

CENTERING YOUTH VOICES TO END VAPING HARM:

A Quick Guide for Trusted Adults



National Behavioral
Health Network

for Tobacco & Cancer Control

from NATIONAL COUNCIL FOR
MENTAL WELLBEING



With support from Campaign for Tobacco-Free Kids (CTFK), the National Council for Mental Wellbeing developed this resource to center youth voices and equip caregivers, educators, health care providers, advocates and other trusted adults with evidence-based and youth-informed tools to address one of the past decade's most pressing public health challenges: youth nicotine addiction from vaping.

To learn more about this campaign, visit [our website](#).

WHY CENTER YOUTH VOICES WHEN IT COMES TO YOUTH VAPING?

Young people are experts on how they are feeling, what they are experiencing and what resonates with them personally. By focusing on youth voice in the conversation about youth vaping, we give the power back to those who are most directly impacted, and who best know what can change young hearts and minds.

When young people are engaged as leaders and advocates, they can shift social norms, challenge tobacco industry tactics and influence peers and policymakers, creating healthier communities.

WHAT MAKES VAPING SO ADDICTIVE TO YOUNG PEOPLE?

Youth vaping is one of the most pressing and rapidly evolving public health challenges of the past decade, with substantial implications for both physical and mental wellbeing. While youth e-cigarette use has declined since its peak in 2019, **7.1% of high school students reported current e-cigarette use in 2025** (Park-Lee, 2026). With over five generations of device evolution, vape products have grown into a market of thousands of highly addictive, high-nicotine, flavored options that appeal to youth and young adults and are readily accessible at little cost (Khodaei, 2025; Centers for Disease Control and Prevention [CDC], 2024).

Today's vaping products are engineered to deliver high doses of nicotine rapidly, and despite efforts to standardize nicotine warnings, studies suggest that most youth struggle to grasp how much nicotine they're actually consuming, with **41% of youth reporting that they don't know the nicotine concentration in the vape products they use** (Morean, 2019; Morean, 2021; Cho, 2025). The tobacco industry and vape companies exploit this knowledge gap among youth by **marketing vapes as a positive, less harmful and cool activity** (Struik, 2020).

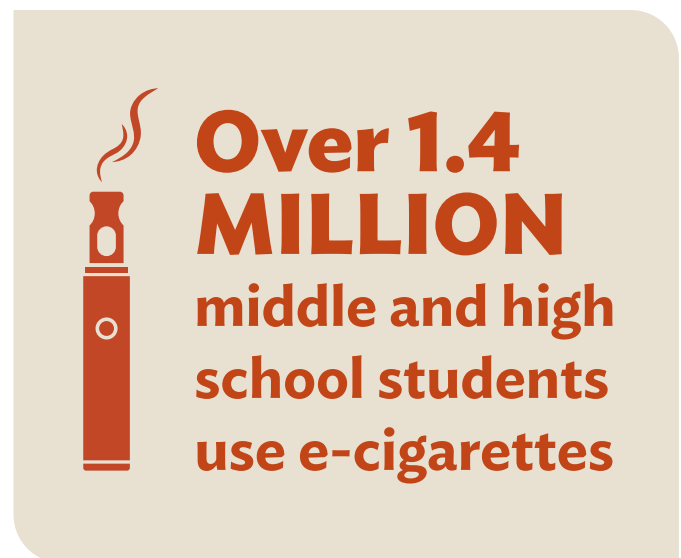


Figure 1. Middle and high school youth vape use 2025. Source: Park-Lee, 2026.



WHY YOUTH ARE ESPECIALLY VULNERABLE...

Still-growing young brains

Age 13-25 is a vulnerable time for brain development and higher-order functioning (judgment, risk, critical thinking, cognitive control) (Chung, 2017).

Nicotine exposure for adolescents can have lasting damaging effects on brain development, impacting attention, memory, learning, mood and impulse control (National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health, 2014).



Predatory marketing by the tobacco industry

The tobacco industry deliberately targets youth through framing vapes as stress relief, cool lifestyle associations, themes of freedom and belonging, colorful candy-like designs, price deals and youth focused advertising through social media (Struik, 2020).



