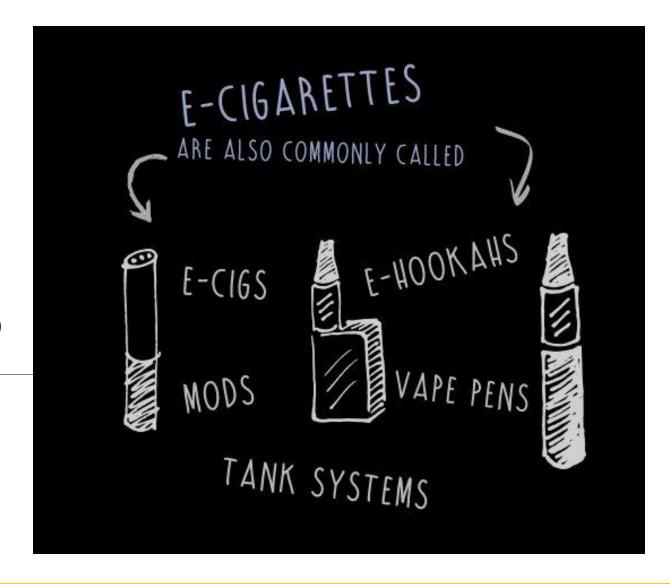
### E-cigarettes

SHIRLEY DUBOIS

YMCA OF KOKOMO

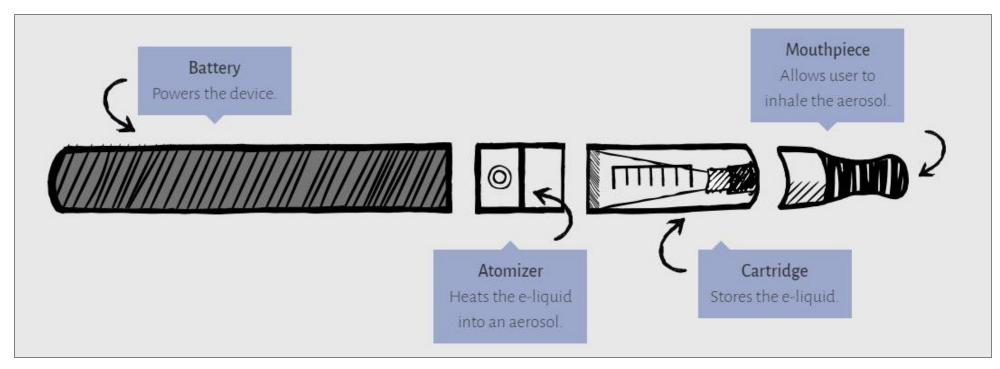
TOBACCO FREE HOWARD COUNTY



#### What are e-cigarettes?

Battery-powered devices that heat a liquid to produce an aerosol that users inhale.

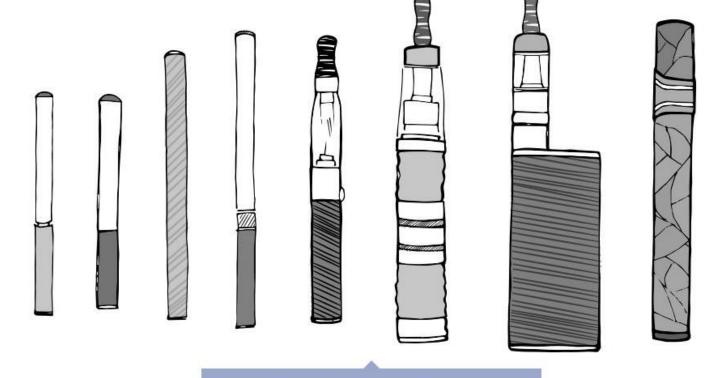
Usually contain nicotine, flavoring, and other additives.



Source: Office of the U.S. Surgeon General. The facts on e-cigarette use among youth and young adults. <a href="https://e-cigarettes.surgeongeneral.gov">https://e-cigarettes.surgeongeneral.gov</a>.

