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### **New Resources for Parents Regarding E-Cigarettes**

In its January, 2017 edition of Advocacy Newsbriefs, one of the Wellness topics that NYS PTA chose to highlight is electronic cigarettes, or e-cigarettes. It seems as if e-cigarettes are everywhere these days, and there are also a lot of misconceptions regarding the safety of such products. Great, recent online resources for parents regarding e-cigarettes have been developed by The National Center on Addiction and Substance Abuse. The link to the main site is attached here: <http://www.centeronaddiction.org/e-cigarettes>. I will also highlight some of the misconceptions and main points regarding this phenomenon, as detailed by The National Center on Addiction and Substance Abuse...

#### **I. 10 Surprising Facts About E-Cigarettes**

The National Center on Addiction and Substance Abuse's website is a valuable resource. It lists surprising facts about e-cigarettes. Many people are calling e-cigarettes the next big thing for people looking to quit smoking and relatively risk-free for new users. But are they safe? Here are some facts:

##### **"1. E-cigarettes and other vaping devices are NOT risk-free.**

Although it's generally agreed that these products are less harmful than smoked cigarettes, there is no evidence that they are, in fact, safe. There is a [growing body of research](#) to suggest that they may lead to negative health consequences, including:

- Damage to the brain, heart and lungs
- Cancerous tumor development
- Preterm deliveries and stillbirths in pregnant women
- Harmful effects on brain and lung development, when use occurs during fetal development or adolescence <http://www.centeronaddiction.org/e-cigarettes/about-e-cigarettes/e-cigarettes-weighing-pros-and-cons>
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##### **2. They contain nicotine, a highly addictive drug with known health risks.**

Using nicotine, regardless of how it is delivered, increases the risk of addiction. Nicotine addiction is notoriously difficult to reverse, and addiction to e-cigarettes can lead to using other nicotine products, including smoked cigarettes, as well as alcohol and other drugs.

**3. Using e-cigarettes and other vaping devices is not a proven method for quitting smoking.**

E-cigarettes and other vaping devices would be a preferred alternative to traditional cigarettes, when used exclusively as a replacement and only among smokers who have been unable to quit smoking using proven, medically approved methods. However, [there is little conclusive evidence](#) that they reliably reduce cigarette smoking or lead to smoking cessation.

<http://www.centeronaddiction.org/e-cigarettes/tobacco-replacement/can-e-cigarettes-help-you-quit-smoking>

**4. E-cigarettes and other vaping devices are not used exclusively by people trying to quit smoking.**

Rather, they are increasingly popular with young people, including those who had never smoked cigarettes previously and never intended to. [Research shows](#) that some young people begin to smoke cigarettes only after using e-cigarettes.

<http://jamanetwork.com/journals/jamapediatrics/fullarticle/2436539>

**5. E-cigarettes and other vaping devices are frequently used in addition to smoked cigarettes, rather than in place of them.**

Many smokers use these products alongside traditional cigarettes, often at times and in places where smoking is not allowed or is not convenient. The end result is an increase in total exposure to nicotine and its harmful effects.

**6. Nicotine can affect brain development and functioning in young people.**

Young people are particularly vulnerable to using e-cigarettes and vaping devices and to their effects. The younger a person is when he or she tries nicotine, the greater the risk of addiction. The developing brain is more vulnerable to the effects of addictive substances than a fully developed adult brain. Additionally, nicotine can disrupt brain development, interfere with long-term cognitive functioning, and increase the risk of various mental and physical health problems later in life.

**7. E-cigarettes and other vaping devices are not FDA approved.**

These products are not approved by the U.S. Food and Drug Administration (FDA) as a smoking cessation aid. Until very recently, manufacturers and distributors of e-cigarettes and other vaping devices were not bound by standards of safety set by the FDA for smoked tobacco products.

Despite the new regulations, e-cigarette manufacturers are free to project a risk-free image in their marketing, and offer enticing, candy-like flavors that appeal to children, adolescents and young adults.

