

# TOOLKIT FOR PROVIDERS — END THE E-CIGARETTE EPIDEMIC



*E-cigarettes are now the most common tobacco product used by youth.*



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The FDA has called e-cigarette use among teens an epidemic with no signs of abating. Thank you for your interest and help in fighting this important battle. This e-cigarette toolkit provides educational materials and resources for parents, teachers and providers. The toolkit includes information on the following:

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40.8% of Pennsylvania high school students have used an e-cigarette at least once, and **24.1% of high school students currently use e-cigarettes.**

– Centers for Disease Control and Prevention.



## E-CIGARETTE USE INCREASED

**78%** among high school students from 2017 to 2018.

– U.S. Health and Human Services

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# FACTS ABOUT E-CIGARETTES

The Impact of E-Cigarettes on the Lungs

E-Cigarettes Fact Sheet / Pennsylvania



# The Impact of E-Cigarettes on the Lungs

E-cigarettes are a relatively new tobacco product that have been sold in the U.S. for about a decade. The e-cigarettes currently in the U.S. marketplace have not been systemically reviewed by the Food and Drug Administration to determine their impact on lung health. While much remains to be determined about the lasting health consequences of these products, the American Lung Association is very troubled by the evolving evidence about the impact of e-cigarettes on the lungs.

## The Inhalation of Harmful Chemicals Can Cause Irreversible Lung Damage and Lung Disease

In January 2018, the National Academies of Science, Engineering and Medicine<sup>1</sup> released a consensus study report that reviewed over 800 different studies.

***That report made clear: using e-cigarettes causes health risks. It concluded that e-cigarettes both contain and emit a number of potentially toxic substances. The Academies' report also states there is moderate evidence that youth who use e-cigarettes are at increased risk for cough and wheezing and an increase in asthma exacerbations.***



A study from the University of North Carolina found that the two primary ingredients found in e-cigarettes – propylene glycol and vegetable glycerin – are toxic to cells, and that the more ingredients in an e-liquid, the greater the toxicity.<sup>2</sup>



E-cigarettes produce a number of dangerous chemicals including acetaldehyde, acrolein, and formaldehyde. These aldehydes can cause lung disease, as well as cardiovascular (heart) disease.<sup>3</sup>



E-cigarettes also contain acrolein, a herbicide primarily used to kill weeds. It can cause acute lung injury and Chronic Obstructive Pulmonary Disease and may cause asthma and lung cancer.<sup>4</sup>



Both the U.S. Surgeon General and the National Academies of Science, Engineering and Medicine have warned about the risks of inhaling secondhand e-cigarette emissions, which are created when an e-cigarette user exhales the chemical cocktail created by e-cigarettes.



In 2016, the Surgeon General concluded that secondhand emissions contain, “nicotine; ultrafine particles; flavorings such as diacetyl, a chemical linked to serious lung disease; volatile organic compounds such as benzene, which is found in car exhaust; and heavy metals, such as nickel, tin, and lead.”



The Food and Drug Administration (FDA) has not found any e-cigarette to be safe and effective in helping smokers quit. If smokers are ready to quit smoking for good, they should call 1-800-QUIT NOW or talk with their doctor about finding the best way to quit using proven methods and FDA-approved treatments and counseling.

<sup>1</sup> NAM Report

<sup>2</sup> Sassano MF, Davis ES, Keating JE, Zorn BT, Kochar TK, Wolfgang MC, et al. (2018) Evaluation of e-liquid toxicity using an open-source high-throughput screening assay. PLoS Biol 16(3): e2003904.

<sup>3</sup> Ogunwale, Mumiye A et al. (2017) Aldehyde Detection in Electronic Cigarette Aerosols. ACS omega 2(3): 1207-1214. doi: 10.1021/acsomega.6b00489].

<sup>4</sup> Bein K, Leikauf GD. (2011) Acrolein - a pulmonary hazard. Mol Nutr Food Res 55(9):1342-60. doi: 10.1002/mnfr.201100279.