### E-cigarettes come in many forms...

E-cigarettes are also commonly known as e-cigs, e-hookahs, mods, vape pens, or tank systems.



E-cigarettes come in a variety of shapes and sizes

Source: Office of the U.S. Surgeon General. The facts on e-cigarette use among youth and young adults. <a href="https://e-cigarettes.surgeongeneral.gov">https://e-cigarettes.surgeongeneral.gov</a>.



Hookah pen or e-hookah These different types of products are often called electronic **ENDS** nicotine delivery Glassomizer systems (ENDS) **E-pipe E-cigarette** 

E-cigar

**Vapor Pen** 

### Inhaler ??? Guess again

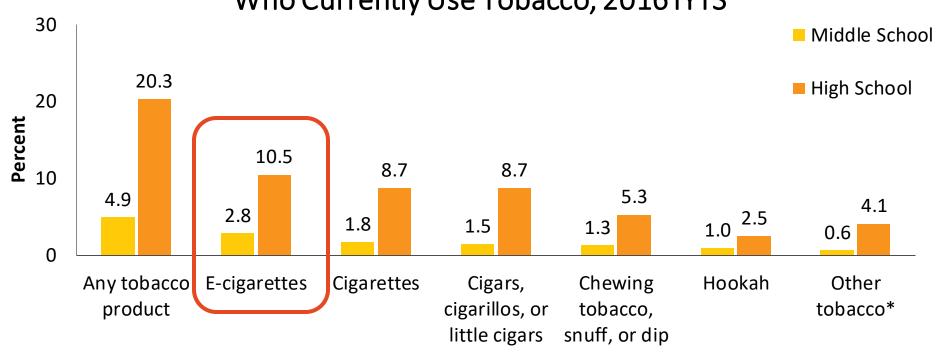


### E- cig Inhaler components



## E-cigarettes are the most commonly used tobacco product among Indiana youth.





Source: Indiana Youth Tobacco Survey, 2016

### What is JUUL?

#### JUUL is a New E-cigarette



JUUL (pronounced "Jewel") is a new type of ecigarette

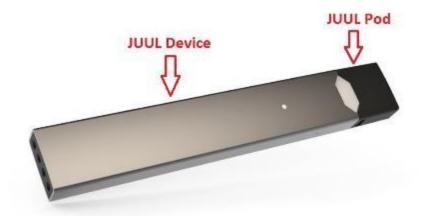
It launched in 2015

It has grown in popularity and now accounts for nearly half of the e-cigarette market share (as of the last quarter in 2017)

### Anatomy of a JUUL

#### The JUUL is made up of two components:

- The part on the left is the power source and contains the battery that can be charged through a USB port.
- The smaller piece on the right is the JUUL pod. The pod or cartridge provides 200 puffs and contains a variety of different flavored e-juices with different JUUL pod covers.
- When plugged into the battery piece, the e-juice in the JUUL pod is heated to produce an aerosol. The aerosol produced is sent through the chimney and out of the mouthpiece.





# Does JUUL Have Nicotine?

#### Nicotine Content of JUUL Pods

#### All JUUL Pods contain nicotine.

According to the JUUL website, each JUUL Pod (cartridge) has 59 milligrams per milliliter of nicotine, which is equal to the amount of nicotine found in a pack of cigarettes.

JUUL Pods have a higher concentration of nicotine than many other e-cigarettes, and nicotine-free pods are not available.

The pods provide approximately 200 puffs each.

A 4-pack of JUUL Pods (approx. \$15.99) is cheaper than 4 packs of cigarettes.



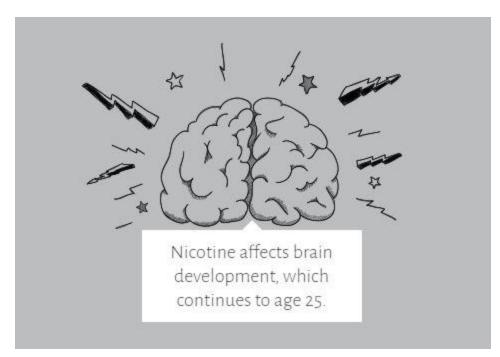
#### E-cigarette Health Risks: Nicotine

Nicotine is highly addictive.

