Unleashing the Healing Power of Hope

Hooked on nicotine: youth and electronic nicotine products

Shannon Waddell, MPA, TTS
Jenna Brinkworth, BS, TTS

Department of Health Behavior
Roswell Park Comprehensive Cancer Center
Buffalo, New York

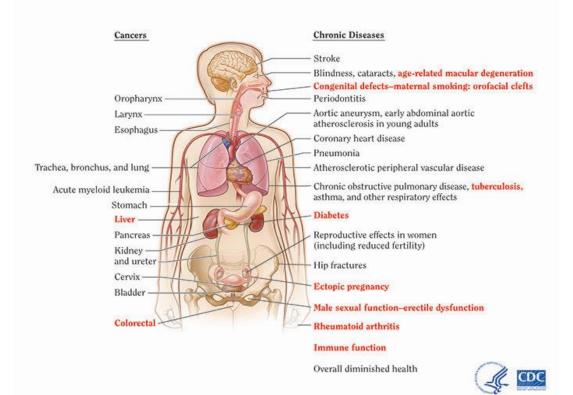


Objectives

- Understanding the Risks of Nicotine Use
- Nicotine
 - Biology of Nicotine Dependence
 - Dangers of Nicotine in Youth
- E-Cigarettes
 - Youth Use
 - Lasting Health Concerns
- Marijuana Use and its Effects
- How Educators Can Make a Difference

Risks from Smoking

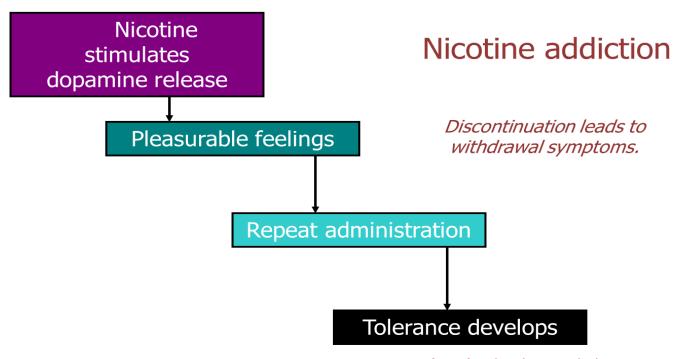
Smoking can damage every part of your body



Nicotine Addiction



Biology Of Nicotine Addiction



Benowitz. (2008). Clin Pharmacol Ther 83:531-541.

Teenagers and Nicotine

- 90 percent of regular smokers start before the age of 18.
- Brains are not completely developed
- Nicotine physically alters the brain development
- Teenagers do experience addiction to nicotine and withdrawal symptoms



Behavior Risks

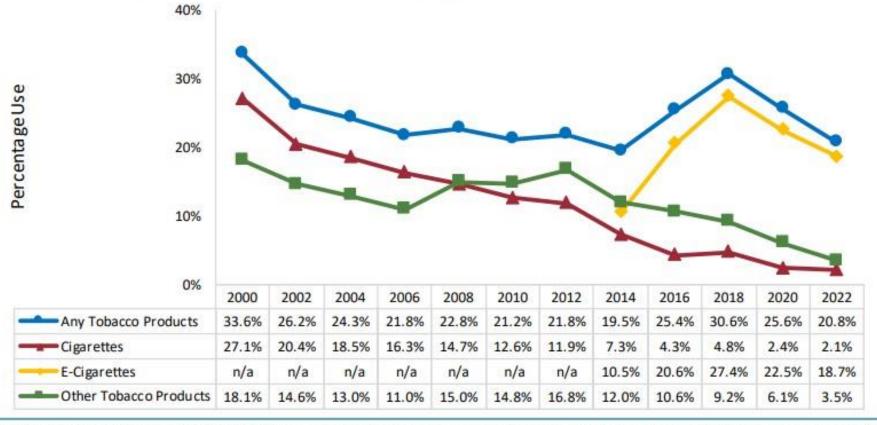
Nicotine can also lead to mood disorders and permanent lowering of impulse control



Electronic Nicotine Products



Trends in Any Tobacco Product Use² among High School Students in NYS, NY-YTS 2000-2022

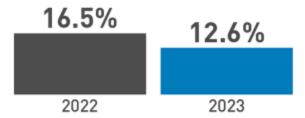


Note: Based on methods developed by CDC, the YTS is a school-based survey of a representative sample of high school students in NYS. The average sample size of high school students in the YTS, for all years excluding 2008, 2020, and 2022, is 8,000. In 2008, a special study was conducted, and the sample was increased to 23,133. In 2020 and 2022 response rates were lower due to the impact of the COVID-19 pandemic, with sample sizes of 3,895 in 2020 and 4,600 in 2022. Non-response bias analyses confirmed data quality and representativeness were not impacted by reduced sample size.