# E-Cigarettes Fact Sheet / Pennsylvania



In 2015, **9.1%** of adults in Pennsylvania reported having tried an e-cigarette at least once.<sup>1</sup> According to the 2015 Pennsylvania Youth Risk Behavior Survey, **40.8%** of high school students have used an electronic vapor product at least once, and **24.1%** of high school students currently use electronic vapor products.<sup>2</sup>

## E-Cigarettes Are Not Quit Smoking Products

- E-cigarettes are **unregulated tobacco products**. Almost all e-cigarettes include nicotine, as well as other chemicals and toxins which are unsafe to inhale.
- FDA delayed a critical review of ingredients and potential harms until 2022, leaving **unregulated products with unknown chemicals that are being inhaled into the lungs on the market**.
- In January 2018, the National Academies of Science, Engineering, and Medicine released a consensus study report that reviewed over 800 studies. The report found that **e-cigarette use causes health risks, increases the chance that youth will start to use combustible tobacco products, and exposes others to dangerous secondhand e-cigarette emissions**.<sup>3</sup>

## Secondhand E-Cigarette Emissions Are Not Safe

- In 2016, the Surgeon General concluded that secondhand emissions contain, “**nicotine**; ultrafine particles; flavorings such as **diacetyl**, a chemical linked to serious lung disease; **volatile organic compounds** such as **benzene**, which is found in car exhaust; and **heavy metals**, such as **nickel, tin, and lead**.”<sup>4</sup>

## The Tobacco Industry Markets E-Cigarettes To Children

- E-cigarettes are the **most commonly used tobacco products among youth**. According to a 2018 Centers for Disease Control study, the primary reasons teens use e-cigarettes are because the candy and fruit flavors are appealing to them, their friends and family are using them, and they think e-cigarettes are less harmful.<sup>5</sup>
- Advertising by e-cigarette companies increased from \$6.4 million in 2011 to \$115 million in 2014. **More than one in two middle and high school students have seen e-cigarette ads in retail stores, and two in five have seen online ads for e-cigarettes**.<sup>6</sup>

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# E-CIGARETTES AND AMERICAN LUNG ASSOCIATION'S TOBACCO CONTROL POLICY

The American Lung Association recommends that e-cigarettes be added into the definitions of “tobacco products” in existing tobacco use policies. It is important to make clear that all nicotine-containing vapor products are also “tobacco products” and will be subject to the same restrictions applied to tobacco product use.

Tobacco Control Policy

What States Can Do To Reduce E-Cigarette Use



# Tobacco Control Policy

## Policies Key to Ending the Tobacco Epidemic:

- Increased tobacco taxes and parity for all products<sup>7</sup>
- Comprehensive smokefree air laws including e-cigarettes<sup>8</sup>
- Raising the minimum age of sale for all tobacco products to 21<sup>9</sup>
- Comprehensive coverage for tobacco cessation treatments and counseling
- Fully funding state tobacco prevention and education programs at levels recommended by CDC
- Fully funding mass-media campaigns to prevent youth use and to prompt current tobacco users to quit
- Implementation of FDA's oversight over all tobacco products



<sup>1</sup> Odani S, Armour BS, Graffunder CM, Willis G, Hartman AM, Agaku IT. State-Specific Prevalence of Tobacco Product Use Among Adults — United States, 2014–2015. *MMWR Morb Mortal Wkly Rep* 2018;67:97–102.

<sup>2</sup> Pennsylvania High School Youth Risk Behavior Survey Results. (2015). Centers for Disease Control and Prevention.

<sup>3</sup> Public Health Consequences of E-Cigarettes (2018). The National Academies of Sciences, Engineering, and Medicine

<sup>4</sup> U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General — Executive Summary. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.

<sup>5</sup> Morbidity and Mortality Weekly Report article "Reasons for Electronic Cigarette Use Among Middle and High School Students — National Youth Tobacco Survey, United States, 2016" February 15, 2018.

<sup>6</sup> Centers for Disease Control and Prevention. E-Cigarette Ads and Youth.

<sup>7</sup> Bader, Pearl, David Boisclair, and Roberta Ferrence. "Effects of Tobacco Taxation and Pricing on Smoking Behavior in High Risk Populations: A Knowledge Synthesis." *International Journal of Environmental Research and Public Health* 8.11 (2011): 4118–4139. PMC. Web. 6 Mar. 2018.

<sup>8</sup> Fong GT, Hyland A, Borland R, et al Reductions in tobacco smoke pollution and increases in support for smokefree public places following the implementation of comprehensive smoke-free workplace legislation in the Republic of Ireland: findings from the ITC Ireland/UK Survey Tobacco Control 2006;15:iii51-iii58.