Nicotine exposure during adolescence can cause addiction and harm the developing brain.

Nicotine in e-liquids can cause accidental poisoning, especially among children.

Use of products containing nicotine in any form among youth, including e-cigarettes, is unsafe.



Source: Office of the U.S. Surgeon General. The facts on e-cigarette use among youth and young adults. <a href="https://e-cigarettes.surgeongeneral.gov">https://e-cigarettes.surgeongeneral.gov</a>.

#### E-cigarette Health Risks: Carcinogens

E-cigarette aerosols can contain cancer-causing substances (carcinogens), including:

- Formaldehyde
- Acetaldehyde
- Acrolein
- Chromium
- Nickel

No safe level of exposure has been determined.

#### Sources:

<sup>&</sup>lt;sup>1</sup>Bhatnagar et al., Circulation 2014;130:1418–1436.

<sup>&</sup>lt;sup>2</sup> Goniewicz et al., Tob Control 2014;23:133–139.

<sup>&</sup>lt;sup>3</sup> Kosmider et al., Nicotine Tob Res 2014;16:1319–1326.

#### E-cigarette Health Risks: Other Chemicals

E-cigarette aerosol is not harmless "water vapor."

In addition to nicotine, e-cigarette aerosol can contain potentially harmful chemicals, including:

- Ultrafine particles (chemicals that can be inhaled deep into the lungs)
- Diacetyl (a flavor chemical linked to lung disease)
- Volatile organic compounds like benzene (also found in car exhaust)
- Heavy metals (nickel, tin, and lead)

The long-term health effects of e-cigarette use are still unknown.

Source: Office of the U.S. Surgeon General. The facts on e-cigarette use among youth and young adults. <a href="https://e-cigarettes.surgeongeneral.gov">https://e-cigarettes.surgeongeneral.gov</a>.

### Youth Appeal and Use

#### However...

A study from Truth Initiative found that 1 in 4 youth JUUL users don't refer to JUUL use as "e-cigarette use" or even "vaping," but rather as "JUULing."

Youth tobacco surveys have not included questions on "JUULing."

Therefore, existing survey data may not capture all youth e-cigarette use.



#### JUUL is Available in Enticing Flavors

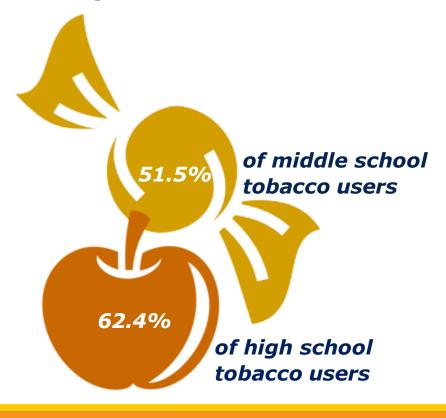
The creators of the JUUL claim that their target audience is adult cigarette smokers.

JUUL Pods come in flavors including mint, mango, and crème brulee.

Candy and fruit-flavored tobacco are proven to appeal to youth and facilitate initiation of tobacco use.

Nationwide, the majority of youth who have ever tried tobacco first tried a flavored product, and youth commonly cite flavors as a reason for using tobacco products.

#### Flavored Tobacco Use among Hoosier Youth, 2016



## News Media, Anecdotes, and Concern from School Personnel

Students plug the Juuls into their school-issued laptops during class to charge them, and can fill the devices with marijuana, a homemade substance or Juul-issued flavor "pods," which can deliver more than double the nicotine — and nicotine buzz — of other vaping products.

—USA Today

Vaping, and "juuling" in particular, is something schools on Long Island are battling, says Patricia Folan, director of The Center for Tobacco Control for Northwell Health. "It's certainly becoming a thing of concern for parents and teachers. We really don't know about these products."

