Health for a Change

E-Cigarette Dangers: Presentations for Youth and Adults

October 14, 2019

Foundation for a Healthy Kentucky’s MISSION

To address the unmet health needs of Kentuckians

Pine Mountain, Whitesburg KY
Foundation for a Healthy Kentucky’s MISSION

By...
• Developing and influencing policy
• Improving access to care
• Reducing health risks and disparities
• Promoting health equity

www.healthy-ky.org/events/health-for-a-change
Dec 3 Webinar: Teens and E-Cigs: What’s the Problem?
Dec 4 Infographics for Social Change: A Graphic Ally Hackathon in Louisville
Dec 2019 Webinar: Health Equity, Projects in Kentucky
SAVE THE DATE
Data! Forum Nov. 15 Erlanger

Dangers of E-Cigarettes for Youth and Young Adults

Dr. Pat Withrow,
Retired Cardiologist and
Director of Outreach, Baptist Health Paducah
The use of E-Cigarettes by adolescents and young people is termed addictive and a widespread epidemic

https://time.com/5685936/state-vaping-bans/

Vaping-Related Lung Injuries

Lung x-ray of a patient who was severely affected by the vaping-related respiratory illness.

Lipid-laden macrophages found in patients with vaping-related respiratory illness. Oily lipids are stained red.

There have been over 1,080 confirmed vaping-related lung injuries and at least 18 deaths. 17% vaped nicotine alone and others vaped nicotine with THC or other toxic chemicals.
### E-Cigarette Bans

#### State Vape Ban Laws

<table>
<thead>
<tr>
<th>State</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>September 27, 2019 was last day to order online before ban.</td>
</tr>
<tr>
<td></td>
<td>- All flavors banned except tobacco flavors.</td>
</tr>
<tr>
<td></td>
<td>- Tobacco cartridges, pods andiquotes still permitted.</td>
</tr>
<tr>
<td></td>
<td>- Nicotine-free flavored pods, pods and cartridges are still permitted.</td>
</tr>
<tr>
<td></td>
<td>- Moxibustion and accessories not affected.</td>
</tr>
<tr>
<td></td>
<td>- These rules apply to online orders</td>
</tr>
<tr>
<td></td>
<td>- Buy Michigan Legal Vape Products</td>
</tr>
<tr>
<td>New York</td>
<td>We are accepting and shipping orders to New York until further notice.</td>
</tr>
<tr>
<td></td>
<td>A temporary restraining order has blocked enforcement of the New York Vape Ban. The restraining order is in place until at least October 1st, when the parties reconvene at the appellate court in Albany.</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>- All vapor and vapor products are prohibited.</td>
</tr>
<tr>
<td></td>
<td>- These rules apply to online orders</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Pending Vape Ban Details to be Determined</td>
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<tr>
<td>Connecticut</td>
<td>Pending Vape Ban Details to be Determined</td>
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</tbody>
</table>

States have implemented some types of E-Cigarette Bans:

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### Stores Banning Sale of E-Cigarettes

Current stores that have banned the sales of e-cigarettes. Many others are discontinuing the sale as well.

- Kroger
- Ralphe Food 4 Less
- Harris Teeter
- Walgreens
- Sam's Club
- Rite Aid
- Walmart
- Fred Meyer
Teen Addiction to E-Cigarette Concerns

Some pediatricians and drug counselors observe that in some adolescents, e-cigarette addiction resembles substance abuse (opioid, marijuana) more than nicotine.

Sudden outbursts, explosive demeanor, mood swings and anxiety as well stealing money at home or selling personal possessions to support the $150/week e-cigarette habit

WHY?

• Why would any young person use e-cigarettes?

• If they use them, why would they not quit?

