



NICOTINE VAPING AND THE DEVELOPING BRAIN

DAMAGE BEYOND THE LUNGS

A HEALTHY BRAIN IS A VAPE-FREE BRAIN.

Each time a new memory is created or a new skill is learned, stronger connections are built between brain cells. Young brains build connections faster than adult brains and nicotine changes the way these are formed. As a result, teens can get addicted to nicotine more easily.

WHAT ARE THE EFFECTS?

Nicotine's effect on the prefrontal cortex, one of the last parts of the brain areas to mature, is particularly important because this is the decision-making center of the brain.

Addiction: Nicotine can prime the adolescent brain for addiction to other drugs

Attention: Exposure to nicotine alters the receptors for the brain's chemical messengers

Mood: Adolescent brains exposed to nicotine are at an elevated risk for mood disorders

Impulse control: Nicotine use as a youth can lead to a permanent lowering of impulse control

WHO'S AT RISK?

Anyone who vapes will experience its negative effects, but young people under the age of 25 are at the highest risk of vaping-related damage because the brain is not fully developed. As a result, they are more likely to take risks with their health and safety. Peer pressure, the desire to fit in, can influence a young person to start vaping. Understanding the negative effects of vaping is key to prevention.





**MORE
THAN 2.1
MILLION
YOUNG
PEOPLE
CURRENTLY
VAPE**

HOW TO MINIMIZE RISK

- Knowing the negative effects
- Being in a vape-free environment
- Having strategies to avoid vaping
- Participating in activities like sports, theatre, or volunteering
- Supportive community
- Strong social connections

HOW TO HELP

The best way to avoid the negative effects of vaping on the brain is to not vape. The sooner a teen brain is free of nicotine, the sooner it can recover from the harmful effects. If you or someone you know is vaping, there are many places to get help, including:

**www.teen.smokefree.gov/quit-vaping
1-800-QUIT-NOW**

**GROWING BRAINS DESERVE
BETTER THAN NICOTINE.**