Peer pressure and social influence

Large numbers of 12th graders (53%), 10th graders (42%) and 8th graders (32%) estimate that at least one of their friends vapes (Miech, 2025).



Deceitful dosing

Newer disposable vape models can contain as much nicotine as 20 packs of cigarettes (or even more)(Diaz, 2023).



Flavors and product appeal

Nearly 90% of youth who vape are using flavored products that come in sweet, fruity and dessert-like options that mask the harshness of nicotine (Jamal, 2024).



THE IMPACT OF VAPING ON YOUNG MINDS AND BODIES



Mental Health Impact

Youth nicotine addiction: Many young people turn to vaping to try to deal with stress and anxiety (Gentzke, 2022). However, when someone addicted to nicotine stops using it, their body and brain have to adjust. Nicotine withdrawal symptoms can include feelings of anxiety and depression (National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health, 1990). This cycle of symptoms can be yet another source of stress. Early research has also found that youth e-cigarette use is associated with mental health symptoms, such as depression (Baiden, 2022; Becker, 2021; Lechner, 2017).

Mood disruption and irritability: Early exposure to nicotine increases the risk of long-lasting mental health effects, such as increased impulsivity, mood disorders (including depression and anxiety) and emotional dysregulation (Leslie, 2020).

Sleep and cognitive impacts: Sleep and e-cigarette use have a bidirectional relationship. Youth who vape experience sleep disturbances, difficulty concentrating and reduced academic performance, which in turn may increase their desire to vape (Birur, 2025).

Increased risk of substance use: Nicotine can prime the brain for addiction to other drugs (National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health, 2016).



Physical Health Impact

Difficult withdrawal: Teens may become dependent on nicotine more quickly than adults, and may be more sensitive to both physical and mental symptoms of withdrawal, such as stomach discomfort, insomnia, impatience, and more (National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health, 2012; Pbert, 2024; Guerra Castillo, 2024; Biles, 2025).

Weakened cardiovascular system: Research indicates that vaping triggers stress on the nervous and circulatory systems, which can lead to severe issues like hardened arteries and stiff blood vessels (Mears, 2023).

Respiratory irritation: Vape aerosols can contain ultrafine particles and toxic chemicals. There is some evidence that vaping can exacerbate asthma and chronic respiratory symptoms (National Academies of Sciences, Engineering and Medicine, 2018). Additionally, vaping aerosols may contribute to inflammation in the respiratory system (Traboulsi, 2020).

Exposure to toxins: Vape aerosols can contain cancer-causing chemicals including heavy metals (lead, nickel), which may pose health risks to many different organs in the body (Sun, 2024).

BEYOND THE RESEARCH: WHAT YOUNG PEOPLE ARE SAYING ABOUT VAPING

YOUTH VAPING EXPERIENCES, BELIEFS AND BEHAVIORS

While research is a powerful tool in understanding the science and prevalence of youth vaping, it's equally important to hear from young people themselves to understand the full picture of how vaping is impacting youth lives. In 2025, the National Council for Mental Wellbeing, in partnership with the Campaign for Tobacco-Free Kids, held a nationwide Youth Against Vaping contest to hear from youth in their own words. They asked, "How is youth vaping impacting your life and that of your peers?" Over 50 young people across 20 states shared personal stories, lived experience and reflections through prose and poetry, to inspire their peers and inform trusted adults and leaders about what's really going on in their schools and communities. Here's what the youth had to say, and the top three themes from their submissions:

Big tobacco preys on youth, but youth are ready to fight back. The tobacco industry has long targeted youth during their most vulnerable moments, using candy-colored packaging and flavors like bubblegum, cotton candy and sweet fruits to disguise the harms of vapes as something playful. Research published by the Truth Initiative and the National Opinion Research Center show that tobacco companies use vague flavor names, known as "concept flavors," to circumvent flavor restrictions, making it harder for enforcement agencies to identify illegal flavored tobacco products (Kostygina, 2022). But today's youth are increasingly aware of these tactics and calling them out for what they are.