Resources for Addressing Youth Nicotine Addiction

Elizabeth Anderson-Hoagland, MPH
Supervisor, Health Promotion Section
Kentucky Department for Public Health

Resources for Schools
Elizabeth Anderson-Hoagland

October 14, 2019
Prevention that works

0-5 Years

- Bonding
  - Family
  - School authorities
  - Peers
- Emotional learning
  - Self-control
- Simple information on harm
- Focus on parents – skills, cessation
6-11 Years

- More influenced by family than friends
  - Parents need to role model
- Some facts about short-term and long-term consequences
- Classroom behavioral management

12-15 Years

- Counter social influences
  - Communication
  - Refusal/assertion
  - Social norming
  - Media literacy
  - Activism
- Life skills
- Family skills
16-17 Years

- Refusal assertion strategies may be received negatively
- Susceptible to tobacco use if perceived as resulting in a social benefit
- Focus on
  - Motivation enhancement
  - Stress-coping skills
  - Decision making

Recommendations for School Health Programs

1. Develop and enforce a school policy on tobacco use.
2. Provide instruction about the short- and long-term negative physiologic and social consequences of tobacco use, social influences on tobacco use, peer norms regarding tobacco use, and refusal skills.
3. Provide tobacco-use prevention education in kindergarten through 12th grade; this instruction should be especially intensive in junior high or middle school and should be reinforced in high school.
4. Provide program-specific training for teachers.
5. Involve parents or families in support of school-based programs to prevent tobacco use.
6. Support cessation efforts among students and all school staff who use tobacco.
7. Assess the tobacco-use prevention program at regular intervals.
Prevention resources for students

Prevention Resources

ASPIRE

https://www.mdanderson.org/about-md-anderson/community-services/aspire.html

Smokescreengame.org
Prevention Resources

https://med.stanford.edu/tobaccopreventiontoolkit.html
Cessation resources for students

Challenges to Quitting

- Physical addiction to nicotine
- Emotional and psychological connections
- Behavioral habits
- Social connections
Signs of Addiction

- Cravings, or feeling like they really need to use tobacco
- Going out of their way to get tobacco
- Feeling anxious or irritable if they want to use tobacco but can’t
- Continuing to use tobacco because it is hard to stop

Beat Your Cravings!

Poster available at: https://chfs.ky.gov/agencies/dph/dmch/hpb/Pages/tobacco-cessation.aspx
Increase Motivation to Quit

• How is quitting relevant to you?
• What do you know about the risks?
• What would be rewarding about quitting?
• What roadblocks are there to quitting?
• Repeat! Repeat! Repeat!

Resources to Quit

Teen.smokefree.gov
Resources to Quit

Resources for schools
The #iCANendthetrend program's primary goal is to provide tobacco use prevention services to youth, families, and community members across Kentucky. #iCANendthetrend is a peer-led, informed program that offers education on the serious harms of e-cigarette use and the costs associated with addiction, as well as strategies to resist peer pressure and avoid tobacco use. Details on how to join the program are available online.

For more information, email: info@breatheky.org

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**AMERICAN LUNG ASSOCIATION**

**INDEPTH**

*Intervention for Nicotine Dependence: Education, Prevention, Tobacco and Health*

Program Implementation:

- **Session 1**: Getting the Facts
  - Handout: Fact or Fiction, Nicotine/Tobacco Product Fact Sheet, Danger, Pulmonary, My Product Use Tracking Diary

- **Session 2**: Addictions
  - Handout: Product Use History, Signs of Addiction, Nicotine/Tobacco Budget

- **Session 3**: Alternatives to Product Use
  - Handout: Quit & Go, Quit Kit

- **Session 4**: Past, Present, Future
  - Handout: A Picture of My Dream Life

60% of student participants reported that they were willing to quit using tobacco products after completing the INDEPTH program.

https://www.lung.org/stop-smoking/helping-teens-quit/indepth.html
CATCH®
MY BREATH
E-CIGARETTE & JUUL PREVENTION PROGRAM

https://catchinfo.org/modules/e-cigarettes/

Digitalmedia.hhs.gov/tobacco
Resources for parents

https://www.lung.org/stop-smoking/vape-talk/
Resources to Quit

• “QUITKY” to 797979
• www.quitnowky.org

Thank you!
Elizabeth Anderson-Hoagland, MPH
ElizabethA.Hoagland@ky.gov
502-564-9358 ext. 4018

https://chfs.ky.gov
E-Cigarette Dangers: Presentations for Youth and Adults

Bonnie J. Hackbarth
Vice President, External Affairs
Foundation for a Healthy Kentucky

Presentation for Youth

This presentation is brought to you by the Kentucky Department for Public Health, Baptist Health, Kentucky Youth Advocates and the Foundation for a Healthy Kentucky.
E-cigarettes are sometimes called vapes or Juuls. Here you see several examples of e-cigarettes. The Juul in the upper left corner has nearly three-quarters of the U.S. e-cigarette market, but Juul is getting some competition from other e-cigs. What products are being used here? Middle school and high school student use of e-cigarettes is a major health concern both NOW and in the FUTURE, because:

- **E-cigarettes are NOT SAFE products for youth**
- **90 percent of tobacco use starts before age 18 so these products are creating a new generation of tobacco users**
- **Studies show that e-cigarette use by youth leads to cigarette smoking later on**
- **E-cigarettes rewire your brain, making you more susceptible to additions to other products, such as prescription drugs and alcohol**
- **Kids who never would have smoked a cigarette are now smoking e-cigarettes**

Newest products on the market:
- Juul, and knock-off devices called mod pods (top left). They use a flavored liquid made from tobacco and stored in a pod. A typical pod contains as much nicotine as an entire pack of cigarettes, and sometimes a lot more. We don’t know for sure, because they’re not yet regulated; but government tests have found that some e-cigarettes contain a lot more nicotine than what’s labeled on the package.

Sales of Juul e-cigarette soared by 728 percent from August 2017 to August 2018, according to Neilsen data. Juul, introduced just three years ago, had more than 70 percent of the e-cigarette market in 2019. And the company is valued at $15 billion!

The industry likes to call these products vapes, which implies that they’re just harmless water vapor. But that’s not true. They are drug delivery devices, and they get the drug into your brain way faster than needles or pills.

- Another product about to hit the market is called IQOS, pronounced EYE kos (center). It stands for “I Quit Ordinary Smoking.” The IQOS contains actual tobacco, but instead of lighting it on fire like a cigarette, it’s battery-heated. This is a new product, but it’s also the same old tobacco, same old nicotine, same old secondhand aerosol. It’s not safe for kids and teens.

- The industry says they never intended for kids to use e-cigs, but the flavors they market tell a different story. Flavors like cotton candy, gummy bear, and bubble gum are very common. We even see names like unicorn blood – clearly, these flavors are being marketed directly to you.

- Four out of five young e-cigarette users say they used e-cigarettes because they came in flavors they liked.
- The FDA banned flavored cigarettes in 2009, because they were known to appeal to kids.
- Flavors use diacetyl, which causes popcorn lung, a dangerous lung disease. Let me make that clear - the flavors themselves that can be dangerous!
actual tobacco, but instead of lighting it on fire like a cigarette, it’s battery-heated. This is a new product, but it’s also the same old tobacco, same old nicotine, same old secondhand smoke.

- These flavors are a trap. They’re clearly designed to draw kids into the tobacco habit. E-cig makers know that nearly 90 percent of tobacco use starts in youth. In order to re-build the customer base that is dying from years of using their traditional tobacco products like cigarettes, cigars and chew, the tobacco industry has to go after kids with something new. Kid-friendly flavors are how they do it. But make no mistake, e-cigarettes are tobacco products.

- Look at these ads. The typical person trying to quit smoking is over 45 years old. Are these ads meant for people in their 50s and 60s?

Over and over you may hear these products are called vapes, and that they just emit harmless water vapor. THAT’S NOT TRUE.

- E-cigarette aerosol is NOT JUST VAPOR, and IT’S NOT SAFE. The aerosol contains nicotine, which damages a teen’s growing brain. In fact, while the human brain is developing – up to age 25 – nicotine exposure reduces a person’s ability to control impulses, to sit still, and to concentrate, both while the teen is using e-cigarettes, but maybe for the rest of their lives as well.

- Recent studies also show that e-cigarette use also damages the heart and the neural cells in the brain stem. Your brain stem controls breathing and other basic life functions.

- And the federal government is investigating dozens of cases of seizures and serious lung illnesses connected with e-cigarette use, possibly tied to the high number of pods youth often go through in a day. As previously mentioned, each pod has at least as much nicotine as an entire pack of cigarettes. If a teen is smoking three or four pods a day of what they think is watermelon vapor, they’re actually taking in three or four cigarette packs worth of nicotine.

- Nicotine is often described as the MOST ADDICTIVE drug on the planet...more addictive than heroin. Research shows that teens who use e-cigarettes are twice as likely to become adult smokers. Let me say that another way – for you, e-cigs can be a proven gateway to cigarette smoking.