**8. There is little consistency across different products.**

Until recently, there was limited federal oversight for e-cigarettes and other vaping devices, making it difficult to assess the dangers of any specific product. Across products, there was considerable variation in the nature and concentration of the ingredients, including nicotine and other known toxins.

**9. There is no evidence that the aerosol from these products is safe.**

There is limited research into the long-term health effects of aerosolizing nicotine and other chemicals in e-cigarettes and other vaping devices. It is clear, however, that the additives, heavy metals, ultrafine particles, and other ingredients they contain include toxins and carcinogens.

### **10. The spread of e-cigarettes and other vaping devices may be re-normalizing smoking behavior.**

The increase in nicotine devices and products and their widespread availability is reversing some of the progress made over decades of intense global, national, and local efforts to reduce cigarette smoking, especially among young people.

#### **What's the bottom line?**

If you're a long-term cigarette smoker and haven't been able to cut back or stop smoking using approved cessation methods, e-cigarettes and other vaping devices products appear to be a safer alternative than continuing cigarette smoking, even if they do not help you reduce your nicotine intake. However, if you do not smoke or use other forms of tobacco or nicotine, steer clear of e-cigarettes and other vaping devices. The potential risks to your long-term health outweigh any enjoyment in the moment." <http://www.centeronaddiction.org/e-cigarettes/about-e-cigarettes/10-surprising-facts-about-e-cigarettes>

## **II. What Parents Should Know**

According to The National Center on Addiction and Substance Abuse, “electronic cigarettes, or e-cigarettes, are now the most popular form of nicotine use among middle and high school students, with an estimated 3 million students using them. There has been a 10-fold increase in the use of e-cigarettes among high school students between 2011 and 2015 – from 1.5 percent to 16 percent. In fact, more teens use these products today than smoke cigarettes. Still, approximately three-quarters of young adults who report using e-cigarettes also smoke traditional cigarettes, exposing themselves to very high doses of nicotine.

Your teenager may believe e-cigarettes are completely safe and may get defensive when you try to discuss the issue. But there are significant risks to be aware of. Here's what you and your child need to know.

#### **What are e-cigarettes?**

E-cigarettes are a type of Electronic Nicotine Delivery System (ENDS), a class of products that includes single-use e-cigarettes that look like traditional cigarettes and a [range of “vaping” devices](http://www.centeronaddiction.org/e-cigarettes/recreational-vaping/what-parents-should-know-about-different-vaping-devices) that look like futuristic, mechanical cigars. These products work by heating a liquid called an e-liquid or e-juice until it turns into an aerosol, which the user inhales. Most of the e-liquids contain highly concentrated nicotine along with other chemicals. <http://www.centeronaddiction.org/e-cigarettes/recreational-vaping/what-parents-should-know-about-different-vaping-devices>

#### **Why should you be concerned?**

**\*\* Tobacco companies are marketing these products to your teen.**

There are laws that prohibit companies from marketing traditional cigarettes to young people, but those laws don't apply to electronic cigarettes and other vaping devices. Companies are free to use the same tactics that cigarette companies used in the past to attract young people. Given the uptake in teen e-cigarette use, the numbers show it's working. For example:

- Cigarette companies are prohibited from making television commercials that glamorize smoking, but e-cigarette companies can and do air such ads.
- In 2014, nearly 7 in 10 middle and high school students were exposed to e-cigarette advertisements. A [recent survey](http://truthinitiative.org/sites/default/files/Vaporized-Youth%20and%20young%20adult%20exposure%20to%20e-cigarette%20marketing.pdf) found that the majority of young people report having seen an advertisement for e-cigarettes on at least one television channel.
- The U.S. Food and Drug Administration banned flavored cigarettes (except menthol), because research shows that young people are attracted to flavors. The endless variety of candy and other enticing flavors of e-cigarette and other vaping products likely contribute to their popularity among teens.
- Only recently (August 2016) has the federal government imposed a legal minimum sale age of 18 for these electronic products.

