



American Heart Association.

The truth about...

How Tobacco and Nicotine Harm Mental Health + Brain Development

We know that tobacco use and nicotine addiction can harm heart and lung health, but emerging research shows it also negatively impacts mental health and brain development.



USING E-CIGARETTES, including vaping products **CAN WORSEN DEPRESSION** symptoms in youth.

Frequent users of e-cigarettes have **2.4X HIGHER ODDS**

of reporting depression compared to people who have never used e-cigarettes.

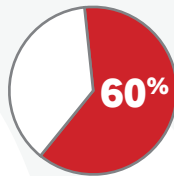


A study has shown **COLLEGE STUDENTS** who use **E-CIGARETTES HAVE HIGHER RATES** of attention deficit hyperactivity disorder (ADHD) symptoms.



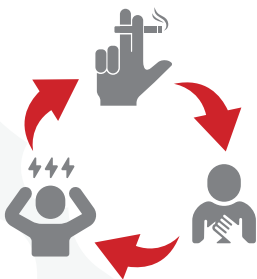
More than **4 IN 5 YOUTH AND YOUNG ADULTS SURVEYED** said they started using e-cigarettes to decrease stress, anxiety or depression.

In a recent survey of 1,000 15-to-24-year-olds who frequently use e-cigarettes, **60%** say they **DIDN'T KNOW** that using these products could actually increase their anxiety and irritability.



Many tobacco users **MISTAKENLY BELIEVE** tobacco products can relieve stress or anxiety, or improve mental health or mood.

This could be due to the **CYCLE OF WITHDRAWAL SYMPTOMS** caused by tobacco use that are followed by temporary relief once they use again.



Studies have suggested that **NICOTINE ALTERS FEAR AND ANXIETY RESPONSES**, and contributes to the development, maintenance and recurrence of anxiety disorders.



KICKING THE ADDICTION to nicotine can reduce anxiety, depression and stress, and improve positive mood and quality of life.



Nicotine/Tobacco Symptoms:

- Nicotine disrupts memory, attention and drug reward processing — and these effects are even more serious during brain development.
- Young people who use nicotine have a harder time paying attention in class and remembering what's being taught.
- Youth exposed to nicotine experience increased difficulty regulating emotional responses well into adulthood.