--Newsday

The product has been described as the "iPhone of e-cigs," and it's perfect for any teenager trying to be discreet.
--Journal Sentinel

Instagram and YouTube are full of videos of teens posting clips of themselves vaping, or "Juuling," in class and in front of teachers; a string of high schools along the East Coast has acknowledged "Juuling" in bathroom stalls as a widespread problem, and dozens of teachers report confiscating Juul devices disguised as Sharpies and other classroom items.

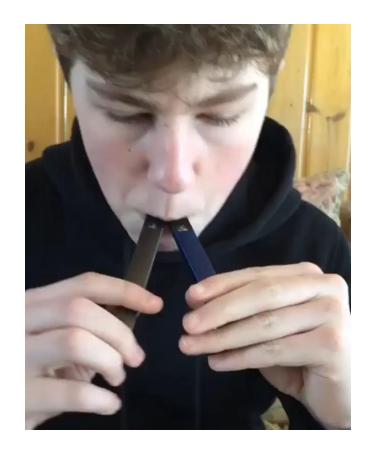
--Business Insider

#### When school is on high security









#### In Summary

JUUL is an e-cigarette, and e-cigarette aerosol is not harmless. It can contain several harmful chemicals.

JUUL pods contain the same amount of nicotine found in a pack of cigarettes, a higher concentration than most other e-cigarettes

JUULs use salt-based nicotine, which helps deliver nicotine like a cigarette

Nicotine in e-cigarettes and other tobacco products can cause addiction and harm brain development among teens

E-cigarette use may increase the risk of using other tobacco products

JUUL has developed their own prevention curriculum. Industry-sponsored curricula has been ineffective in the past

Support 100% Tobacco Free School Grounds Policies that include ENDS.

Youth 13 yrs and older who use tobacco products may be referred to the Indiana Tobacco Quitline for evidence-based help.

Emerging tobacco products should not be a distraction from combustible tobacco products, which by far cause the most death and disease of any tobacco products.

#### E-cigarette Marketing

E-cigarettes are marketed in many ways, such as:

- On TV
- The internet
- Social media
- Celebrity endorsements
- Sponsorships
- In retail stores (point-of-sale)

E-cigarette TV ad exposure among youth and young adults increased dramatically from 2011-2013:

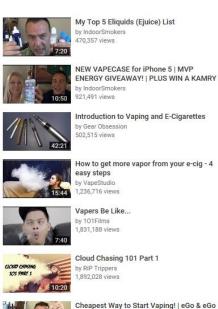
Youth: 256% increase

Young Adults: 321% increase

Duke et al., 2014 Pediatrics (doi: 10.1542/peds.2014-0269)