**\*\* Use of e-cigarettes may be a sign that your teen is smoking regular cigarettes or even marijuana.**

If your teen is smoking e-cigarettes, chances are he or she has tried traditional cigarettes too. Most high school students who are current e-cigarette users also smoke cigarettes. Additionally, your teen can use vaping devices to smoke marijuana or hash oil instead of nicotine liquids. The [vaporized marijuana smoke](http://www.centeronaddiction.org/e-cigarettes/recreational-vaping/beyond-nicotine-vaping-marijuana) has little smell, which makes it hard to detect. <http://www.centeronaddiction.org/e-cigarettes/recreational-vaping/beyond-nicotine-vaping-marijuana>

### **The takeaway**

Although more research is needed for a complete assessment of the risks of e-cigarettes, the existing data show they do pose some risk, especially for young people. If your teen is using e-cigarettes, don't write it off as a safe or a risk-free habit. While it may be less dangerous than smoking cigarettes, it is not harmless and it could mean your teen is smoking other addictive substances as well." <http://www.centeronaddiction.org/e-cigarettes/about-e-cigarettes/what-parents-should-know-about-e-cigarettes>

### **III. What is Vaping?**

Vaping is the act of inhaling and exhaling the aerosol, often referred to as vapor, which is produced by an e-cigarette or similar device. The term is used because e-cigarettes do not produce tobacco smoke, but rather an aerosol, often mistaken for water vapor, that actually consists of fine particles. Many of these particles contain varying amounts of toxic chemicals, which have been linked to cancer, as well as respiratory and heart disease.

Vaping has grown in popularity with the rise of e-cigarettes, which were introduced to the mass market in the U.S. in 2007. Vaping devices include not just e-cigarettes, but also vape pens and advanced personal vaporizers (also known as 'MODS'). E-cigarettes, which resemble smoked

cigarettes, and vape pens, which resemble large fountain pens, are typically simpler in design and less expensive than devices that have been customized by the user.

Generally, a vaping device consists of a mouthpiece, a battery, a cartridge for containing the e-liquid or e-juice, and a heating component for the device that is powered by a battery. When the device is used, the battery heats up the heating component, which turns the contents of the e-liquid into an aerosol that is inhaled into the lungs and then exhaled.

The e-liquid in vaporizer products usually contains a propylene glycol or vegetable glycerin-based liquid with nicotine, flavoring and other chemicals and metals, but not tobacco. Some people use these devices to [vape THC](#), the chemical responsible for most of marijuana's mind-altering effects, or even synthetic drugs like [flakka](#), instead of nicotine. \*\*Flakka is more dangerous than cocaine, and similar to, but cheaper than

methamphetamine. <http://www.centeronaddiction.org/the-buzz-blog/dangerous-new-drug-flakka-takes-florida-storm>

**\*\*Parents should know that:**

- Vaping THC does *not* produce the telltale smell that emerges when smoking marijuana through a joint, blunt or pipe. Teens and young adults can use marijuana without being detected
- When people vape rather than smoke marijuana, they tend to consume even higher concentrations of THC, which means greater exposure to the drug's mind altering and addictive ingredient

**IV. What Parents Should Know About the Different Vaping Devices Available**

Parents should have an understanding of the different products around. Like iPads, these products are categorized by generations. E-cigarettes, which resemble traditional cigarettes, most accurately refer to the first generation of Electronic Nicotine Delivery Systems, or ENDS, which were introduced in the U.S. in 2007. Second- and third-generation ENDS products look less like combustible cigarettes.

A chart of the different products, along with their description, as well as a photo of each is contained on the following page: Source= <http://www.centeronaddiction.org/e-cigarettes/recreational-vaping/what-parents-should-know-about-different-vaping-devices>