"Think about it: candy-colored packaging, bubblegum and mango flavors, ads that make vaping look like freedom and fun. These products are designed to bypass the part of your brain that tells you to beware of whatever they are trying to sell you. It activates the part of your brain that tells you that you need to feel excitement, relief from boredom and stress, and that you belong."

— Kris, 16, Indiana



Vaping creates a cycle of stress and addiction, and breaking this cycle takes more than willpower. It takes the right support from trusted adults. Youth have to navigate a lot of stress — from school, peers and social expectations. This stress drives many to vape as a coping mechanism, only to find that it deepens the very same cycle of anxiety and depression they were trying to escape. National data show that among youth who used e-cigs in the past 30 days, the most common reason reported for current use was feeling anxious, stressed, or depressed (Gentzke, 2022). But with the right support, recovery is possible, bringing relief and freedom to the lives of young people. For trusted adults, the most powerful tool is simple — starting a candid conversation with the young people in their life about the harms of vaping and the road to recovery.



“I’ve seen my classmates struggle to focus in school because they’re distracted by cravings. I’ve seen classmates, who sit next to me, spend 20 minutes in the bathroom to soothe that very craving. I’ve seen people get anxious, irritated, and experience withdrawals, all because of something they were told was a ‘stress reliever.’” — Anna, 16, Massachusetts



“If you are struggling with vaping, reach out to a loved one or counselor immediately. Like the never-ending cavity, vaping addictions can feel too strong to fight against, but calls for help can be heard and answered. There are people who care about you and will help you out of this struggle if you ever lose your way.” — Ella, 13, Utah



“Quitting brings relief, freedom, and a healthier body. And this isn’t just my opinion; research supports it. If I could share one message with parents, it would be this: Have open and honest conversations about substance use. The belief that ‘my kid would never’ can be dangerous. I hid my addiction from my father for five years, and when I finally told him I had quit, he was shocked to learn how long it had gone unnoticed.” — Chloe, 22, Connecticut



Figure 2. Youth mobilized by Campaign for Tobacco-Free Kids protesting the flavoring of nicotine products. Source: Campaign for Tobacco-Free Kids.

Youth don't want to be seen as part of the vaping problem. They want to be an active part of the solution. While youth shared their voices about their lived and living experiences and the struggles faced with addiction, they also shared their solutions to the youth vaping crisis. They're calling for stricter regulations on flavored vapes and associated marketing, a fundamental shift in how schools respond to the issue, and policies that support rather than punish.

"I wish adults and policymakers saw this isn't just 'teens being teens.' Vaping's a trap, with vapes sold everywhere. Schools should teach about addiction and bring in former vapers to share stories, not just punish kids. Policymakers should ban candy-flavored vapes and ads targeting teens on social media. A vape-free future would be incredible — schools teaching mindfulness or music for stress, communities with hangout spots where teens don't need vapes to fit in. Vaping wouldn't be a flex; it'd just fade away." — Kelvin, 18, Nevada

"all we need is a listening ear / or perhaps even a hand / someone to say all is fine / telling us our resilience / shall triumph // triumph for all / victory is shared / why not / our efforts too"
The Fog, The Clouds, The Reality — Winnie, 15, New York

