works. If you stop using it, your body can get confused and you can start to feel really sick. This makes it hard to stop using these products even when you know it's bad for you. This is called addiction.

It can be very hard to stop smoking, but there are some medications that can help.



8TH GRADERS WHO VAPED IN THE PAST MONTH



Tobacco and Nicotine Vaping Threatens Progress

In 2019, 0.8% of 8th graders said they smoked cigarettes daily, but 1.9% said they vaped nicotine daily.

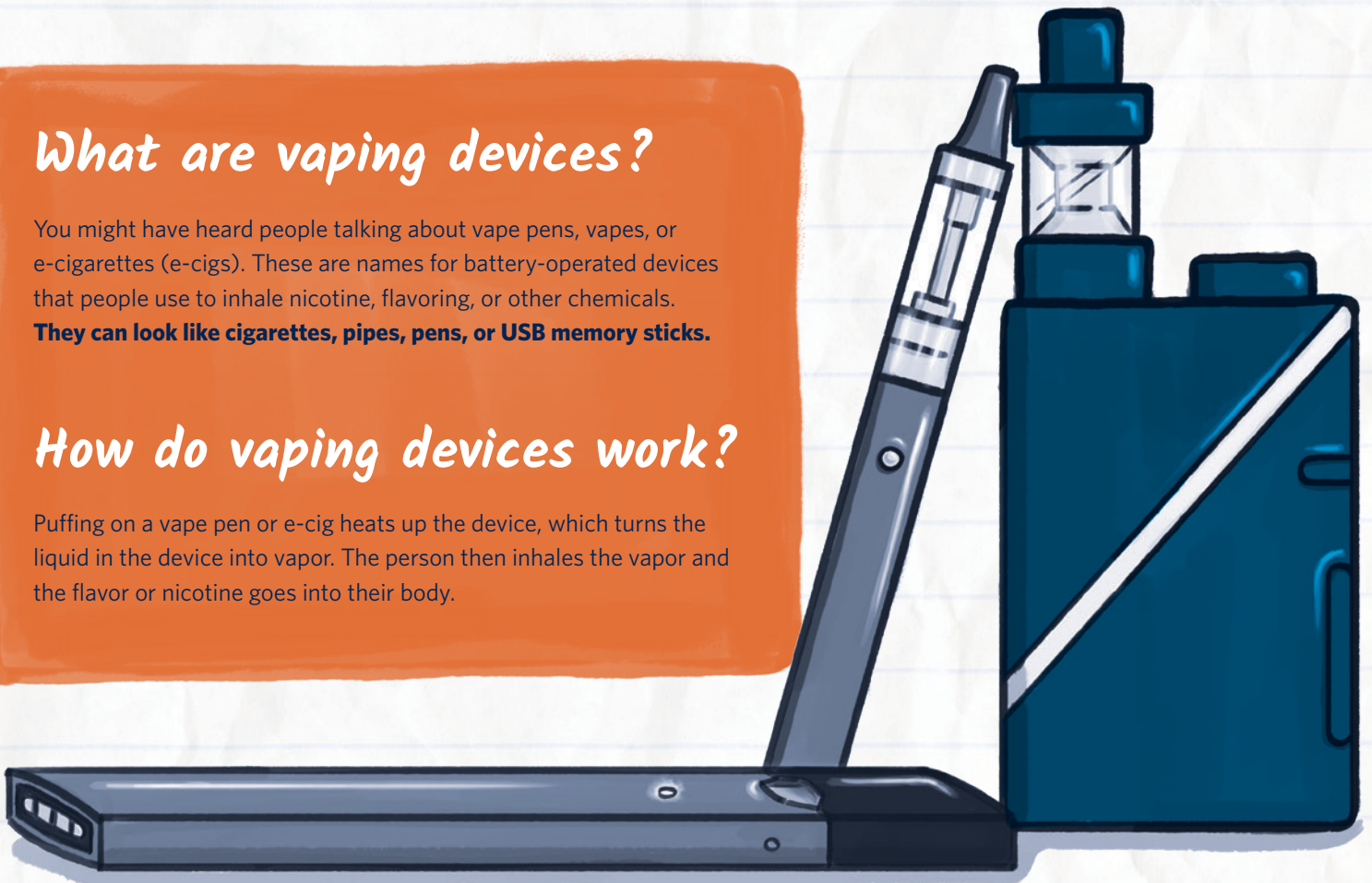
What are vaping devices?

You might have heard people talking about vape pens, vapes, or e-cigarettes (e-cigs). These are names for battery-operated devices that people use to inhale nicotine, flavoring, or other chemicals.

They can look like cigarettes, pipes, pens, or USB memory sticks.

How do vaping devices work?

Puffing on a vape pen or e-cig heats up the device, which turns the liquid in the device into vapor. The person then inhales the vapor and the flavor or nicotine goes into their body.



Can vaping devices help you stop smoking?

Some people think that vaping can help you stop smoking. But actually, **there is not enough science to prove this.** In fact, some research shows that non-smoking preteens and teens who vape nicotine might go on to use other tobacco products like cigarettes.



What if someone I know needs help?

If you think a friend or family member has a problem with tobacco or 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-8052
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.