



# *Rupert A. Nock Middle School*

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*Lisa Furlong, Principal • Timothy Mahan, Assistant Principal*

NEWBURYPORT PUBLIC SCHOOLS

Dear Nock Community,

Schools across the country are noticing an increase in student use of e-cigarettes, vaporizers, and flavored tobacco products. Since these products are relatively new to the mainstream market, many parents and guardians are not familiar with their appearance, their use, and the potential health risks.

Attached is some educational information from the Centers for Disease Control and the Massachusetts Department of Health. A useful online site is [e-cigarettes.surgeongeneral.gov/](http://e-cigarettes.surgeongeneral.gov/). The devices are often small and similar in shape to a thumb drive—although they come in many shapes and sizes.

Most of the products used in the electronic devices contain high levels of nicotine. As the CDC explains, "Nicotine exposure during periods of significant brain development, such as adolescence, can disrupt the growth of brain circuits that control attention, learning and susceptibility to addiction... The effects of nicotine exposure during youth and young adulthood can be long-lasting and can include lower impulse control and mood disorders."

Additionally, there is emerging research showing the harmful effects of the other chemicals found in the vape "juice" on the respiratory system. What is very clear is that these products, marketed to young people as "sweet, cheap, and easy to get," are posing a significant risk to their health.

The Nock will be hosting a parent information session with Diane Knight, Director of the Northeast Tobacco-Free Community Partnership on January 24th. We will send details when the date is closer.

I encourage you to be proactive in learning about vaporizers and e-cigarettes, in talking with your children about the effects of nicotine and tobacco products, and in keeping the conversation open as your child moves through middle school.

Best,

Lisa Furlong

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Lisa Furlong  
Principal  
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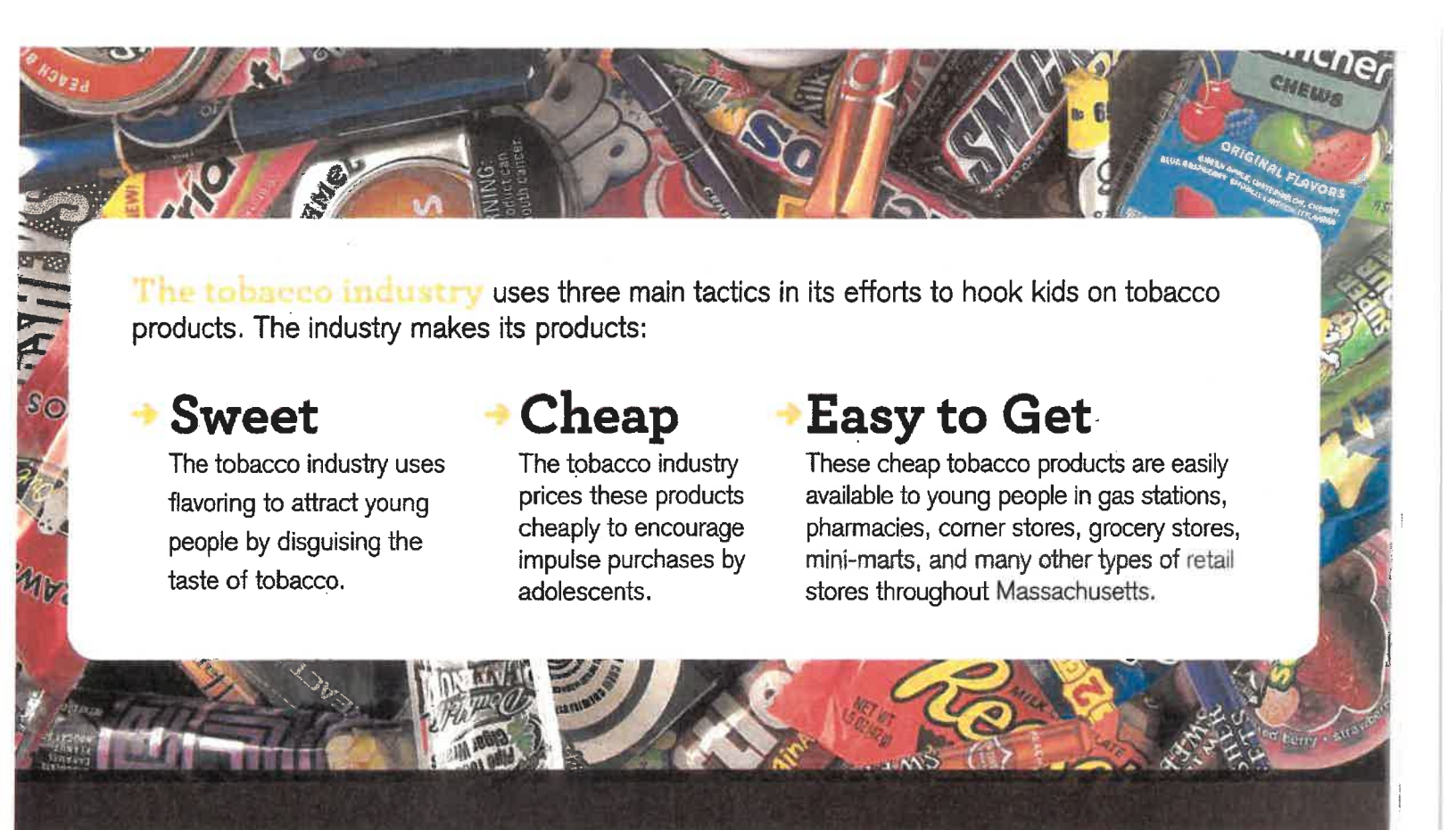
# Big Tobacco targets **kids**.