<sup>9</sup> Committee on the Public Health Implications of Raising the Minimum Age for Purchasing Tobacco Products; Board on Population Health and Public Health Practice; Institute of Medicine; Bonnie RJ, Stratton K, Kwan LY, editors. *Public Health Implications of Raising the Minimum Age of Legal Access to Tobacco Products*. Washington (DC): National Academies Press (US); 2015 Jul 23.



# What States Can Do To Reduce E-Cigarette Use



1. Increase tobacco taxes and equalize rates across all tobacco products—including e-cigarettes



2. Include e-cigarettes in comprehensive smokefree air laws



3. Raise the minimum age of sale for all tobacco products to 21



4. Require coverage for comprehensive quit-smoking treatments and counseling



5. Fully fund state tobacco prevention and education programs per CDC recommendations



6. Fully fund mass-media campaigns aimed at preventing youth tobacco use, and urging current tobacco users to quit



7. States and localities have the authority to restrict the use of flavored tobacco products. So why hasn't yours?

1-800-LUNGUSA | Lung.org



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# RESOURCES FOR PARENTS, TEACHERS, AND PROVIDERS

[E-cigarettes, “Vapes”, and JUULs: What Parents Should Know](#)

[E-cigarettes, “Vapes”, and JUULs: What Schools Should Know](#)

[E-cigarettes, “Vapes”, and JUULs: What Teens Should Know](#)

[How Can I Tell if My Child is JUULing or Vaping?](#)



# E-cigarettes, “Vapes”, and JUULs

## What Parents Should Know

### Are e-cigarettes less harmful than cigarettes?

***There is no FDA oversight of the manufacturing of these products – which means there is no oversight regarding potentially harmful ingredients.***

- E-cigarettes almost always contain harmful ingredients including nicotine.
- Acrolein, a known ingredient of many e-cigarettes, causes irreversible lung damage. Nicotine exposure during adolescence can harm the developing brain.
- The most popular e-cigarette among teens is JUUL
  - All JUUL pods contain some nicotine – something many youth don’t realize.
  - According to the manufacturer, one JUUL pod may contain as much nicotine as a pack of cigarettes.
- No e-cigarette has been found to be safe and effective by FDA in helping smokers quit.

### Is there a difference between an e-cigarette and JUUL?

- No. JUULs may look different, but they’re actually a type of e-cigarette.
- E-cigarettes are battery-powered and deliver nicotine through a liquid which turns into an aerosol.
- The e-liquids come in fruit flavors that appeal to youth.


***JUUL is more discrete and looks like a USB drive. Other e-cigarettes may look like phones.***


- Cartridge-based e-cigarettes like JUUL contain nicotine salts that do not produce vapor or visible emissions when the device is used and may make the product even more addictive.


***JUUL claims that some of its pods have roughly as much nicotine as an entire pack of cigarettes.***

### How bad is the e-cigarette epidemic?

Most common reasons youth use e-cigarettes<sup>1</sup>

 **39%** Use by “friend or family member”

 **31%** Availability of “flavors such as mint, candy, fruit, or chocolate”

 **17%** Belief that “they are less harmful than other forms of tobacco such as cigarettes”

<sup>1</sup> Wang TW, Gentzke A, Sharapova S, Cullen KA, Ambrose BK, Jamal A. Tobacco Product Use Among Middle and High School Students – United States, 2011–2017. MMWR Morb Mortal Wkly Rep 2018;67:629–633



# E-cigarettes, “Vapes”, and JUULs

## What Parents Should Know

### Does the American Lung Association agree with the Food and Drug Administration that youth use of e-cigarettes has reached an epidemic?

- Yes, the American Lung Association agrees that e-cigarette use among youth has reached epidemic levels.
- American Lung Association has been asking the FDA to take action on e-cigarettes for a decade.
- E-cigarettes are the most commonly used tobacco products among youth and have been for several years now.
- Many youth don't realize how they are harming their lungs and brain by using e-cigarettes.

*Several years ago, one study estimated there were about 7,700 flavors of e-cigarettes on the market at that time.*

### Contact

Lung HelpLine is a telephone support line available in over 250 languages, and is a free service allowing callers access to expert staff, including registered nurses, respiratory therapists, pharmacists and certified tobacco cessation specialists.