- E-cigarettes also contain heavy metals that will be inhaled deep into your lungs; and also flavorings such as diacetyl. Diacetyl is approved for food, but putting something in your stomach is a whole lot different than inhaling something into the tiny capillaries in your lungs. Diacetyl causes popcorn lung, an incurable lung disease.

- E-cigarettes also include cancer-causing chemicals, volatile organic compounds, and other particles that can be inhaled into the lungs where they cause damage and disease.
actual tobacco, but instead of lighting it on fire like a cigarette, it’s battery-heated. This is a new product, but it’s also the same old tobacco, same old nicotine, same old secondhand smoke. Tobacco use also contributes to a variety of other diseases, including heart disease, stroke, blindness, and gum disease. E-cigs have only become a part of popular culture in the last few years, so we don’t even know all of the long-term health risks yet. What we do know is that e-cigs pose a risk of nicotine poisoning in very young children who might find an e-cigarette around the house and chew on it; and there have been multiple reports of e-cigarette explosions, which have caused serious injury, and lung illnesses that have led to hospitalizations.

E-cigarettes purportedly were developed to help smokers quit. Instead, they’ve hooked millions of adolescents and teens on nicotine. They’ve created a whole new generation of nicotine addicts — and the research shows that many of these young, new addicts would NEVER have tried smoking. Youth e-cigarette users are an entirely NEW and growing category of tobacco users.
We all know what smoking has done to generations of our families. But our great grandparents and grandparents didn’t know. They didn’t know that cigarettes were deadly. They didn’t know that cigarettes cause cancer. They didn’t know that smoking would lead to years of difficulty breathing. They didn’t know smoking would hurt their babies, rot out their teeth and keep them from watching their children and grandchildren graduate from school.

They were manipulated by the tobacco industry into an addiction that still kills nearly a half a million people every year.

Today, many of your friends and classmates don’t know about the dangers of e-cigarettes. But they’re learning. Here’s what some Kentucky kids have to say:

NOTE TO PRESENTER: The names of the students on these slides are hyperlinks. You can also download these PSAs at www.ijustdidntknow.org.
Sadly, many of your classmates are already addicted to nicotine. They can hardly sit through class without taking a hit. They may have tried quitting on their own, only to find out how addicted they’ve become. But free help is available.

“This is Quitting” is a free program specifically for teens and young adults to help them quit e-cigarettes. You can text DITCHJUUL to 88709 to learn more.

Quitting is really hard – it’s much easier to never start in the first place. But quitting is possible. And it’s worth it. Share this with anyone you know who might be addicted to e-cigs.
Chances are, if you live in Kentucky, you have a family member or friend who died of tobacco-related cancer. You may have more than one.

In fact, Kentucky is the “Cancer Capital” of our nation.
A higher percentage of Kentuckians are diagnosed with cancer than in any other state
A higher percentage of Kentuckians die of cancer than in any other state
A higher percentage of cancers are attributed to smoking than in any other state (34%)

What that last number means is that 34 percent of cancers in Kentucky are PREVENTABLE.

This map shows CHANGE in cancer deaths from 1980 to 2014.
Cancer deaths have gone DOWN 20 percent since 1980 just about almost everywhere across the country.
But look at Kentucky – they’ve gone UP.
As you can see, Kentucky is ground zero when it comes to cancer. And remember, more than a third of those cases are caused directly by tobacco use.
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The use of tobacco products is the biggest risk factor for many diseases in Kentucky. Yet 24.5 percent of Kentucky adults smoke. That’s 62 percent higher than the national adult smoking rate of 15.1 percent. The map on the bottom left shows where the highest smoking rates are – notice that they tend to be in rural areas.
E-cigarettes purportedly were developed to help smokers quit. Instead, they’ve hooked millions of adolescents and teens on nicotine. They’ve created a whole new generation of nicotine addicts — and the research shows that many of these young, new addicts would NEVER have tried smoking. They represent an entirely NEW and growing category of young tobacco users.

According to the Food and Drug Administration, one in five high schoolers used e-cigarettes nationwide in 2018. That was a 78 percent jump over 2017. And one in 20 middle schoolers used e-cigs. That was a 48 percent jump.

By contrast, only 2.8 percent of U.S. adults used e-cigarettes in 2017, the latest year for which data is available.