*The more they're exposed,  
the more likely they are to smoke.*

*It's a fact:* Research shows that kids who shop at stores with tobacco two or more times a week are **64% more likely to start smoking than their peers who don't.\***

Make smoking history.

\*Source: Henriksen, Schleicher, Feighery and Fortmann. Pediatrics: The Official Journal of the American Academy of Pediatrics. July 19, 2010, DOI: 10.1542/peds.2009.3021



**The tobacco industry** uses three main tactics in its efforts to hook kids on tobacco products. The industry makes its products:

→ **Sweet**

The tobacco industry uses flavoring to attract young people by disguising the taste of tobacco.

→ **Cheap**

The tobacco industry prices these products cheaply to encourage impulse purchases by adolescents.

→ **Easy to Get**

These cheap tobacco products are easily available to young people in gas stations, pharmacies, corner stores, grocery stores, mini-marts, and many other types of retail stores throughout Massachusetts.

## Health Risks

Adolescents are especially harmed by nicotine, the highly addictive substance in tobacco products and e-cigarettes:

Nicotine affects brain development, which continues to age 25. The effects of nicotine exposure during youth and young adulthood can be long-lasting and can include lower impulse control and mood disorders. Nicotine can prime young brains for addiction to other drugs, such as cocaine and methamphetamine.<sup>1</sup>

**Because of the way nicotine changes the adolescent brain, people who start smoking as adolescents smoke more and have a harder time quitting than people who start as adults.<sup>2</sup>**

## Candy or Tobacco Flavor?

- White Grape**
- Cotton Candy**
- Banana Split**
- Honey Berry**
- Cherry Cola**
- Fruit Punch**
- Pink Lemonade**
- Chocolate Mint**
- Kiwi Strawberry**
- Tropical Fusion**



**All of the above are actual flavors of tobacco products.**

<sup>1</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>2</sup> Many published studies have shown this, including: Abreu-Villaca, Y. et al (2003). Short-term adolescent nicotine exposure has immediate and persistent effects on cholinergic systems: Critical periods, patterns of exposure, dose thresholds. *Neuropsychopharmacology*, 28 pp. 1935-1949.

<sup>3</sup> U.S. Food and Drug Administration. Vaporizers, E-cigarettes, and other Electronic Nicotine Delivery Systems (ENDS), 2016.

# Big Tobacco is at it Again

The tobacco industry is always trying to grow profits, and it's at the expense of our nation's youth. They're targeting kids with sweet, cheap, and easy to get tobacco products using popular fruit and candy-like flavors. Flavored tobacco products are typically priced below five dollars and widely available at retailers frequented by youth.

## Little Cigars, Cigarillos, and Tip Cigars

These types of tobacco products feature candy-like flavors and come in varying sizes and shapes. Tobacco companies price them at levels that are attractive to youth, often selling them for less than one dollar each.



