Health Education: Vaping
– It’s Not Just Water Vapor!

Brought to you by the Kansas Association for Education Service Agencies (KAESA) in collaboration with the Kansas State Department of Education (KSDE)
Welcome!

Mark Thompson
Education Program Consultant
Health & Physical Education
Kansas State Department of Education
mathompson@ksde.org
785-296-6823

Access Today’s Slides at this address:
Health Education (ksde.org)
Presentation Objectives

To address:

• What is a vape product

• Why we need to address vaping
  o Nicotine addiction
  o Unique challenges
  o Student use data

• Resources – where to turn to for information
Though vaping could be addressed in all 8 standards, five that seem more obvious are:

- **Std 1** – comprehend concepts related to health.
- **Std 2** – analyze influence of culture & media on health.
- **Std 3** – ability to access valid information.
- **Std 5** – demonstrate ability to use decision-making skills to enhance one’s health.
- **Std 8** – demonstrate ability to advocate for personal health.
Objective 1: What is a vape product?
Evolution of E-Cigarettes
How E-Cigarettes Work

**INSIDE THE E-CIGARETTE**

- **Cartridge** stores nicotine in a chemical solution of either propylene glycol or glycerine and water.
- **Atomiser**
- **Battery**
- **Microprocessor** activates the LED.
- **LED** illuminates as you inhale.
- **Mouthpiece**

A heating element vaporises the liquid delivering a hit of nicotine straight into the lungs as the smoker inhales.
Different Shapes: Same Components

Tanks & Mods

Rechargeable e-cigarette

Disposable e-cigarette
Contents of e-juice

Common components found in E-liquids
Contents of e-cigarette aerosol

- Volatile Organic Compounds
- Cancer-causing chemicals
- Ultratine particles
- Heavy metals such as nickel, tin, and lead
- Flavoring such as diacetyl, a chemical linked to a serious lung disease
- Nicotine
Marketing to...?
Ethical Packaging?
JUUL

- E-cigarette shaped like a USB flash drive
- Used savvy marketing techniques to appeal to youth
- Used flavors to appeal to youth
- JUUL pods ALWAYS contain nicotine
- Now offered in 5% and 3% strength
Trend of JUUL Sales

Source: Nielsen: Tobacco “All Channel” Data. August 2017-October 2018

Nicotine Content of JUUL

1 JUULpod (3% or 5%) = 1 pack of cigarettes
Objective 2: Why we need to address vaping

- Nicotine addiction
- Unique challenges
- Student use data
Reason #1 - Nicotine

Nicotine is a highly addictive chemical compound.

The addiction results from nicotine changing the way the brain works, causing cravings.

Young people are the most at risk for nicotine addiction due to the brain still developing.
How Nicotine Creates Addiction

• Nicotine stimulates the release of dopamine
• Dopamine is released when the brain is expecting a reward
• The repetitive nature of inhaling from a cigarette or vape product quickly creates an addiction due to this nicotine → dopamine link
• As tolerance for nicotine develops, the brain requires more of it to elicit the same level of dopamine release
Putting Nicotine Into Perspective

• Nicotine addiction is very challenging to overcome. It is classified along with the following drugs as the hardest drugs to quit:
  • Heroin
  • Prescription painkillers
  • Cocaine
  • Methamphetamine

- Crane, Marisa, 6 of the Hardest Drugs to Quit, americanaddictioncenters.org, Nov. 25, 2019
Recipe for Addiction

• The flavors make it easy to hit.
• The devices make it easy to hide.
• The nicotine makes it hard to quit.
Unique Challenge for Youth Quitting

• No smoking cessation medications are FDA approved for use in children or adolescents (younger than 18 years).
Reason #2 – Unique Challenges

• More difficult to detect than traditional cigarette use.
  • Smell/aroma
  • Devices – designed to look like “normal” student belongings such as flash drives
More Challenges

• Messaging of manufacturers and distributors.
  • “Safe” or “Safer than cigarettes”
  • It’s just water vapor
  • It’s a healthier way to stop smoking cigarettes
  • Social media depiction that use of the products is “cool”
More Challenges

• Getting information in parents’/guardians’ hands.
• Counter-messaging pro-vaping industry and champions.
• Making factual statements without research to substantiate.
Reason #3 – Student Use Data

Use is Increasing (YRBS data on 9th-12th Grades)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2019</th>
<th>Increase</th>
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<tbody>
<tr>
<td>Ever tried e-cigarettes:</td>
<td>34.8%</td>
<td>48.6%</td>
<td>39.7%</td>
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<tr>
<td>Used at least 1 day of last 30:</td>
<td>10.6%</td>
<td>22%</td>
<td>107%</td>
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<tr>
<td>Used e-cigarettes daily:</td>
<td>1.4%</td>
<td>5.2%</td>
<td>271%</td>
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</table>
Comparison to Cigarettes

2019 Kansas YRBS data

<table>
<thead>
<tr>
<th>Item</th>
<th>Cigarette</th>
<th>E-Cigarette</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever tried</td>
<td>24.8%</td>
<td>48.6%</td>
</tr>
<tr>
<td>Used at least 1 day of last 30</td>
<td>5.8%</td>
<td>22%</td>
</tr>
<tr>
<td>Used daily over last 30 days</td>
<td>1.3%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>
Link to Cigarette Use

Youth who use e-cigarettes are **4 times** more likely to start using cigarettes.
Objective 3: Resources
Curricula Options

• Take Down Tobacco https://www.takingdowntobacco.org/

• ASPIRE: MD Anderson Cancer Center
  https://www.mdanderson.org/about-md-anderson/community-services/aspire.html

• The Real Cost of Vaping-Scholastic and the FDA
  http://www.scholastic.com/youthvapingrisks/?eml=snp/e/20181116////////FDA////////&ET_CID=20181116_SNP_FDA_ACQ_24449&ET_RID=1414772458
Kansas Vape-Free Schools Toolkit

• Information and resources to help implement, communicate and enforce a tobacco free campus

• Includes credible resources for e-cigarette/tobacco education and cessation for students, parents, and educators.

http://www.kdheks.gov/tobacco/vape_free_schools.htm
Tobacco-Free Signage

- Free signage available from KDHE for schools who pass comprehensive tobacco free policies
Credible, Free Youth Cessation

• My Life, My Quit: available 24 hours a day/7 days a week online, by text or by phone.

