



Vaping Unveiled E-Cigarettes and Eco-Consequences

Prevention – Health – Waste Management

HOSTED BY
CONNECTICUT PREVENTION NETWORK
HOUSATONIC RESOURCES RECOVERY AUTHORITY

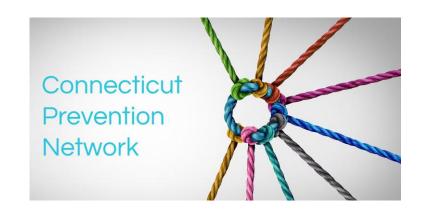
Housekeeping

- Agenda/break
- Refreshments during break in the cafeteria
- Hold questions for the Q and A portion of each panel
- Please mute your cell phone
- Restrooms
- Food and beverage other than water is not allowed in this room
- Slides will be available on the landing page (QR code)

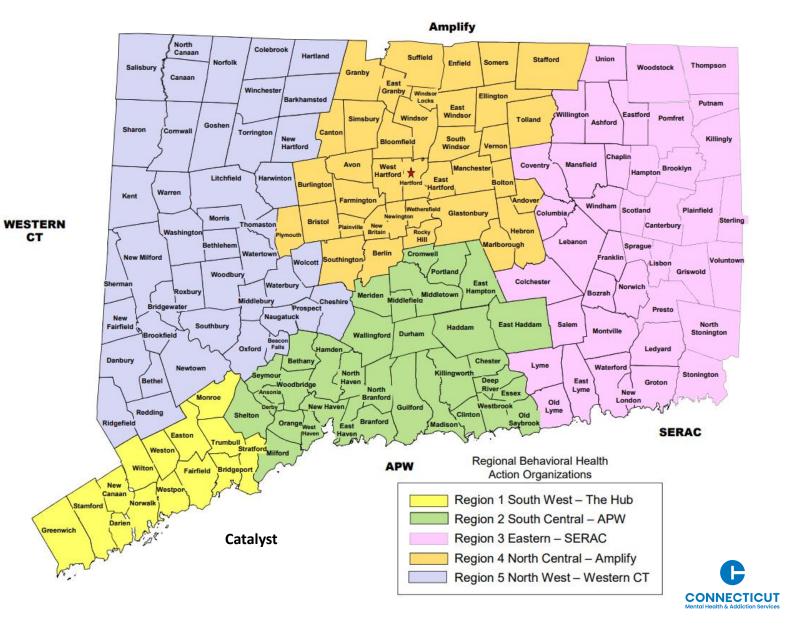


The Impact of E-Cigarettes on our Communities

KATHY HANLEY- BEHAVIORAL HEALTH PROGRAM MANAGER
UNDERAGE NICOTINE PREVENTION PROGRAM
WESTERN CT COALITION, RBHAO FOR REGION 5



CT



Key Takeaways:

- History of vape product development and the current retail environment
- Impact of underage and adult vaping in CT
- Health effects of nicotine and cannabis
- Prevention efforts
- Impact of e-cigarette waste

Terms:

- ☐ E-Cigarettes are referred to in many ways: Electronic Nicotine Delivery Systems (ENDS), Electronic Vapor Products (EVP), Vapes.
- ☐ The term "vaping" is a misnomer. The consumer is really inhaling an aerosol that contains tiny droplets of heated oil with nicotine or THC and other chemicals.

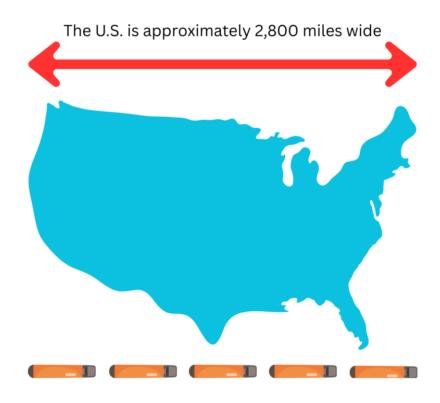
Anchor Activity

Please take a moment to read this statement and consider the visual that accompanies the statement.

PIRG (Public Interest Research Group) is an advocate for consumers, advancing solutions to problems that affect our health, our safety and well-being.

PIRG Report Vape Waste 2- June 2025:

The volume of disposable vape waste demands immediate attention. The nearly 500,000 vapes discarded daily create a significant environmental burden. To visualize this waste: lining-up the disposable vapes sold in 2023 would stretch for 8,772 miles—long enough to span the contiguous United States three times. Their plastic cases will persist in our environment for hundreds of years, creating a permanent pollution legacy.





GENERATIONS OF E-CIGARETTES & VAPE PENS





CIG-A-LIKE (2007)

E-Cigarettes came onto the market around 2007. Most looked very similar to a traditional cigarette.

0mg/mL - 6mg/mL



MODS/TANKS (2012)

Large size, modifiable e-cigarettes allow for more aerosol, nicotine, and other chemicals to be breathed into the lungs at a faster rate. E-juice and e-liquid often put in externally.