Contact your local American Lung Association office for information on youth leadership groups and other youth tobacco initiatives. **1-800-LUNGUSA (586-4872)**

### How is the American Lung Association helping your children?

- The American Lung Association urges the Food and Drug Administration to take meaningful action to crack down against products that target youth.
- The American Lung Association and our partners filed a lawsuit against FDA for its delay of reviewing products currently for sale.
- The American Lung Association is working to implement proven effective policies that will reduce youth from e-cigarettes, including raising the minimum age of sale to 21 and increasing the price of products.
- Education programs available
  - Not on Tobacco (N-O-T) is the American Lung Association's teen smoking cessation program and helps teens who want to quit, providing the tools, information and support to quit for good.
  - INDEPTH program is offered as an option to students who face suspension for violation of school tobacco-use policy and is administered by an adult facilitator in either a one-on-one or group format in a school or community-based setting.



**1-800-LUNGUSA | Lung.org**



# E-cigarettes, “Vapes”, and JUULs

## What Schools Should Know


### What are these products?


- E-cigarettes are battery-powered devices that use a heating element to heat e-liquid, typically containing nicotine, from a cartridge that produces a chemical-filled aerosol.
- Many e-liquids or “e-juice” come in fruit flavors, making them appealing to kids.


*E-cigarettes come in many forms and can look like everyday products like pens, USB flash drives, phones and tubes of lipstick.*

- Currently, the most popular e-cigarette among teens is the JUUL, which looks like a USB flash drive and produces little visible aerosol when being used. Many JUUL pods contain high levels of nicotine - one JUUL pod contains roughly the same amount of nicotine as one pack of cigarettes, or 20 cigarettes.

### Most common reasons kids use e-cigarettes include:<sup>2</sup>

 **39%** Use by “friend or family member”

 **31%** Availability of “flavors such as mint, candy, fruit, or chocolate”

 **17%** Belief that “they are less harmful than other forms of tobacco such as cigarettes”

### Are e-cigarettes less harmful than cigarettes?

- The Surgeon General has concluded that e-cigarette aerosol is not safe.
- E-cigarettes contain harmful and potentially harmful ingredients, including formaldehyde and acrolein, which can cause irreversible lung damage. They also contain nicotine.
- E-cigarettes can be used for delivery of marijuana and other illicit drugs.
- FDA has found no e-cigarette to be safe and effective in helping people quit; in fact, more than half of all adult e-cigarette users continue to use regular cigarettes.

### Is youth e-cigarette use really an epidemic?

*The FDA has called e-cigarette use among teens an epidemic with no signs of abating.*

- E-cigarettes are the most commonly used tobacco products among kids, with nearly 12 percent of high school students nationwide using e-cigarettes and about 20 percent using at least one tobacco product.



<sup>1</sup> Wang TW, Gentzke A, Sharapova S, Cullen KA, Ambrose BK, Jamal A. Tobacco Product Use Among Middle and High School Students – United States, 2011–2017. MMWR Morb Mortal Wkly Rep 2018;67:629–633.

<sup>2</sup> Tsai J, Walton K, Coleman BN, et al. Reasons for Electronic Cigarette Use Among Middle and High School Students – National Youth Tobacco Survey, United States, 2016. MMWR Morb Mortal Wkly Rep 2018;67:196–200.



# E-cigarettes, “Vapes”, and JUULs

## What Schools Should Know

### Impact of e-cigarette use on teens

*The bottom line: e-cigarette use is unsafe, especially for young people.*

- Schools can educate their students about the potential long-term consequences of using e-cigarettes.
  - Kids often don't realize that they are harming their lungs and their brain by using e-cigarettes.
  - Kids may not realize that the products they are using contain nicotine, which is highly addictive and can harm adolescent brain development.
- It's not just harmless water vapor: secondhand emissions from e-cigarettes can contain nicotine; ultrafine particles; **flavorings such as diacetyl, a chemical linked to serious lung disease**; volatile organic compounds such as benzene, which is found in car exhaust; and heavy metals, such as nickel, tin and lead.
- The e-cigarette industry is currently using the same tactics that worked to sell traditional cigarettes for decades.
- These products are designed to appeal to and be used by teens and can go undetected by adults.

### Contact

Lung HelpLine is a telephone support line available in over 200 languages, and is a free service allowing callers access to expert staff, including registered nurses, respiratory therapists, pharmacists and certified tobacco cessation specialists.