In Kentucky, we’ve seen more than a 100 percent increase among high schoolers and nearly a 100 percent increase among middle schoolers in e-cig use over the last two years. More than one in four Kentucky high school seniors and one in seven 8th graders used e-cigarettes in 2018.
E-cigarettes are sometimes called vapes or Juuls. Here you see several examples of e-cigarettes. The Juul in the upper left corner has nearly three-quarters of the U.S. e-cigarette market, but Juul is getting some competition from other e-cigs. What products are being used here? Middle school and high school student use of e-cigarettes is a major health concern both NOW and in the FUTURE, because:

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These flavors are a trap. According to the Journal of the American Medical Association, four out of five kids who have tried e-cigarettes started with a flavored product. The FDA banned flavored cigarettes in 2009 because they appealed to kids, but it has yet to ban flavored e-cigarettes. Meanwhile, tobacco and e-cig companies are selling flavors like cotton candy, bubble gum and "Sticky Sweets." These flavors are clearly designed to draw kids into the tobacco habit. E-cig makers know that nearly 90 percent of tobacco use starts in youth. In order to re-build the customer base that is dying from years of using their products, the tobacco industry has to go after kids. Kid-friendly flavors are how they do it.
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The Centers for Disease Control and Prevention tells us that e-cigarette aerosol is NOT JUST VAPOR, and IT'S NOT SAFE. The aerosol contains nicotine, which is damages the developing brain of adolescents, teenagers and young adults. In fact, while the brain is developing — up to age 25 — nicotine exposure reduces impulse control and impairs learning, both immediately and long-term. Recent studies also show that e-cigarette use damages the heart and the neural cells in the brain stem.

And the FDA is investigating incidences of seizures connected with e-cigarette use, possibly tied to the high number of pods youth often go through in a day. As previously mentioned, each pod has at least as much nicotine as an entire pack of cigarettes.

Moreover, nicotine is often described as the MOST ADDICTIVE drug on the planet...more addictive than heroin. Research shows that teens who use e-cigarettes are twice as likely to become adult smokers. Let me say that another way — e-cigs are a proven gateway to cigarette smoking for youth.

E-cigarettes also contain heavy metals that will be inhaled deep into the lungs; and also flavorings such as diacetyl. Diacetyl is approved for food, but eating is a whole different animal than inhaling something into the tiny capillaries in your lungs. Diacetyl causes popcorn lung, an incurable lung disease.

Here’s a graphic from the Beaumont Health Foundation sharing some signs that parents, guardians, teachers and friends can watch out for. If you see these signs, the best thing you can do is warn adolescents and teens that e-cigarettes aren’t safe. Other signs might include:

- New smells in your teen’s car or bedroom
- Spending time in a parked car
- Wearing a hoodie and long sleeves in the heat of summer
- Propylene glycol is the ingredient in e-cigarette aerosol that creates the visual cloud. It causes dry mouth, the reason for increased desire for water.
We all know what smoking has done to generations of our families. But our great grandparents and grandparents didn’t know. They didn’t know that cigarettes were deadly. They didn’t know that cigarettes cause cancer. They didn’t know that smoking would lead to years of difficulty breathing. They didn’t know smoking would hurt their babies, rot out their teeth and keep them from watching their children and grandchildren graduate from school.

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Sadly, many Kentucky youth are already addicted to nicotine. But free help to quit is available.

In 2017, the legislature passed a law requiring all health insurers, including commercial companies as well as Medicaid, to fully cover the cost of FDA-approved tobacco cessation programs and medications.

So if you or the youths in your lives have health insurance or Medicaid, free help is available. (NOTE: NRT is not covered by Medicare or Medicare supplement plans.)

In addition, the Kentucky Department for Public Health runs the statewide tobacco quit line, which has live counselors who will work with both adults and youth to assist them in successfully quitting tobacco use.

Quitting is hard – it’s much easier to never start in the first place. But quitting is possible. And now that you know, it’s worth the effort to try.

Questions?

Dr. Pat Withrow

Elizabeth Anderson-Hoagland, MPH

Bonnie J. Hackbarth
Survey Via Email

- Give me your feedback
- Suggest future topics
- Only 3 minutes

Foundation for a Healthy Kentucky

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@healthyky
See you soon!

CONTACT

Rachelle Seger
Community Health Research Officer
rseger@healthy-ky.org
@kyhealthfacts
(502) 326-2583