#### Marketing: Social Media





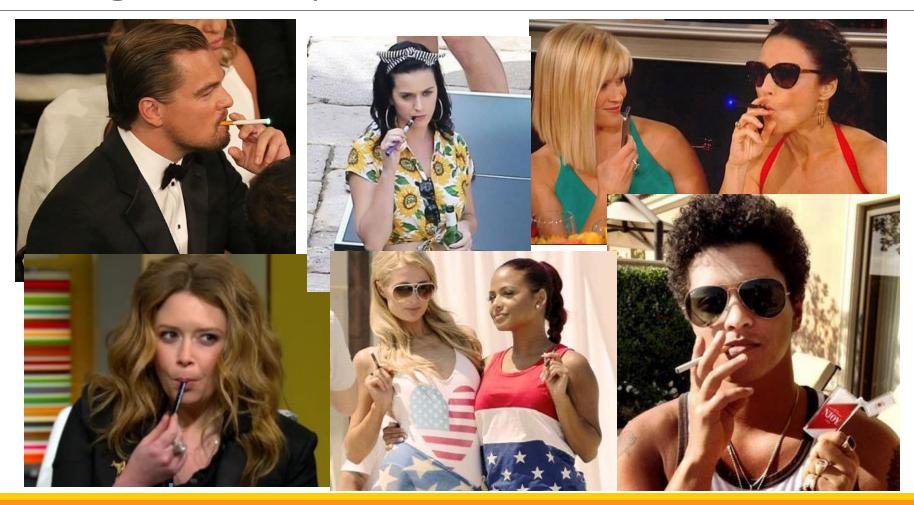


Twist Blister Kits | IndoorSmokers

#### Marketing: Social Media



#### Marketing: Celebrity Endorsements

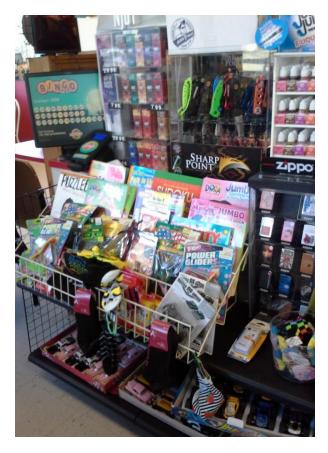


### Marketing: Sponsorships



#### Marketing: Retail Stores (Point-of-Sale)







#### E-cigarette Marketing to Youth

E-cigarettes are marketed in many of the same ways tobacco companies have marketed cigarettes to young people.

- Themes that appeal to young people
- Marketing of flavored products

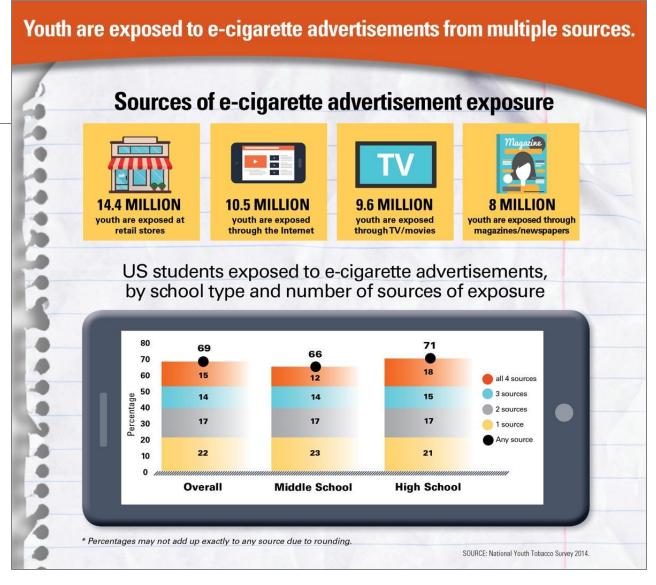
Nearly 3 in 5 middle school students in Indiana (59%) are exposed to any ecigarette advertising.

Indiana (67%) are exposed to e-cigarette advertising.

## About 2 in 3 high school students in

#### Sources:

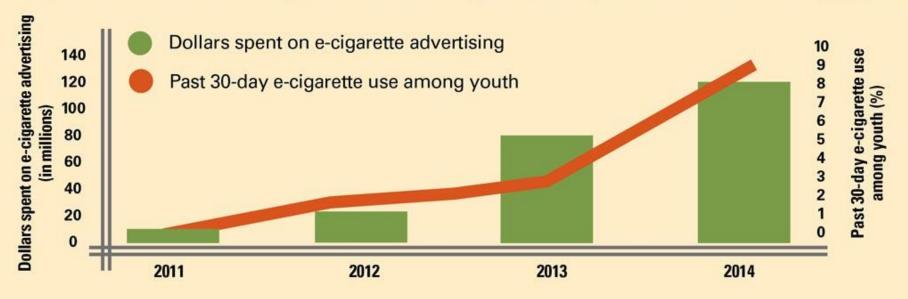
- 1) CDC Vital Signs. E-cigarette Ads and Youth.
- 2) Indiana Youth Tobacco Survey, 2016



#### E-cigarette Marketing Trends

Nationwide, as e-cigarette marketing increased, youth e-cigarette use increased.

#### E-cigarette use among youth is rising as e-cigarette advertising grows



SOURCE: National Youth Tobacco Survey, 2011-2014; Kim et al (2014), Truth Initiative (2015).