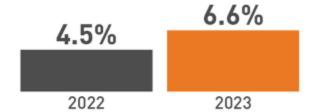
About 2.8 million youth currently use any tobacco product

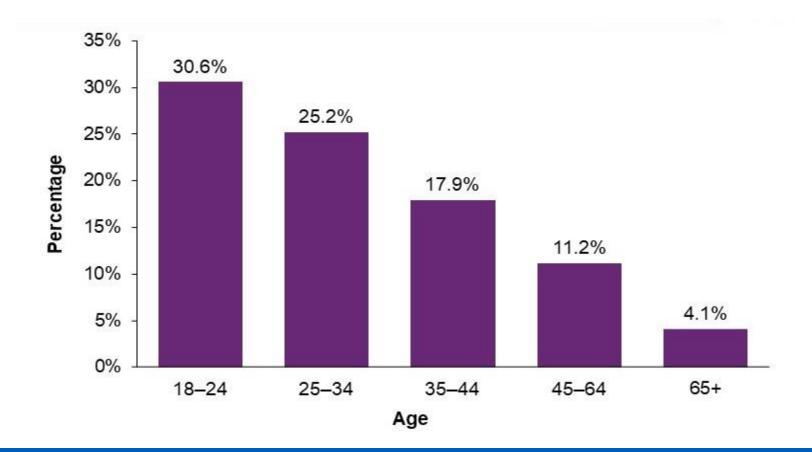
Any tobacco use **decreased** among high school students





Any tobacco use **increased** among middle school students





E-Cigarette Use -

Most young people start using E-cigs because of the different choices in flavors; fruit, candy, mint, coffee etc.

They also start after seeing friends and family members use them, peer pressure.

Teens can turn to e-cigarettes to relieve stress, anxiety, loneliness.

2,000 chemicals in vapor including benzene formaldehyde, acetone, heavy metals, food grade flavoring, water, high levels of nicotine



E-Juice Flavors







Stuffed French Toast

Syrupy, buttery, and the next best thing.





















The common misconception of e-cigarettes as a stress reliever could be rooted in the cycle of nicotine withdrawal.

Irritability, anxiety and depression are some of the symptoms of nicotine withdrawal, and using nicotine relieves these symptoms temporarily. The tobacco industry markets tobacco use as away to help mental well-being, stress-relief, relaxation and pleasure.

We need to help teens understand that nicotine will lead to more stress in their lives.

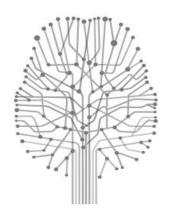
E-Cigarettes as a Gateway-

Youth who use e-cigarettes may be more likely to smoke regular cigarettes and/or use other drugs in the future.



Nicotine Use Can Lead to Addiction

The nicotine in e-cigarettes and other tobacco products can also prime the adolescent brain for addiction to other drugs such as cocaine, opioids, and marijuana.









Marijuana Use-

- Cannabis or Marijuana use usually starts in middle and late teen years
- Chronic bronchitis and impaired respiratory function
- Psychotic symptoms (at high doses)
- Road crashes if a person drives while intoxicated
- Cannabis dependence syndrome (in around one in ten users)



- Negative effects of teen marijuana use include³:
- Difficulty thinking and problem-solving
- Problems with memory and learning
- Reduced coordination
- Difficulty maintaining attention
- Problems with school and social life





Teens use marijuana for different reasons, which may include:

- to relax
- to have fun.
- to alter their perspective
- to fit in
- to experiment
- Some teens see it as not dangerous and easy to get maybe even easier than alcohol.

Why Teens Use-



Lifetime Risk of Dependence

- Nicotine 32%
- Heroin 23%
- Cocaine 17%
- Alcohol 15%
- Stimulants 11%
- Cannabis 9%



Role of Schools in a Vape Free School Zone

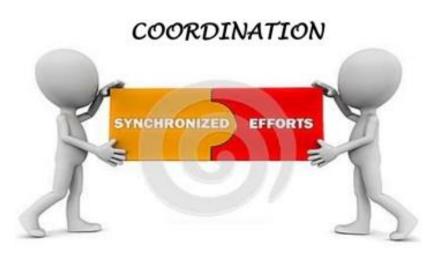
Participate Advocate Coordinate Assist Policy Support

Advocate-



- Advocate for non-punitive procedures for student violations of the schools tobacco policy
- Educate school administrators on the nature of addiction and provide information on cessation information on cessation intervention and referral

Coordinate-



- Deliver and or coordinate vaping education to parents and staff on a regular basis
- Include all buildings, all grades.
 Provide credible handouts
- Build E-cigarette education into science class, health class, physical education, homeroom.
- Try to have a comprehensive approach

Participate-



- Review curriculum content about vaping, alcohol, tobacco, cannabis, and other drugs
- Determine what updates need to be made and provide guidance on the need for evidence-based resources
- Make this a school wide effort

Assist-

- P Ensure that students, staff and parents who are interested in quitting are referred to treatment
- Provide appropriate cessation resources including the state quitline

New York State Smokers Quitline

https://www.nysmokefree.com/

Text: DropTheVape to 88709

Support-



- Support or sponsor clubs and student programs that raise awareness around the dangers of vaping, tobacco and substance use
- Advocate for student support in resisting peer pressure and setting positive social norms
- Have a trusted adult who will counsel students about vaping

Policy-

- Advocate for state initiatives and local polices that have been shown to prevent and reduce youth vaping and smoking
- Consult with others in the school district who may focus on policy initiatives and advocate as school based professionals
- Know e-cigarettes laws



E-Cigarette Education Programs

- Drop the Vape Text: DropTheVape to 88709
- In Depth: ALA Alternatives to Suspension
- Catch My Breath Curriculum
- Empower Vape-Free Youth- CDC Role of Eduators

Disposal of E-Cigs-



Let the tobacco researchers at Roswell Park help! We need used e-cigarettes and other vaping products to help characterize vaping among youth in WNY.

THANK YOU!

Shannon Waddell, MPA, TTS
Shannon.Waddell@roswellpark.org

Jenna Brinkworth, BS, TTS
Jenna.Brinkworth@roswellpark.org