WHAT YOUTH SAY THEY NEED FROM TRUSTED ADULTS

➔ **Start the conversation early — prevention is key!**

HOW CAN YOU HELP? WHAT CAN YOU DO AS A...		Actions You Can Take	Related Resources
HOW CAN YOU HELP? WHAT CAN YOU DO AS A...	Parent or Caregiver	- Bring up vaping before peer pressure starts. Don't wait for a problem to arise, and don't assume the young adult in your life is not exposed to or impacted by vaping and the predatory marketing practices of vaping companies. - Ask open-ended questions to start a safe and candid conversation. - Bring awareness to the harmful impact of nicotine and vapes, without using scare tactics. - Model healthy coping habits, and support the youth in your life on healthy habits to cope with mental health needs.	National Council for Mental Wellbeing Getting Candid Toolkit Tobacco Settlement Endowment Trust Talk About Tobacco Resources Stanford Medicine Vaping Prevention Remote-learning Curriculum for Students, Educators and Parents
	Educator	- Use peer-led programs and youth voices for authentic messaging. - Create norms that ensure safe classroom spaces for conversations on vaping prevention and recovery. - Engage students with strengths-based messaging and supports, steering clear of fear-based and punitive tactics.	CATCH Global Foundation CATCH My Breath Evidence-based Youth Vaping Prevention Program Stanford Medicine Vaping Prevention Remote-learning Curriculum for Students, Educators and Parents Scholastic How to Discuss E-Cigarettes and Nicotine Addiction With Youth
	Health Care Provider	- Screen for tobacco use and vaping among young patients by using Youth Screening, Brief Intervention, and Referral to Treatment (YSBIRT) tools tailored to youth and adolescents. - Provide guidance to parents and caregivers before their children reach adolescence. - Use motivational interviewing techniques. - Provide helpful resources, such as fact sheets, to youth and their caregivers.	NORC at the University of Colorado Learner's Guide to Adolescent SBIRT National Council for Mental Wellbeing Getting Candid — A Communication Pathway for Providers

➔ Build trust and reduce shame and stigma

	Actions You Can Take	Related Resources
Parent or Caregiver	■ Listen without judgment. ■ Affirm that addiction is a health issue, not a moral failure. ■ Maintain an honest and open conversation. ■ Promote curiosity by answering their questions about vaping in a nonjudgmental way.	■ Killingly Youth Substance Prevention Coalition How to Talk About Vaping: A Discussion Guide for Parents ■ Medfield Outreach Adult Guide for Youth Substance Use Prevention: Tips for Talking With Youth of All Ages ■ NAMI Be a Trusted Adult for Young People in Your Life
Educator	■ Support school policies that enable students to feel safe disclosing their vape use. ■ Shift discipline from punitive to restorative approaches. ■ Train school staff to be trauma-informed and respond with empathy, not shame and stigma. ■ Address vape use privately with students. Respect confidentiality, but always follow your school's policy if the student is at risk of harm.	■ CDC Empower Vape-Free Youth: How to Talk to Students About Vaping ■ Resilient Futures Trauma Informed Futures Education and Free Resources
Health Care Provider	■ Use nonjudgmental, patient-centered language. ■ Normalize the conversation about vaping (e.g., incorporate questions about vape use in every appointment, and emphasize that all young patients get asked about their vape use). ■ Respect patient decision-making, and involve the youth in their own care plan.	■ National Council for Mental Wellbeing Stigma, Biases and Shame: Tobacco Use and Wellbeing Masterclass



→ Provide the facts about vaping

	Actions You Can Take	Related Resources
Parent or Caregiver	■ Explain the connection between vaping, nicotine and addiction/mental wellbeing. ■ Clarify that flavored products are not necessarily safe for consumption. ■ Debunk common vaping myths (e.g., vapes being just vapor, vapes being completely “safe”).	■ Parents Against Vaping Resources for Parents ■ HHS Sound the Alarm: Youth Vaping Can Harm ■ Tobacco-Free Colorado Vape: Myths vs. Facts
Educator	■ Use evidence-based facts and national and local data to promote prevention and recovery. ■ Amplify student voices and lived and living experience. ■ Debunk tobacco industry marketing in media literacy lessons.	■ ESD 112 Youth Now Educator Resources ■ HHS Tobacco Education Resource Library For Teachers: Lesson Plans and Classroom Materials ■ HHS Sound the Alarm: Youth Vaping Can Harm
Health Care Provider	■ Share clinical data on vaping, its risks and its connection to youth development and mental health. ■ Provide written materials that patients can take home. ■ Follow up with helpful preventive resources and referrals.	■ American Academy of Pediatrics E-Cigarettes and Vaping Toolkit ■ HHS Sound the Alarm: Youth Vaping Can Harm