## E-Cigarettes

E-cigarettes (also known as e-cigs, e-hookahs, or vape pens) are battery-powered vaporizers that simulate the action and sensation of smoking. The products don't use tobacco, but most contain and deliver nicotine. The user inhales aerosol, commonly called vaping. E-cigarettes come in many different sizes, varieties, flavors, and colors and are usually cheaper than cigarettes.



## E-Liquids

E-liquid, e-fluid, or e-juice is the mixture used in vapor products such as e-cigarettes. Available in many variations, e-liquids feature a range of nicotine strengths and flavors. In addition to nicotine and flavorings, they usually contain chemicals like propylene glycol and glycerin.<sup>3</sup>



## Blunts and Blunt Wraps

While blunts and blunt wraps are typically associated with marijuana use, they are made of tobacco, come in many fruit and candy flavors, and can cost as low as 59 cents. Smoking these products can lead to nicotine addiction among youth.



## Chewing and Dipping Tobacco

Dipping tobacco (dip) consists of shredded tobacco leaves that users place between their lower lip and gum. It is not chewed. Chewing tobacco (chew) is made up of tobacco leaves that users place between their cheeks and gum and "chew." Excess liquid is spit out.



# The Latest on E-Cigarettes:\*

- Among Massachusetts high school youth, nearly half (44.8%) have ever used e-cigarettes. This far surpasses ever use of cigarettes, which was 27.8% in 2015.
- High school youth current<sup>†</sup> use of e-cigarettes is at a higher rate than any tobacco products<sup>‡</sup> combined (23.7% compared to 15.9%).
- High school youth are much more likely to use e-cigarettes than adults. This has not been the case for cigarettes. While the current<sup>†</sup> youth cigarette use rate in Massachusetts is just half of the adult use rate (7.7% versus 14%), the current<sup>†</sup> youth e-cigarette use rate is more than nine times higher than the adult use rate (23.7% versus 2.6%).

Youth Data Source: 2015 Massachusetts YRBS

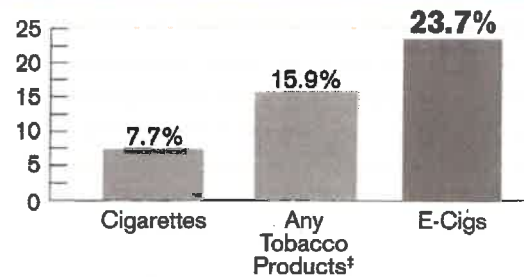
Adult Data Source: 2015 Massachusetts BRFSS

\* E-cigarette data refer to electronic nicotine delivery products, which include e-cigs, e-hookahs, vape pens, or other vaping devices.

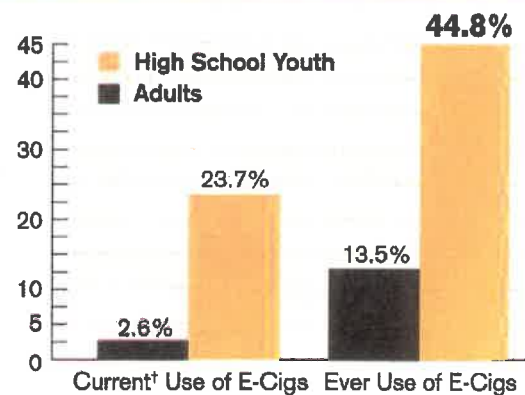
† Use in the past 30 days.

‡ Any tobacco is defined as cigarettes, cigars (including little cigars and cigarillos), and smokeless tobacco (such as chewing tobacco, snuff, or dip).

**Current<sup>†</sup> Use of Tobacco Products by Massachusetts High School Youth, 2015**



**E-Cigarette Use Among Massachusetts High School Youth and Adults, 2015**



## What You Can Do

**The tobacco industry continues to target kids. It's time to take action and get outraged!**

**Look around.** Talk with kids in your community about tobacco products and ask them what they see. The more our kids are exposed to these products, the more likely they are to start smoking.<sup>1</sup>

**Know the facts.** Flavored tobacco products are considered "starter" products that aid in the establishment of smoking patterns for youth and can lead to long-term addiction.<sup>2</sup> The youth cigarette smoking rate continues to decrease, but 2,800 young people still become new daily smokers every year in Massachusetts.<sup>3</sup>

**Support local strategies.** Find out more about local regulations to reduce the tobacco industry's influence in your community at [makesmokinghistory.org/my-community](http://makesmokinghistory.org/my-community).