0mg/mL - 36mg/mL



SINGLE-USE/DISPOSABLE* (2018-NOW)

These e-cigarettes are currently the most popular and range in sizes and color. They typically contain high nicotine content and are highly addictive.

0mg/mL - 50mg/mL



These have batteries that can reach higher temperatures, have refillable e-liquid cartridges, and allow users to regulate the frequency of inhalations.

0mg/mL - 18mg/mL

POD-BASED (2015-2017) .

These e-cigarettes are shaped like USBs or different shapes, and contains pods with higher amounts of nicotine then previous generations.

0mg/mL - 50mg/mL

*Disposable vapes contain hamrful chemicals and cannot be thrown away normally and should be disposed in proper manner.

What is inside those e-cigarettes?



Harmful ingredients found in the liquids include:

- Heavy metals like lead, nickel and cadmium
- Volatile Organic
 Compounds like
 Benzene and
 Formaldehyde

for food consumption (think Doritos), but not for inhalation.



Monitoring E-Cigarette Sales: National Trends

February 2019-May 2025

- During the 6-month period ending May 18, 2025, the total number of different e-cigarette products for sale in the U.S. reached 7,066; 93% were disposable
- The top 5 brands were Vuse, Juul, Geek Bar Pulse, Breeze
 Smoke, and RAZ; sales of these products account for 76% of the total dollar sales
- Geek Bar Pulse and RAZ contain models considered "smart vapes" incorporating technologies such as digital screens, interactive notifications and power level/usage indicators



Monitoring E-Cigarette Sales: National Trends

February 2019-May 2025



From February 2020 to May 2025:

Disposable e-cigarette sales increased by 202.5%; their unit share increased from 26% to 61% of total e-cigarette sales

Flavored e-cigarettes sales increased by 46% and currently account for **81% of total unit sales**

Of note: Units of e-cigarettes are not adjusted to account for variations in size. Larger devices that offer "thousands of puffs" are widely available.



Federal Oversight

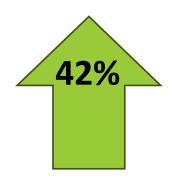
- FDA has had regulatory authority over all e-cigarette products since 2016
- All manufacturers must submit a **Pre-Market Tobacco Application** (PMTA) to keep selling existing products or to sell new products
- To date, the FDA has authorized **39 products**, none of which are disposable
 - Authorized brands are: Juul, Logic, NJOY and Vuse.
 - Tobacco and menthol are the only flavors authorized

Remember... 7,066 products on the market!

• In 2019, all flavored pods were banned (except menthol and tobacco)

Tobacco 21 was signed into law on 12/20/19
CT beat the feds with Tobacco 21 law on October 1, 2019!

The Retail Environment in CT



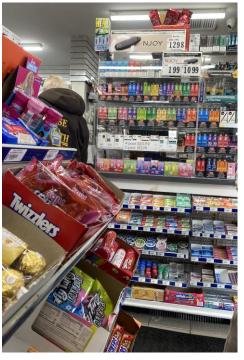
- From 2020 to 2024, registered ENDS dealers in CT increase by 42% (1,301 in 2020 to 1,849 in 2024)
- As of 9/16/25, there are 1,787 records of "ENDS Dealers" in CT (DCP data)











Most youth in Connecticut choose NOT to vape!





Percentage of High School Students Who Currently Used an Electronic Vapor Product,* by Sex,† Grade,† and Race/Ethnicity,† 2023



Black Bar: Estimates redacted due to CV>30% or sample size of less than 30.

[†]F > M; 10th > 9th, 11th > 9th, 12th > 9th; B > A, H > A, H > B, W > A, W > B (Based on t-test analysis, p < 0.05.) All Hispanic students are included in the Hispanic category. All other races are non-Hispanic. This graph contains weighted results.

Connecticut - YRBS, 2023 - QN36

^{*}Including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods [such as JUUL, SMOK, Suorin, Vuse, and blu], on at least 1 day during the 30 days before the survey

Percentage of High School Students Who Currently Used an Electronic Vapor Product to Vape Marijuana,* by Sex,† Grade,† and Race/Ethnicity,† 2023



Black Bar: Estimates redacted due to CV>30% or sample size of less than 30.

 $^{\dagger}F > M$; 10th > 9th, 11th > 9th, 12th > 9th; H > A, H > B, W > A, W > B (Based on t-test analysis, p < 0.05.) All Hispanic students are included in the Hispanic category. All other races are non-Hispanic. This graph contains weighted results.

Connecticut - YRBS, 2023 - QN98

^{*}Also called cannabis, pot, or weed, including THC, THC concentrates, hash oil, or waxes, during the 30 days before the survey

Adult Vaping Behaviors

6.2%

Current use of e-cigarettes among adults in CT

Current Use of

E-Cigarettes

14.8%

12.2%

7.9%

3.4%

2.7%

1.3%

1/	.5%
14,	J/0

Current use of cannabis among adults in CT

Age	Current Use of Cannabis
18-34	25.3%
35-54	14.8%
55+	8%

^{*}Among those who use cannabis, 33.6% report vaping as the method.