➔ Address the root causes of nicotine addiction and promote healthy habits

	Actions You Can Take	Related Resources
Parent or Caregiver	- Regularly talk to the young person in your life about things that may cause them stress, anxiety or feelings of peer pressure. - Help youth identify healthy coping skills and tools. - Connect the young person in your life to professional help like a counselor or therapist, if needed. - Learn ways to reduce access to nicotine products and support an environment of healthy living and wellness.	Partnership to End Addiction How to Help a Stressed Teen: Signs, Support & Talk National Council for Mental Wellbeing Youth Hub Resources NAMI Mental Health Resources for Kids, Teens and Young Adults
Educator	- Integrate lessons on emotional regulation and developing healthy coping mechanisms to build stress resilience among youth. - Learn about adverse childhood events/trauma and their connection to nicotine addiction. Use this information to foster an environment of trauma-informed interactions. - Create opportunities and safe spaces for students to check in about their mental wellbeing.	Quit Works NH Motivational Conversations With Youth Center for Intensive Behavioral Supports: Resources The Kids Mental Health Foundation: Resources TEACH: Resources for Teaching Kids About Emotional Regulation and Meditation
Health Care Provider	- Screen for anxiety, depression and trauma alongside substance use/vaping. - Apply a trauma-informed care approach to patient screening and treatment. - Connect youth to mental health support services as part of routine care. - Recognize nicotine as a coping mechanism and not just a habit. Help patients identify healthier coping skills.	American Academy of Pediatrics National Center for Relational Health and Trauma-informed Care National Council for Mental Wellbeing Incorporating Trauma-informed Approaches in Tobacco Cessation Services Roswell Park Comprehensive Cancer Center Trauma and Tobacco: A Practical Resource Guide



➔ Support quitting and recovery

	Actions You Can Take	Related Resources
Parent or Caregiver	■ Celebrate the decision to quit or reduce vaping. Even small wins count. ■ Help the young person in your life identify triggers, ways to overcome cravings and how to create a recovery plan. ■ Practice patience — recovery is a journey, and a young person recovering from vape use needs your support now more than ever. ■ Share cessation resources with youth.	■ Truth Initiative and Mayo Clinic EX Program ■ American Lung Association N-O-T: Not on Tobacco — Proven Teen Smoking and Vaping Cessation Program ■ CDC Resources to Help Youth Reject or Quit Vaping
Educator	■ Connect students to cessation resources. ■ Promote the Quitline and similar support services in school communications. ■ Help youth lead a vaping-focused peer support network. ■ Ensure school counselors are trained in cessation and recovery supports (e.g., tobacco treatment specialist trainings). ■ Connect students to school-based resources on addiction and referrals to support recovery.	■ CDC Quitlines and Other Cessation Support Resources ■ Truth Initiative Curriculums to Address Vaping, Cannabis Use and Prescription Drug Misuse ■ Truth Initiative Discipline Is Not the Answer: Better Approaches to On-campus Student Tobacco Use ■ New Mexico Public Education Department Free Vape Resources for Adult and Classroom Educators
Health Care Provider	■ Consider offering nicotine replacement therapy (NRT) and other treatment options for youth. While the FDA has not approved NRT products for individuals under the age of 18, national organizations, like the American Academy of Pediatrics support health care providers using off-label NRT for adolescents with nicotine dependence who are motivated to quit. Any youth NRT use should occur under the guidance and supervision of a professional health care provider who can help ensure safe and appropriate use. ■ Provide brief counseling at every visit. ■ Refer youth to other behavioral health providers for co-occurring anxiety, depression or other substance use. ■ Refer patients to the Quitline. ■ Help patients set a recovery plan, milestones and a quit goal. ■ Follow up after attempts to quit or reduce vape use.	■ American Academy of Pediatrics Youth Tobacco Cessation: Considerations for Clinicians ■ American Academy of Pediatrics Nicotine Replacement Therapy and Adolescent Patients ■ U.S. Department of Veterans Affairs Tobacco & Nicotine Treatment: Group Counseling Toolkit ■ American Academy of Family Physicians Tobacco & nicotine use: prevention and cessation resources ■ University of Colorado Behavioral Health & Wellness Program DIMENSIONS: Nicotine-free Toolkit ■ U.S. Preventive Services Task Force Tobacco Use in Children and Adolescents: Primary Care Interventions

