

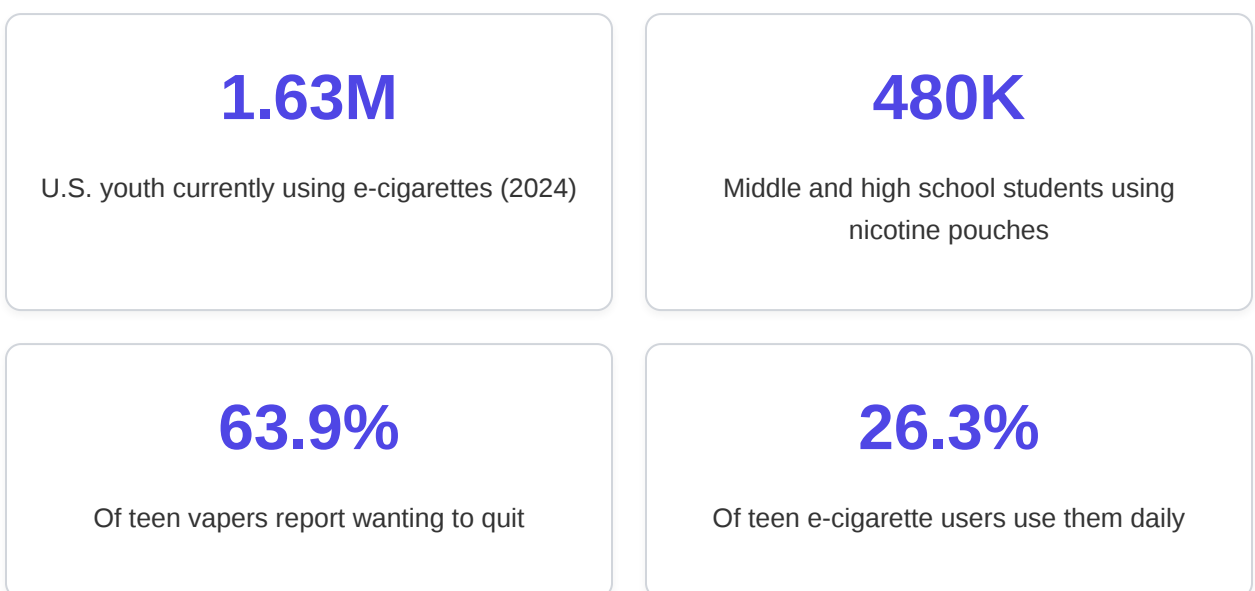
# THE TRUTH ABOUT VAPING & NICOTINE

EVIDENCE-BASED FACTS FOR TEENS AND PARENTS - 2025 EDITION

### Key Takeaway

Vaping and nicotine products pose significant risks to teen health. They contain addictive substances and harmful chemicals that can impact brain development, respiratory health, and lead to long-term dependence.

### Current Vaping Statistics



### Health Impacts of Nicotine on Teen Brains

#### Short-Term Effects

- Increased heart rate and blood pressure
- Reduced impulse control
- Mood disorders
- Attention and learning problems
- Anxiety and irritability when not using

#### Long-Term Consequences

- Altered brain development until age 25
- Increased risk of addiction to other substances
- Cognitive deficits and memory impairment
- Potential permanent changes to brain structure
- Increased susceptibility to mental health issues

### Brain Science Fact

Nicotine reaches the brain within 10 seconds of use, making it one of the most rapidly acting drugs. The adolescent brain is particularly vulnerable to nicotine's effects because brain development continues until approximately age 25.

### Different Nicotine & Cannabis Products & Their Risks

#### E-Cigarettes/Vapes

- What they are:** Battery-operated devices that heat liquid to produce aerosol
- Health risks:** Lung damage, nicotine addiction, exposure to harmful chemicals
- Deceptive marketing:** Often marketed as "safe alternatives" despite significant health risks

#### Nicotine Pouches (Zyn, etc.)

- What they are:** Tobacco-free pouches containing nicotine powder and flavorings
- Health risks:** Nicotine addiction, cardiovascular issues, gum damage
- Hidden dangers:** A 2022 study found cancer-causing chemicals in 26 of 44 tested pouches

#### Cannabis Vaping Devices

- What they are:** Devices used to vape cannabis oils, waxes, or dry herb
- Health risks:** Respiratory problems, high-potency THC exposure, risk of contaminants
- Concerning trend:** Cannabis vaping is rapidly increasing among teens, with devices often modified

#### Disposable Vapes

- What they are:** Pre-filled, single-use e-cigarettes designed to be discarded
- Health risks:** Same as regular vapes, plus environmental harm from batteries and plastic
- Youth appeal:** Colorful designs, sweet flavors, and low prices target young users

### Warning: "Tobacco-Free" ≠ Risk-Free

Products marketed as "tobacco-free" or "clean nicotine" still contain highly addictive nicotine and often have harmful chemicals. Nicotine in any form poses serious health risks, especially for developing brains.