Contact your local American Lung Association office for information on youth leadership groups and other youth tobacco initiatives. **1-800-LUNGUSA (586-4872)**

### What should schools do to protect students from these products?

- Enforce comprehensive tobacco-free campus policies that include e-cigarettes. Punitive policies aren't effective. Many of our youth are already addicted to nicotine through these tobacco products and therefore efforts are needed to help kids quit. Schools should offer programs on-site to help students quit or connect them with resources to support them in breaking free from their addiction.
- Ensure all teachers, administrators and staff know the different kinds of e-cigarettes on the market and the dangers they pose to young people.
- Participate in the “Real Cost Campaign.” FDA's tobacco prevention campaign which now features ads to educate teens on dangers of e-cigarettes. Schools can take advantage of free print materials and web content from the campaign.

### What resources does American Lung Association offer to address this issue?

- Not on Tobacco (N-O-T) is the American Lung Association's teen smoking cessation program and helps teens who want to quit, and provides the tools, information and support to quit for good.
- The Alternative to Suspension program is offered as an option to students who face suspension for violation of school tobacco-use policy and is administered by an adult facilitator in either a one-on-one or group format in a school or community-based setting.

**1-800-LUNGUSA | Lung.org**



# E-cigarettes, “Vapes”, and JUULs

## What Teens Should Know



### What are e-cigarettes?

Electronic cigarettes, or e-cigarettes, include “vapes”, hookah pens, or JUULs. They are battery-powered devices that heat an e-liquid sometimes called “e-juice” that often contains nicotine. E-cigarettes are inhaled like regular cigarettes and produce an aerosol cloud of nicotine or other substances. They are not proven to be a safer alternative to cigarettes.

### Is there a difference between using an e-cigarette and JUUL?

- No. JUULs may look different, but they’re actually a type of e-cigarette.

***Every JUUL pod contains highly addictive nicotine. JUUL does not make any nicotine-free pods. Some JUUL pods contain roughly as much nicotine as an entire pack of cigarettes.***

- The aerosol cloud produced by a JUUL might not look as thick as other e-cigarettes or regular cigarette smoke, but it still contains many of the same chemicals and has the same health risks.

### Aren’t e-cigarettes less harmful than tobacco? Isn’t it just water vapor?

- The aerosol produced by e-cigarettes isn’t water vapor and it isn’t harmless.

***The aerosol inhaled from these products is often a mixture of harmful chemicals like nicotine, formaldehyde and acrolein.***

- Virtually all e-cigarettes contain nicotine – even the ones labeled “nicotine free”. This is because there are no rules about how e-cigarettes or “e-juice” are made. There is no way to know exactly what is in an e-cigarette.
- “E-juice” and JUUL pods flavored like fruit or other treats carry the same health risks as the unflavored products. Also, the flavorings used are typically not safe to be inhaled into the lungs.



# E-cigarettes, “Vapes”, and JUULs

## What Teens Should Know

### What are the health risks of e-cigarettes?

- E-cigarettes contain chemicals that can cause irreversible lung damage and alter teen brains.

*E-cigarettes contain harmful chemicals such as formaldehyde, which is known to cause cancer, and acrolein which is used as a weed killer and can cause irreversible lung damage.*

- Nicotine is highly addictive and exposure during adolescence can harm the developing brain.
- Youth who use e-cigarettes are more likely to go on to use traditional cigarettes.
- In the short term, e-cigarette aerosol can irritate your lungs, throat and eyes. It can also make it more likely that you’ll catch colds or get the flu.

### Is it legal for people to sell e-cigarettes to youth or for youth to buy or use them?

- In the majority of states, the minimum age of sale for e-cigarettes is 18; in three states the minimum age is 19 and in six states and DC the minimum age is 21.

*In many states, it is illegal for retailers to sell youth e-cigarettes, and in some states it is also illegal for youth to possess e-cigarettes.*

- Many schools have added e-cigarettes to their tobacco-free school policies and the consequences for using them on school grounds are often the same as smoking traditional cigarettes.

### Can e-cigarettes help someone quit?

- No e-cigarette has been found to be safe and effective to help people quit smoking.
- If you know someone who wants to quit smoking, they can call 1-800-LUNGUSA (1-800-586-4872) or visit [Lung.org](https://www.lung.org) to learn about quitting safely.