➔ Become an advocate

	Actions You Can Take	Related Resources
Parent or Caregiver	- Attend school board or local community meetings on vaping policies. - Support flavor ban legislation and share your concerns with policymakers. - Connect with fellow parents and caregivers to form a coalition against youth vaping and its harmful impact. - Amplify the voices of youth in your life.	Campaign for Tobacco-Free Kids Join the Fight National Council for Mental Wellbeing Youth Mental Health First Aid Parents Against Vaping (PAVe) Resources for Parents
Educator	- Advocate for campus-wide tobacco-free policies in your school. - Make the case for restorative discipline over punitive action when students are caught vaping. - Partner with local public health agencies and community-based organizations to bring attention to anti-vaping campaigns. - Champion youth-led advocacy clubs, peer recovery groups and coalitions.	Alliance for a Healthier Generation Resources for Tobacco-free and Vaping-free Schools and Communities Public Health Law Center Addressing Student Tobacco Use in Schools: Alternative Measures Public Health Law Center Alternatives to Suspension for Commercial Tobacco Use in K-12 Settings
Health Care Provider	- Advocate for more stringent local, state, and federal regulations on flavored vape products. - Support national associations calling for policy reform. - Use your platform to share testimonials about the impact of nicotine addiction and vaping that you see in the young people you serve.	American Academy of Pediatrics Section on Nicotine and Tobacco Prevention and Treatment (SONTPT)

YOUR INFLUENCE MATTERS

Vaping can harm both the physical and mental health of young people, exposing them to nicotine and toxic chemicals that can damage the developing brain, affect attention and mood, irritate the lungs, and increase the risk of addiction and future substance use. Young people make healthier choices when they feel heard and respected, not judged. Whether you're a health care provider, parent, teacher, or caregiver, the trust you build is what turns a difficult conversation into a candid one. Amplify youth voices instead of speaking for or over them. Do this consistently and you can become the person a young person turns to for their wellbeing and recovery. Creating a tobacco-free generation starts with one trusted relationship at a time.

REFERENCES

- Baiden, P., Szlyk, H. S., Cavazos-Rehg, P., Onyeaka, H. K., Peoples, J. E., & Kasson, E. (2022). Use of electronic vaping products and mental health among adolescent high school students in the United States: The moderating effect of sex. *Journal of Psychiatric Research*, 147, 24–33.
- Becker, T. D., Arnold, M. K., Ro, V., Martin, L., & Rice, T. R. (2021). Systematic review of electronic cigarette use (vaping) and mental health comorbidity among adolescents and young adults. *Nicotine and Tobacco Research*, 23(3), 415–425.
- Biles, J., Kornhaber, R., Irwin, P., Schineanu, A., Kavisha Sookraj-Baran, M., & Cleary, M. (2025). Perspectives, motivations, and experiences of adolescents and young adults using nicotine vapes: a qualitative review. *Health Promotion International*, 40(2), daaf007.
- Birur, S., Burk, B. G., Fargason, R. E., Alhassan, A., & Reddy, A. (2025). Exploring the interplay of sleep and nicotine vaping in adolescents: An evidence-based narrative review. *Psychopharmacology Bulletin*, 55(2), 60–74. <https://doi.org/10.64719/pb.4521>
- Centers for Disease Control and Prevention. (2024, October 24). About e-cigarettes (vapes). <https://www.cdc.gov/tobacco/e-cigarettes/about.html>
- Cho, J., Miech, R. A., Harlow, A. F., Han, D. H., Dai, H. D., Sussman, S., & Leventhal, A. M. (2025). Nicotine concentration of e-cigarettes used by youths. *JAMA Network Open*, 8(3), Article e252215. <https://doi.org/10.1001/jamanetworkopen.2025.2215>
- Chung, W. W., & Hudziak, J. J. (2017). The transitional age brain: “The best of times and the worst of times.” *Child and Adolescent Psychiatric Clinics*, 26(2), 157–175. <https://doi.org/10.1016/j.chc.2016.12.017>
- Diaz, M. C., Silver, N. A., Bertrand, A., & Schillo, B. A. (2025). Bigger, stronger and cheaper: growth in e-cigarette market driven by disposable devices with more e-liquid, higher nicotine concentration and declining prices. *Tobacco Control*, 34(1), 65–70.
- Gentzke, A. S. (2022). Tobacco product use and associated factors among middle and high school students—National Youth Tobacco Survey, United States, 2021. *MMWR. Surveillance Summaries*, 71.
- Guerra Castillo, C., Hoeft, K. S., Couch, E. T., Urata, J., Halpern-Felsher, B., & Chaffee, B. W. (2024). Adolescents’ experiences and perceptions of e-cigarettes and nicotine addiction. *Substance Use & Misuse*, 59(13), 1981–1989. <https://doi.org/10.1080/10826084.2024.2392516>
- Jamal, A., Park-Lee, E., Birdsey, J., West, A., Cornelius, M., Cooper, M. R., Cowan, H., Wang, J., Sawdey, M. D., Cullen, K. A., & Navon, L. (2024). Tobacco product use among middle and high school students — National Youth Tobacco Survey, United States, 2024. *Morbidity and Mortality Weekly Report*, 73(41), 917–924. <https://doi.org/10.15585/mmwr.mm7341a2>
- Khodaei, A., Reed, A., & Khodaei, M. (2025). Electronic cigarette use (vaping) among adolescents: A narrative review of an emerging public health epidemic. *Cureus*, 17(8), Article e89422. <https://doi.org/10.7759/cureus.89422>