• This is Quitting: mobile application and companion text messaging program designed specifically for young adult smokers and e-cigarette users.

• N-O-T On Tobacco: program is rooted in the social cognitive theory and is administered in 10, 50 minute sessions.
TRUTH Initiative

• The largest nonprofit public health organization committed to making tobacco use a thing of the past.  https://truthinitiative.org/

• Vaping: Know the truth – 4 digital lessons of 5-10 minutes for 8th - 12th grade students
Do’s and Don’ts of Talking to Teens

THE DO’S AND DON’TS OF TALKING TO TEENS ABOUT VAPING

Conversation Starters:
- "Would it be okay if we talked about vaping?"
- "Tell me what you know about vaping."
- "Why do you vape?" AND "What do you not like about vaping?"
- If providing factual information, ask, "What do you make of that?"
  - For example: "Youth who vape are more likely to go on and smoke cigarettes. What do you make of that?"

Do:
- Listen twice as much as you speak, use three reflections for every question.
- Encourage an open dialogue.
- Ask open-ended questions and reflect on those responses, make the teen feel heard.

Don’t:
- Criticize or try to instill guilt.
- Turn the conversation into a lecture.
  - Focusing on facts is less effective and can lead to teens digging in their heels.
- Use scare tactics
- Try to answer questions you don’t know the answer to, look the answer up together!

Conversation Closers:
- Give back the autonomy.
  - "At the end of the day, the decision of whether or not to vape is up to you. Only you can make that decision. I'm here for you."
- Schedule a time later to talk more about resources, follow up on how the student is doing, & discuss possibilities of parent notification.
  - "Do you mind if we share this flyer with your parent?"

Youth Tobacco Cessation Resources:

MY LIFE MY QUIT™ program is the free and confidential service for teens who want help quitting all forms of tobacco including vape. By enrolling, teens receive one one-on-one coaching sessions with a tobacco treatment specialist trained in adolescent cognitive development.

Not-On-Tobacco (N-O-T) was created by the American Lung Association that is a group program designed for 14-19 year olds who are daily smokers, vapers, and who demonstrate motivation to quit. Consists of 10 weekly 50 minute sessions plus 4 booster sessions, conducted in a school or community setting, with 13-12 participants per group.

To learn more about what you can do to prevent teen tobacco use visit our website at https://www.kdfeks.gov/tobacco/vape_free_schools.htm
Teen Vaping: What to Watch For

1. Finding Unusual or Unfamiliar Items:
   Disposable or refillable pods that contain the e-juice (or vape juice) may be the most commonly found items. However, many vaping devices may look like benign objects in disguise. JUUL achieved phenomenal success in part by designing its devices to resemble USB drives that can be hidden and charged in plain sight. Other manufacturers are now designing vaping devices that resemble watches, pens, markers and other common objects.

2. Behavioral Changes, Mood Swings, Agitation:
   Mood swings, agitation, impulsivity, secretiveness, memory loss, inability to concentrate and anxiety are some of the key changes you may see. This may be due to the effect of nicotine substantially diminishing the prefrontal cortices of a vaping brain, which largely governs emotional control, decision making and impulse regulation.

3. Shortness of Breath:
   If a child is an athlete and starts having trouble breathing during practices or games, it could be due to vaping.

4. Poor Performance:
   If a child's academic or athletic performance starts to decline, it could be due to nicotine induced changes in the brain. Students who get caught vaping at school may be suspended or kicked off the team.

5. Increased Thirst and Nose Bleeds:
   Some types of e-liquids contain chemicals that dry out the mouth and nasal passages. This can heighten thirst and prompt more frequent nose bleeds.

6. Mouth Sores, Abnormal Coughing, Throat-Clearing:
   Vaping affects the cells and oral tissue, which can lead to lesions, gum disease, tooth loss and other forms of oral decay. It can also irritate the throat, causing vapors to frequently cough or clear their throat.

7. Strange/Sweet Odors:
   One of the appeals of vaping is the "fun" flavors like mint, bubblegum, and chocolate. While certainly less pungent than cigarette smoke, the trace odors of vaping are still noticeable. The most popular flavors are sweet so you may notice an unusually sweet smell, although it goes away quickly.

8. Vaping Lingo:
   Vaping has developed its own culture, with popular sites on YouTube and Twitter showing vape cloud tricks and slang. Keep an ear out for overheard conversations with coded phrases like "sauce" for the device's e-liquid or "e-juice."

By The Vape Free Kansas Schools Task Force, November 2020.
What to do with this information:

● Become personally familiar with the information and terminology

● Teach your students the “facts” about vaping

● Share the information with parents, fellow teachers, and other school staff

● Contact Mark Thompson at mathompson@ksde.org if you need assistance
For Additional Information:

If you or your staff would like to learn more about this topic or others, please contact your local education service center for more in-depth training opportunities.

To receive a certificate of completion for this session, please complete the form below. A certificate will be emailed to the address listed within 24 hours. If you do not receive your certificate, please email Emma Herrman (emma.herrman@greenbush.org).

ACCESS CERTIFICATE OF COMPLETION FORM: HERE