### Learn more:

Contact your local American Lung Association office for information on youth leadership groups and other youth tobacco initiatives. 1-800-LUNGUSA or [Lung.org](https://www.lung.org)





# How Can I Tell if My Child is JUULing or Vaping?

If you're concerned that your child may be JUULing, here are a few signs you should be on the lookout for:

## Unexplained Sweet Scent

With the JUUL product available in 16 different flavors, many of which are sweet and/or fruity, be on the lookout for an unexplainable, sweet scent which may indicate your child is JUULing. (Keep in mind that JUULs create far less of a vapor or "cloud" than traditional e-cigarettes, so it may be more difficult to detect the scent.)

## USB Flash Drive That Doesn't Look Normal

If you come across an unusual looking USB flash drive, often with holes on one end (the mouthpiece), chances are it's a JUUL and not an ordinary flash drive.

## Skipping the Caffeine

Some e-cigarette users suddenly find themselves developing sensitivity to caffeine. So, if your teen used to be hitting coffee regularly or chugging energy drinks and is now suddenly passing on their favorite caffeinated drinks, this could be a red flag.

## Increased Thirst

Dehydration, often described by vapers as dry or cotton mouth is actually a fairly common side effect of JUULing and vaping in general. Propylene Glycol, one of the ingredients in e-liquid, is the primary cause of the dehydration. The substance has been shown to absorb and hold in water molecules, preventing them from being absorbed into the body. Therefore, if you notice your teen drinking more than they typically do or you happen to notice other signs of dehydration such as dark circles under their eyes, you may want to dive a little deeper to determine the cause.

## Nosebleeds

Typically, when a person is JUULing they exhale the vapor through their nose which can cause the inside of their nostrils to become dried triggering random nosebleeds. The chemical in the e-liquid, Propylene Glycol, is a dehydrating chemical that strips the moisture from the inside of the nose. So, if your child is suddenly experiencing nosebleeds, it probably deserves more attention to determine the cause.





# How Can I Tell if My Child is JUULing or Vaping?

## Bloody Sores in the Mouth / Smoker's Cough

According to a 2017 article in Science News for Students, entitled **"Concerns Explode Over New Health Risks of Vaping,"** researchers are now linking e-cigarettes with mouth wounds that won't heal and smoker's cough. The vapors disrupt the immune system which can have harsh effects on human cells. Keep your eye on your child if they complain of sores in their mouth or begin to show signs of an unexplained cough.

## Finding Organic Cotton Balls and Metallic Wires

If you stumble across any unbleached, organic cotton balls or thin metallic coils, which are components used when vaping, it's typically a dead giveaway that your child is vaping.

## Discarded Atomizers

The atomizer is an important part of any e-cigarette. It's the component of the e-cigarette that turns the e-liquid into vapor. The atomizers don't last forever and eventually need to be discarded.

## Discarded JUUL Pods

To use a JUUL, users purchase JUUL "pods." As the name suggests, the pod systems are e-cigarettes that make use of a pod as opposed to a traditional atomizer, although they pretty much serve the same function. If you happen to see discarded JUUL pods in your child's backpack, bedroom, pockets or elsewhere, there's reason for concern.

When approaching the subject of JUULing with your child, it's important to remember that teenagers view JUULing as cool, fairly harmless and fun, and the pressure to try it among their peers is oftentimes intense.

Experts say it's important that we talk with our kids calmly and honestly about tobacco, e-cigarettes, and nicotine addiction. There's actually a fairly good chance your child has no idea that JUULs contain nicotine or the damaging impact they can have on their health. Help them understand just how harmful JUULing is, how addictive nicotine is and how nicotine addiction can affect their health, both short and long-term, as well as their performance in school and in sports.

Above all, keep the lines of communication open with your child. The more comfortable they are coming to you to discuss important issues, the more open they'll be to further discussion and the more accepting they'll be of your guidance.

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# RESOURCES FOR YOUTH

Learn More About E-Cigarettes and JUULs



# Learn More About E-Cigarettes and JUULs

## VAPING IS NOT JUST WATER AND FLAVORS

### Acrolein

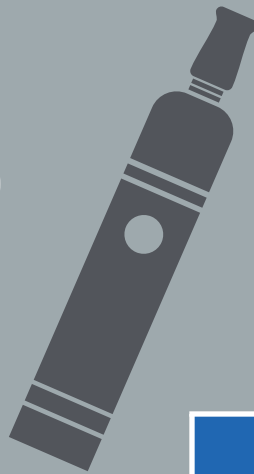
The same toxic product that's used as a weed killer and can cause irreversible lung damage.

### Formaldehyde

A dangerous chemical that can cause lung and even heart disease.