- Kostygina, G., Tran, H., Schillo, B., Silver, N. A., & Emery, S. L. (2022). Industry response to strengthened regulations: amount and themes of flavoured electronic cigarette promotion by product vendors and manufacturers on Instagram. *Tobacco Control*, 31(Suppl 3), s249-s254.
- Lechner, W. V., Janssen, T., Kahler, C. W., Audrain-McGovern, J., & Leventhal, A. M. (2017). Bi-directional associations of electronic and combustible cigarette use onset patterns with depressive symptoms in adolescents. *Preventive Medicine*, 96, 73–78. <https://doi.org/10.1016/j.ypmed.2016.12.034>
- Leslie F. M. (2020). Unique, long-term effects of nicotine on adolescent brain. *Pharmacology Biochemistry and Behavior*, 197, Article 173010. <https://doi.org/10.1016/j.pbb.2020.173010>
- Mears, M. J., Hookfin, H. L., Bandaru, P., Vidal, P., Stanford, K. I., & Wold, L. E. (2023). Electronic nicotine delivery systems and cardiovascular/cardiomatabolic health. *Circulation Research*, 132(9), 1168–1180. <https://doi.org/10.1161/CIRCRESAHA.123.321565>
- Miech, R. A., Johnston, L. D., Patrick, M. E., & O'Malley, P. M. (2025). National Survey Results on Drug Use, 1975–2024: Overview and detailed results for secondary school students. *Monitoring the Future*.
- Morean, M. E., Bold, K. W., Kong, G., Gueorguieva, R., Camenga, D. R., Simon, P., Jackson, A., Cavallo, D. A., & Krishnan-Sarin, S. (2019). Adolescents' awareness of the nicotine strength and e-cigarette status of JUUL e-cigarettes. *Drug and Alcohol Dependence*, 204, Article 107512. <https://doi.org/10.1016/j.drugalcdep.2019.05.032>
- Morean, M. E., Wackowski, O. A., Eissenberg, T., Delnevo, C. D., & Krishnan-Sarin, S. (2021). Adolescents and young adults have difficulty understanding nicotine concentration labels on vaping products presented as mg/ml and percent nicotine. *Nicotine and Tobacco Research*, 23(8), 1389–1397. <https://doi.org/10.1093/ntr/ntab007>
- National Academies of Sciences, Engineering, and Medicine. (2018). *Public health consequences of e-cigarettes*. <https://www.nationalacademies.org/projects/HMD-BPH-16-02>
- National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health. (1990). *Health benefits of smoking cessation*. Centers for Disease Control and Prevention (US).
- National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health. (2012). *Preventing tobacco use among youth and young adults: A report of the surgeon general*. Centers for Disease Control and Prevention (US).
- National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health. (2014). *The health consequences of smoking: 50 years of progress. A report of the surgeon general*. Centers for Disease Control and Prevention (US).
- National Center for Chronic Disease Prevention and Health Promotion, (US) Office on Smoking and Health. (2016). *E-cigarette use among youth and young adults. A report of the surgeon general*. Centers for Disease Control and Prevention (US).
- Park-Lee, E., Dutra, L. M., Cowan, H., Levine, B., Sawdey, M. D., Cooper, M., ... & Cullen, K. A. (2026). Tobacco product use among middle and high school students in the United States: National Youth Tobacco Survey, 2025. *Nicotine & Tobacco Research*, ntag116.