Age

18-24

25-34

35-44

45-54

55-64

65+

E-CIGARETTE AND NICOTINE HEALTH EFFECTS ON THE BODY



Nicotine use in adolescence and early adulthood causes changes in the brain that make life-long addiction much more likely for young people who use e-cigs



Ear, eye, and throat irritation is common



Science shows that nicotine negatively affects the cardiovascular system, meaning that use of e-cigs can lead to cardiovascular (heart) diseases



Science shows that aerosols producted by chemicals in e-cigs, including the flavors themselves, can be harmful to the lungs, resulting in asthma, bronchitis and lung collapse.

There isn't enough research on the long-term health impacts.

These products have only been widely marketed for about 10 years.







Cannabis Use and the body:

- Anxiety, paranoia, slowed reactions, poor memory
- Respiratory problems like inflammation, cell damage, chronic cough, and infections
- Increased appetite, nausea, vomiting
- Increased heart rate by 20-50 beats per minute
- Poor muscle coordination, imbalance, falling

Youth use of cannabis can disrupt brain development and lead to problems with:

- Learning
- Memory
- Emotional Regulation
- Decision Making
- Stress Management



Research on the effects of cannabis is sparse because it is still federally illegal







- Department of Mental Health and Addiction Services
 - Regional Behavioral Health Action Organizations (RBHAOs)
 - Underage Nicotine Prevention Program
 - Cannabis Education and Awareness Program
 - Local Prevention Councils
 - Tobacco Prevention and Enforcement Program (TPEP)
 - Tobacco Merchant and Community Education Steering Committee
 - True to You Coalition
 - Be in the Know Campaign
- Department of Public Health Tobacco Use Prevention & Control Program
 - Cessation supports- Commit to Quit, This is Quitting, My Life My Quit
- Mobilizing Against Tobacco For CT Health (MATCH) Coalition





CT's Free Tobacco Cessation Resources



Committoquitct.com
1-800-QUIT-NOW

Ages 18 and over

<u>Live support</u>: coaching and
nicotine replacement
therapy offered

vapefreect



Ages 13-17
Text START MY QUIT
to 36072

Live support: coaching
Operated by National
Jewish Health



Ages 13-24 **Text VAPEFREECT to 88709**

Automated text support
Operated by Truth
Initiative

Impact of E-Cigarette Waste

From a Truth Initiative Report: "A Toxic, Plastic Problem"

49.1% of young people don't know what to do with used device

Some methods of waste disposal reported:

- 51% in the trash
- 17% in a regular recycling bin not designed for e-cigarette waste
- 10% reported they threw them on the ground

"There is an urgent, overdue need for standardized processes for the disposal of e-cigarette devices"

Respondents recognized the danger of throwing e-cigarette waste into the trash (75.8%)

Vape Waste in our Communities and Schools



Western CT Coalition 2023 scans outside several vape shops in the region

Collected by administrators at Nonnewaug High School in Woodbury.

"These are the devices we confiscated last year (some at dances). We are seeing mostly boys using in the bathrooms during class time. They are meeting up and sharing these in stalls where it is harder to see. They are getting smarter with where they hide them. We are seeing more THC vapes recently; I think that is becoming more the norm." – Mykal Kuslis



Closing Thoughts...

PIRG Report Vape Waste 2- June 2025:

The volume of disposable vape waste demands immediate attention. The nearly 500,000 vapes discarded daily create a significant environmental burden. To visualize this waste: lining-up the disposable vapes sold in 2023 would stretch for 8,772 miles—long enough to span the contiguous United States three times. Their plastic cases will persist in our environment for hundreds of years, creating a permanent pollution legacy.



PIRG (Public Interest Research Group) is an advocate for consumers, advancing solutions to problems that affect our health, our safety and well-being.

Full Reports from this presentation

Public Interest Research Group (PIRG)

https://pirg.org/articles/disposable-vapes-dangerous-damaging-and-just-dumb/

https://publicinterestnetwork.org/wp-content/uploads/2025/07/PIRG-Vape-Waste-2.pdf

Authorized E-Cigarette List-FDA

https://digitalmedia.hhs.gov/tobacco/hosted/Authorized-E-Cig-July2025.pdf

Monitoring E-Cigarette Sales (CDC Foundation)

https://digitalmedia.hhs.gov/tobacco/hosted/Authorized-E-Cig-July2025.pdf

Truth Initiative Reports- E-Cigarettes: Facts, Stats and Regulations, and A Toxic, Plastic Problem:

E-Cigarette Waste and the Environment

<u>Tobacco Control Milestones- American Lung Association</u>

Resource Links:

List of RBHAOs

<u>DMHAS Tobacco Prevention Education Program</u> (TPEP)

Be in the Know CT- cannabis harm reduction campaign

CT Department of Public Health Tobacco Control Program

Tobacco Treatment Specialist Training