### Propylene glycol

This ingredient is toxic to cells and can cause a condition known as Popcorn Lung.



## MOST E-CIGARETTES DO CONTAIN NICOTINE.

### Why is this a problem for me?

- Nicotine is an addictive chemical and can harm development of the teen brain.
- Over time, it can affect your attention span and even result in memory loss.

**GROSS, RIGHT? AND THESE AREN'T EVEN ALL OF THE CHEMICALS THAT WE KNOW ABOUT.**



40.8% of Pennsylvania high school students have used an e-cigarette at least once, and **24.1% of high school students currently use e-cigarettes.**<sup>14</sup>

– Centers for Disease Control and Prevention.



**E-CIGARETTE USE INCREASED**

**78%** among high school students from 2017 to 2018.

– U.S. Health and Human Services



Cancer Causing Chemicals



**IN FACT, IN ONE JUUL POD ALONE, THERE IS THE SAME AMOUNT OF NICOTINE AS THERE IS IN 20 CIGARETTES.**



## Learn More About E-Cigarettes and JUULs



NO MATTER HOW IT'S DELIVERED, NICOTINE IS **ADDICTIVE & HARMFUL** FOR YOUTH AND YOUNG ADULTS.

- U.S. Surgeon General



Volatile Organic Compounds



Ultrafine Particles

### How can you make a difference?

Get involved! If you are a teen between the ages of 12 and 18, you can join the fight against tobacco and nicotine products as a Tobacco Resistance Unit (TRU) member! As a TRU member, you have the opportunity to take part in awesome activities to help educate others about the dangers of these products and you even become an advocate for important issues like Tobacco 21!

Learn more about the TRU movement at [TRUinPA.org](http://TRUinPA.org) and make sure to follow us on social media @TRUinPA!

## TOBACCO



### What is Tobacco 21?

Tobacco 21 is all about raising the age to purchase tobacco and nicotine products from 18 to 21 to make sure your future generation doesn't get addicted to nicotine and leads healthier lives.

Learn more about becoming an advocate for Tobacco 21 and how to get involved at [UpTheAge.com](http://UpTheAge.com)!

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# HELP WITH QUITTING

Adult Cessation Programs

Teen Cessation Programs



## Adult Cessation Programs

### Freedom From Smoking® Clinic

[Lung.org](http://Lung.org) or 1-800-LUNG-USA

- The Freedom From Smoking® group clinic includes eight sessions and features a step-by-step plan for quitting smoking. Each session is designed to help smokers gain control over their behavior. The clinic format encourages participants to work on the process and problems of quitting both individually and as part of a group. Visit [www.lung.org](http://www.lung.org) or call 1-800-LUNG-USA to learn more or contact your local charter for a list of available classes.

### Freedom From Smoking® Plus

[Lung.org/FFS](http://Lung.org/FFS)

- The Freedom From Smoking® Plus is a highly-interactive online behavioral change program that addresses today's mobile lifestyles. It works on desktops, laptops, tablets and smartphones and includes telephone, chat and email support from trained tobacco cessation counselors. To learn more about the Freedom From Smoking® Plus program, visit [Lung.org/FFS](http://Lung.org/FFS).

### Freedom From Smoking® Self-Help Manual

(717) 971-1122

- The Freedom From Smoking® self-help manual can be used by individuals interested in a self-guided method of quitting. This 56-page interactive self-help workbook is based on the American Lung Association's proven-effective Freedom From Smoking® Clinic Program, and covers identifying triggers, removing roadblocks, addressing physical, mental and social aspects of addiction, preparing for quit day, handling social situations, preventing relapse and how to stay on track with lifestyle changes. The cost is \$5.99 each and can be ordered through your local American Lung Association office. To place an order, call (717) 971-1122.

### Pennsylvania Quitline

1 (800) QUIT-NOW (784-8669)

Spanish-speaking: 1 (855) DEJELO-YA (335-3569)

- The Pennsylvania Quitline is a free local resource for quitting smoking. It provides over-the-phone counseling services with a certified quit coach, nicotine patches and lozenges (for qualified callers) and support for all Pennsylvania residents. Information and self-help materials are available.