Source: CDC Vital Signs. E-cigarette Ads and Youth.

#### E-cigarette Risks: Use of Other Tobacco

Many youth who use e-cigarettes also use other tobacco products.

About **2 in 3** high school e-cigarette users in Indiana use at least one other tobacco product.

Youth who use e-cigarettes may be more likely to later start using regular cigarettes.



2 in 3 Indiana high school students who use e-cigarettes also use other tobacco products.

#### Sources:

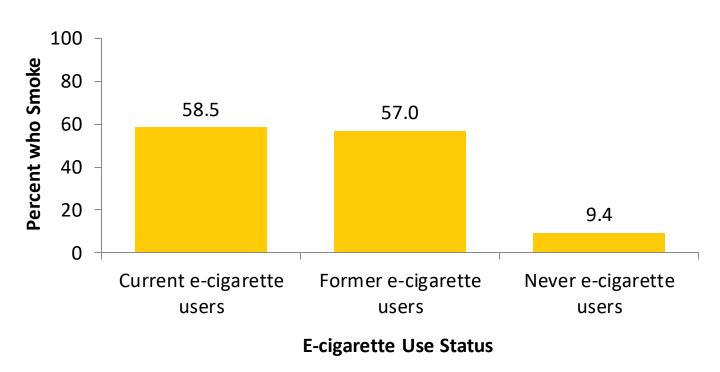
- 1) Office of the U.S. Surgeon General. The facts on e-cigarette use among youth and young adults. <a href="https://e-cigarettes.surgeongeneral.gov">https://e-cigarettes.surgeongeneral.gov</a>.
- 2) Indiana Youth Tobacco Survey, 2016
- 3) Soneji Set al. Association between initial use of e-cigarettes and subsequent cigarette smoking among adolescents and young adults: a systematic review and meta-analysis. *JAMA Pediatrics*. 2015; 171(8):788-797.

#### Quitting Tobacco

E-cigarettes are **not** proven to help people quit tobacco.

Most adults who use ecigarettes continue to use other tobacco products, including cigarettes.

#### Percentage of Indiana Adults who Currently Smoke, by E-cigarette Use Status



Source: Behavioral Risk Factor Surveillance System, 2016

## Comprehensive Tobacco-Free School Policies

Schools are strongly encouraged to enact and enforce policies that...

- Prohibit **tobacco use** by students, staff, parents, and visitors on school property, in school vehicles, and at school-sponsored activities and functions
- Prohibit tobacco advertising in all of the above locations and environments
- Include provisions for **informing** students, staff, families, visitors, and community members about the policy
- Include tobacco use **prevention education** for students and information about **tobacco cessation programs** for students and staff

## Comprehensive Tobacco-Free School Policies: New Focus Area

Include e-cigarettes/Electronic Nicotine Delivery Devices in the definition of *tobacco products* prohibited on school grounds

#### Indiana Tobacco Quitline Services for Youth

Indiana teens will receive a series of five proactive outbound calls from an experienced Quit Coach® trained in youth tobacco cessation counseling.

These proactive calls provide personalized counseling utilizing cognitive-behavioral strategies and motivational support specifically tailored to youths.







#### E-cigarettes: The Bottom Line

- E-cigarette aerosol is not harmless. It can contain several harmful chemicals.
- Nicotine in e-cigarettes and other tobacco products can cause addiction and harm brain development among teens.
- Ouse of products containing nicotine, including e-cigarettes, among youth is unsafe.
- E-cigarettes are marketed in ways that target teens.
- E-cigarette use may increase the risk of using other tobacco products.
- E-cigarettes are not proven to help people quit tobacco.
- Support 100% Tobacco Free School Grounds Policies that include ENDS.
- Youth 13 yrs and older who use tobacco products may be referred to the Indiana Tobacco Quitline for evidence-based help.

#### We are here to help!

YMCA of Kokomo

**Tobacco Free Howard County** 

Quitnowindiana.com

765.513.8514

Shirley.dubois@kokomoymca.org