THE NEW EPIDEMIC:

ELECTRONIC NICOTINE DELIVERY SYSTEMS

Tobacco Prevention & Cessation Program
AGENDA

1. JUUL Basics & Structure
2. Health Effects
3. New Trends
4. ENDS Identification
5. Youth & Marketing
Researchers have concluded that ENDS are dangerous and pose health risks.
WHAT IS JUUL?

The JUUL is one of many Electronic Nicotine Delivery Systems. (Electronic Cigarette)

The JUUL is the most popular ENDS product among youth and young adults.

These USB shaped devices are taking over schools and are delivering a powerful amount of nicotine.

ENDS CONTAIN NICOTINE AND OTHER HARMFUL INGREDIENTS!
- SURGEON GENERAL
These devices were created by two Stanford University Graduates, who initially created the PAX Cannabis Vaporizer.

These devices were supposedly created as a smoking cessation aid for people who already smoke.

These devices were first created in 2015 but sales grew by 600% in 2017 making them the top-selling ENDS in the U.S.
JUUL Anatomy

1. JUUL POD
2. LED POWER INDICATOR
3. JUUL BODY
Nichrome Wire is used as the coil. It is an industry standard.

Hazards Identification:
Nonhazardous, but unpredictable reactions are possible.

Composition:
Nickel, Iron, Chromium, Carbon

First Aid:
If Inhaled – Remove victim to fresh air in a position comfortable for breathing.
Skin contact – Rinse with water for several minutes.

Source: MSDS
Many E-cigarettes contain:

- **Ultrafine particles**
  That can travel into the lungs

- **Diacetyl**
  Known famously for causing lung disease

- **Volatile Organic Compounds**
  That can cause cancer

- **Heavy metals**
  Like nickel, tin, and lead

- According to the Surgeon General
Bronchiolitis Obliterans
(Popcorn Lung)

DANGER
INHALATION HAZARD
AVOID BREATHING VAPORS

Image from: Pixabay
Nicotine is highly addictive and can harm the developing brain.\textsuperscript{1,2}

- Mood Disorders
- Poor Impulse Control
- Delayed Learning

Using nicotine can increase the likelihood to become more easily addicted to other drugs.\textsuperscript{1}

A single JUUL Pod has 42 mg of nicotine!!

About the same amount is found in an entire pack of cigarettes.

Source: US Surgeon General
Inhaling **Ultrafine Particles** have been known to increase the risk of developing lung, heart, neurodegenerative disorders, and even cancers.

**Ultrafine Particles** are so small they can easily penetrate the lungs and enter the bloodstream.
Long-term inhalation of these **Heavy Metals** has been linked to lung, liver, immune, heart and brain damage, and even cancers.

These **Heavy Metals** can enter the body through the skin, or by inhalation or ingestion.
Students report that they are “renting” JUULs from classmates for part of the day or a class period.

There is a risk of being exposed to drugs and bacteria since the pods are being refilled & reused.
According to hippievaporizer.com

**17 Weird Things You can Vape**

- Vodka. Vodka tastes decent when mixed with coke, lemonade, or orange juice. ...
- Catnip. Catnip is often referred to as marijuana for cats. ...
- Mountain Dew. When I want something sweet that also gives me (short-term) energy, Mountain Dew is a nice alternative to coffee or Red Bull. ...
- Honey. ...
- Thyme. ...
- Green Tea. ...
- Butter. ...
- Ginseng.

More items...

[17 Weird Things You can Vape – HippieVaporizer.com](http://www.hippievaporizer.com/blogs/blog/17-weird-things-you-can-vape)
EXPLOSIONS

**JUUL Specifically** has not reported any device explosions to date, but there is always a potential!

**Other brands** have erupted causing a great deal of **damage** and **even death** to the user.

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*Texas Man Dies After E-Cigarette Explodes in Face, Severing Artery*

PEOPLE.com • 2 days ago
Andrew Hall
Idaho
Andrew suffered from:

- A **projectile wound** caused by the **explosion** of the lithium ion battery.

- 1\textsuperscript{st}, 2\textsuperscript{nd}, & 3\textsuperscript{rd} Degree **Burns**
- 7 missing **teeth**
- A **long recovery**
- Anxiety & **PTSD**
LETS PLAY A GAME!
IDENTIFY THE E-CIGARETTES

ENDS
Or
Flash Drive
Did you get them all?!
Addiction has many faces...
They know what youth like…

Tobacco Companies know exactly what youth like to eat, drink, and chew!

Common brands are mimicked to look like candy!

Many of these products make youth feel like they are safe by associating them with brands they know!

Image from: Vimeo, Hersheys
**Flavors** appeal to youth!

Currently **15,500 Flavors** the are available.

The JUUL was the first e-cigarette to appear on youth’s **social media**.

*Some flavors contain Diacetyl*
NEW WAY OF ADVERTISING

JUUL marketing contains youth-centered themes to draw in a younger group.

JUUL persistently ran ads that targeted youth on popular social media platforms.

PAX Lab has portrayed JUUL as a “safe alternative,” but there is not enough research to call these items safe.
MONITOR
TOBACCO USE AND PREVENTION POLICIES

PROTECT
PEOPLE FROM SECONDHAND SMOKE

OFFER
HELP AND RESOURCES FOR QUITTING

WARN
ABOUT THE DANGERS OF TOBACCO

ENFORCE
BANS ON TOBACCO ADS, PROMOTIONS, & EVENTS

RAISE
PRICES ON TOBACCO PRODUCTS

MPOWER
MODEL
NOW WE KNOW

Tell people that e-cigarettes are not a safe alternative to smoking and can pose a new threat to youth.

Refer smokers to Be Well services to obtain the help they need.

If you know a violation is happening you can call the AR Tobacco Control Hotline 1-877-ID-TEENS

833-283-WELL
QUESTIONS?

WARNING: This product contains nicotine. Nicotine is an addictive chemical.
REFERENCES


2. Willett JG, Bennett M, Hair EC, et al Recognition, use and perceptions of JUUL among youth and young adults. Tobacco Control Published Online First: 18 April 2018. doi: 10.1136/tobaccocontrol-2018-054273

3. https://www.fda.gov/TobaccoProducts/PublicHealthEducation/ProtectingKidsfromTobacco/ucm625887.htm


8. https://health.clevelandclinic.org/does-saliva-have-health-risks-3-ways-germs-can-spread/

Videos:
Juulers Against Juul  https://www.youtube.com/watch?v=7EsNG7RcStQ
NBC Explosions Newscast

Pictures: sourced from creative commons