# Adult Cessation Programs

## Local Cessation Programs in Pennsylvania

<p><b>Northwestern</b> Erie County Department of Health Phone (814) 451-7857</p>	<p><b>Southcentral</b> American Lung Association in Pennsylvania Phone (717) 971-1121</p>
<p><b>Allegheny County</b> Tobacco-Free Allegheny Phone (412) 322-8321</p>	<p><b>Northeastern</b> American Lung Association in Pennsylvania Phone (717) 971-1121</p>
<p><b>Southwestern</b> Adagio Health Phone (412) 253-8166</p>	<p><b>Philadelphia</b> Philadelphia Department of Health Phone (215) 685-5693</p>
<p><b>Northcentral</b> American Lung Association in Pennsylvania Phone (717) 971-1121</p>	<p><b>Southeastern</b> Health Promotion Council Phone (215) 731-6154</p>



## Teen Cessation Programs



### Not On Tobacco®

The Not On Tobacco® group (N-O-T) is the American Lung Association's voluntary smoking cessation program for teens ages 14 – 19. Over the 10-week program, participants learn to identify their reasons for smoking, healthy alternatives to tobacco use and people who will support them in their efforts to quit. Visit [lung.org](http://lung.org) or call 1-800-LUNGUSA to learn more or contact your local charter at 717-541-5864 for a list of available classes.

### Smokefree Teen

Smokefree Teen is a web-based program designed and run by the National Cancer Institute to help you understand the decisions you make - especially the decision to quit smoking - and how those decisions fit into your life. Visit [teen.smokefree.gov](http://teen.smokefree.gov) to learn more or sign up for this free program.

### Smokefree TXT

Smokefree TXT is a mobile text messaging program that provides 24/7 tips, advice and encouragement to help you quit smoking. To sign up for SmokefreeTXT, simply text QUIT to IQUIT (47848). This free program is designed and run by the National Cancer Institute.

### 1-800-QUIT-NOW

The quitline is a free service that offers one-on-one immediate support. It is staffed by quit smoking coaches who can provide you with helpful information, advice and support as they walk you through a step by step plan to quit. To sign up or for more information, call 1-800-QUIT-NOW (1-800-784-8669).

### QuitSTART App

This QuitSTART is a free app made for teens who want to quit smoking. This app takes the information you provide about your smoking history and gives you tailored tips, inspiration and challenges to help you become smokefree and live a healthier life. This app is free for download on iTunes and Android. This free program is designed and run by the National Cancer Institute. For more information, visit [teen.smokefree.gov](http://teen.smokefree.gov).

### Taking Down Tobacco

Taking Down Tobacco is a comprehensive youth advocacy training program created by the Campaign for Tobacco-Free Kids in partnership with the CVS Health Foundation. This initiative educates and engages youth through free online and in-person trainings. It provides introductory training for youth new to the fight against tobacco and advanced training to help young leaders take their advocacy to the next level. For more information, visit [takingdowntobacco.org](http://takingdowntobacco.org).

1-800-LUNGUSA | [Lung.org](http://Lung.org)





- American Lung Association's Statement on E-cigarettes
- Surgeon General Report – E-Cigarette Use Among Youth and Young Adults
- American Lung Association's Truth About E-Cigarettes Brochure
- U.S. Surgeon General's Know the Risks: E-cigarettes and Young People
- Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion's Facts about Electronic Cigarettes
- U.S. Food & Drug Administration's Vaporizers, E-Cigarettes and other Electronic Nicotine Delivery Systems (ENDS)
- "The Real Cost" Youth E-Cigarette Prevention Campaign
- FDA – The Real Cost Campaign
- The National Academies of Sciences Engineering Medicine Health and Medicine Division's Public Health Consequences of E-Cigarettes
- American Nonsmokers' Rights Foundation Electronic Cigarettes
- Public Health Law Center/Tobacco Control Legal Consortium E-Cigarettes
- Public Health Law Center's Model for a Tobacco-free Environment in Minnesota's K-12 Schools
- Campaign for Tobacco-Free Kids Taking Down Tobacco
- Stanford's Tobacco Prevention Toolkit
- CATCH My Breath E-Cigarette Prevention Program for Schools
- Electronic Cigarettes- What's the Bottom Line
- Parents/Teachers -That USB Stick Might be a Cigarette
- E-Cigarettes Shaped Like USB Flash Drives
- Talk with Your Teen About E-cigarettes: A Tip Sheet for Parents
- PACT's Emerging Products
- Pennsylvania Department of Health
- Truth Initiative
- TRUTH – Videos and teen education material on e-cigarettes