Pbert, L., Dubé, C. E., Nagawa, C. S., Simone, D. P., Wijesundara, J. G., & Sadasivam, R. S. (2024). Vaping cessation support recommendations from adolescents who vape: a qualitative study. *BMC Public Health*, 24(1), 1615.

Struik, L. L., Dow-Fleisner, S., Belliveau, M., Thompson, D., & Janke, R. (2020). Tactics for drawing youth to vaping: Content analysis of electronic cigarette advertisements. *Journal of Medical Internet Research*, 22(8), e18943.

Sun, Y., Prabhu, P., Li, D., McIntosh, S., & Rahman, I. (2024). Vaping: Public health, social media, and toxicity. *Online Journal of Public Health Informatics*, 16, Article e53245 <https://doi.org/10.2196/53245>

Traboulsi, H., Cherian, M., Abou Rjeili, M., Preteroti, M., Bourbeau, J., Smith, B. M., ... & Baglole, C. J. (2020). Inhalation toxicology of vaping products and implications for pulmonary health. *International Journal of Molecular Sciences*, 21(10), 3495.

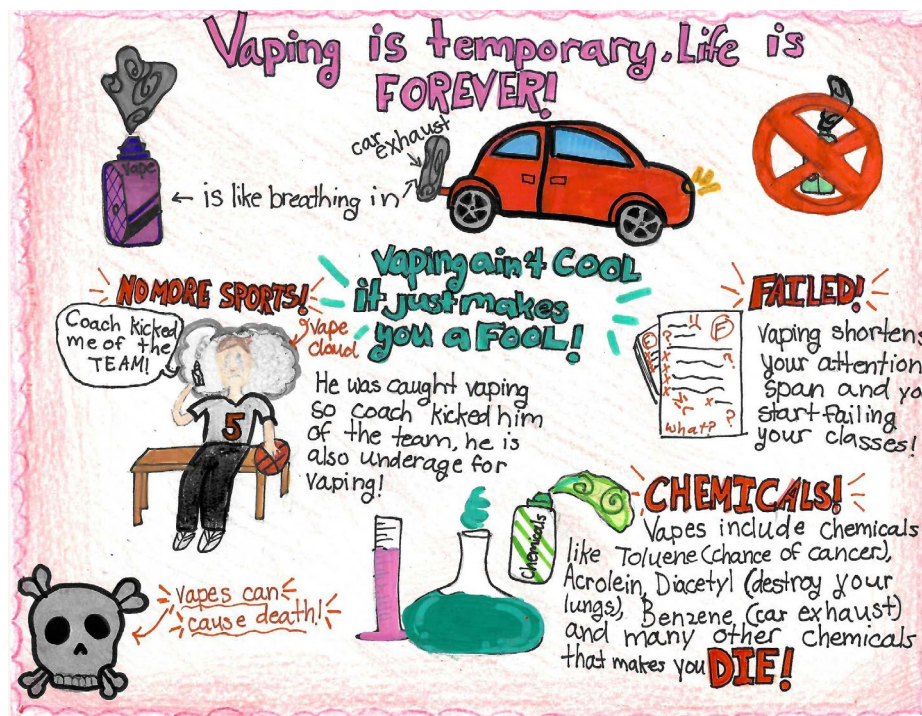


Figure 3. Artwork made by youth in Woodbridge, New Jersey, speaking to the harms of vaping. Source: New Jersey Woodbridge Township.

NATIONAL
COUNCIL
for Mental
Wellbeing

TheNationalCouncil.org