### Cannabis Vaping & Co-Use with Nicotine

#### Growing Trend

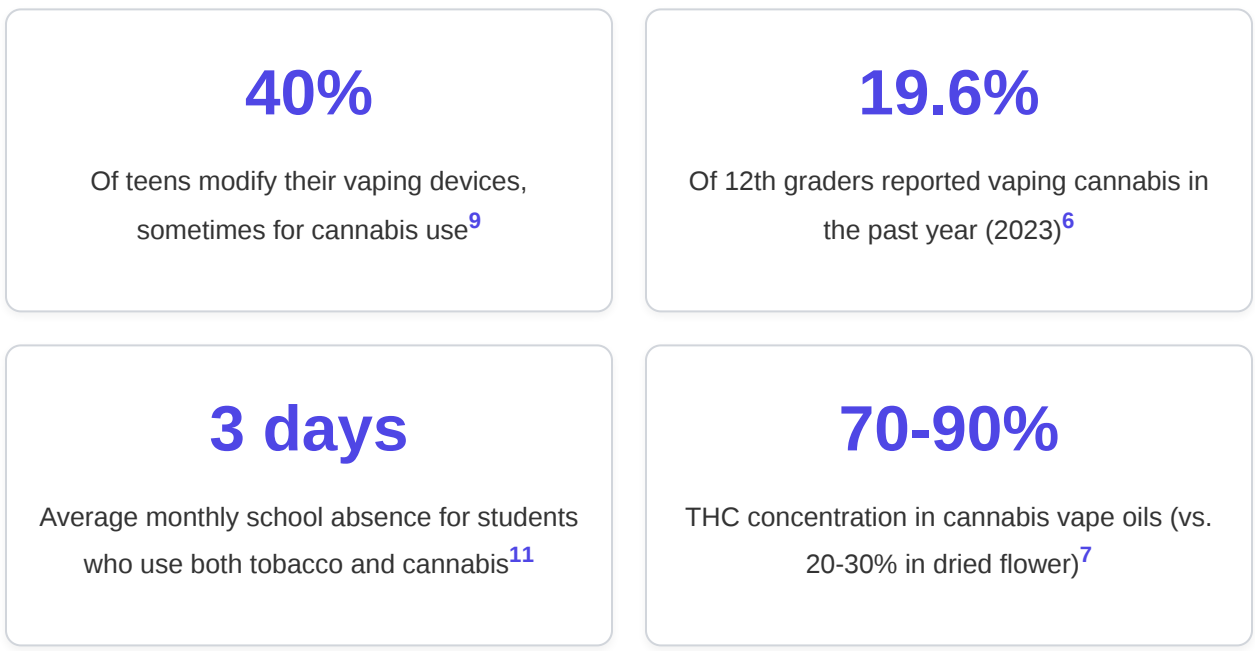
Cannabis vaping among teens is increasing at an alarming rate. In 2023, 19.6% of 12th graders reported vaping cannabis in the past year.<sup>6</sup> Many teens don't realize that cannabis vape oils can contain 70-90% THC concentration, compared to 20-30% in dried cannabis flowers.<sup>7</sup>

#### Cannabis Vaping Risks

- Respiratory problems:** Increased likelihood of wheezing, coughing, and lung inflammation<sup>8</sup>
- Higher potency:** Cannabis oils deliver more intense THC doses than smoking<sup>7</sup>
- Lung injury:** Linked to EVALI (E-cigarette or Vaping product use-Associated Lung Injury)<sup>9</sup>
- Brain development:** THC can affect memory, learning and cognitive function<sup>10</sup>
- Dependence risk:** High-potency products increase likelihood of addiction<sup>10</sup>

#### Co-Use Concerns

- Academic impact:** Students who use both tobacco and cannabis have lower grades and more absences<sup>11</sup>
- Gateway effect:** Nicotine vaping increases odds of subsequent cannabis vaping<sup>12</sup>
- Device modification:** About 40% of teens modify vaping devices, sometimes to use with cannabis<sup>9</sup>
- Combined addiction:** Dual use makes quitting more difficult<sup>13</sup>
- Social outcomes:** Combined use associated with more behavioral and social problems<sup>10</sup>



### Co-Use Warning Signs

Warning signs of cannabis and nicotine co-use include declining academic performance, increased absences, respiratory symptoms, sudden behavior changes, and possession of multiple types of vaping devices or accessories.<sup>11,13</sup>

### Finding Help: Quitting Resources

- Text-to-Quit Programs:** Text "DITCHVAPE" to 88709 for free support
- This is Quitting Program:** A free, anonymous program created specifically for young people
- Talk to a healthcare provider:** Doctors can recommend cessation strategies
- National Quitline:** Call 1-800-QUIT-NOW (1-800-784-8669)
- School counselors:** Many schools now have resources to help students quit

#### Nicotine & Vaping Sources:

- Centers for Disease Control and Prevention (CDC). National Youth Tobacco Survey, 2024.
- U.S. Food and Drug Administration (FDA). E-Cigarette and Nicotine Pouch Use Among Middle and High School Students, 2024.
- National Institute on Drug Abuse (NIDA). Teen Vaping Trends, 2024.
- American Lung Association. "ZYN 101: What to Know About Big Tobacco's Latest Addiction." 2024.
- Johns Hopkins Medicine. "Nicotine pouches are growing in popularity. Are they safe?" March 2024.

#### Cannabis Vaping & Co-Use Sources:

- National Institutes of Health (NIH). "Reported drug use among adolescents continued to hold below pre-pandemic levels in 2023." December 13, 2023.
- The Washington Post. "Teen vaping of marijuana surges, spurring public health worries." December 18, 2019.
- NPR. "Cannabis vaping among teens has grown sharply in recent years." October 26, 2021.
- Yale Medicine. "Researchers Note Latest Vaping Concern: 'Hacked' E-Cigarette Devices." June 27, 2024.
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- Columbia University Mailman School of Public Health. "Major Uptick Reported in Cannabis Vaping for All Adolescents." October 3, 2022.
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