**Engage young people.** Encourage young people to join The 84 Movement, a statewide youth initiative that empowers young people to make a difference in their own communities. Learn more at [The84.org](http://The84.org).

<sup>1</sup> Henriksen, Schleicher, Feigehery and Fortmann. Pediatrics: The Official Journal of the American Academy of Pediatrics. July 19, 2010, DOI: 10.1542/peds.2009.3021

<sup>2</sup> Food and Drug Administration. "Fact Sheet: Flavored Tobacco Products." Accessed 2/17/16. <http://www.fda.gov/downloads/TobaccoProducts/Labeling/ProductsIngredients-Components/UCM183215.pdf> and U.S. Department of Health and Human Services. 2012. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta: U.S. National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, p. 539. <http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf>.

<sup>3</sup> New underage daily smoker estimate based on data from U.S. Dept of Health and Human Services (HHS), "Results from the 2015 National Survey on Drug Use and Health," with the state share of national initiation number based on CDC data on future youth smokers in each state compared to national total. Information accessed February 2017 from: [http://www.tobaccofreekids.org/facts\\_issues/toll\\_us/massachusetts](http://www.tobaccofreekids.org/facts_issues/toll_us/massachusetts).

Make smoking history.



Massachusetts Department of Public Health

**GET OUTRAGED!**

visit [makesmokinghistory.org](http://makesmokinghistory.org) to learn more



# E-Cigarette Use Among Youth and Young Adults

A Report of the Surgeon General

## Fact Sheet

This Surgeon General's report comprehensively reviews the public health issue of e-cigarettes and their impact on U.S. youth and young adults. Studies highlighted in the report cover young adolescents (11-14 years of age); adolescents (15-17 years of age); and/or young adults (18-25 years of age). Scientific evidence contained in this report supports the following facts:

**E-cigarettes are a rapidly emerging and diversified product class. These devices typically deliver nicotine, flavorings, and other additives to users via an inhaled aerosol. These devices are referred to by a variety of names, including "e-cigs," "e-hookahs," "mods," "vape pens," "vapes," and "tank systems."**

- E-cigarettes are battery-powered devices that heat a liquid into an aerosol that the user inhales.
- The liquid usually has nicotine, which comes from tobacco; flavoring; and other additives.
- E-cigarette products can also be used as a delivery system for marijuana and other illicit drugs.

**E-cigarettes are now the most commonly used tobacco product among youth, surpassing conventional cigarettes in 2014. E-cigarette use is strongly associated with the use of other tobacco products among youth and young adults, including cigarettes and other burned tobacco products.**

- In 2015, more than 3 million youth in middle and high school, including about 1 of every 6 high school students, used e-cigarettes in the past month. More than a quarter of youth in middle and high school have tried e-cigarettes.
- Among high school students, e-cigarette use is higher among males, whites, and Hispanics than among females and African-Americans.
- There is a strong association between the use of e-cigarettes, cigarettes, and the use of other burned tobacco products by young people. In 2015, for example, nearly 6 of 10 high school cigarette smokers also used e-cigarettes.
- Research has found that youth who use a tobacco product, such as e-cigarettes, are more likely to go on to use other tobacco products like cigarettes.

**E-cigarette use among youth and young adults has become a public health concern. In 2014, current use of e-cigarettes by young adults 18-24 years of age surpassed that of adults 25 years of age and older.**

- Among young adults 18-24 years of age, e-cigarette use more than doubled from 2013 to 2014. As of 2014, more than one-third of young adults had tried e-cigarettes.
- The most recent data available show that the prevalence of past 30-day use of e-cigarettes was 13.6% among young adults (2014) and 16.0% among high school students (2015).
- The most recent data available show that the prevalence of past 30-day use of e-cigarettes is similar among middle school students (5.3%) and adults 25 years of age and older (5.7%).
- Among young adults, e-cigarette use is higher among males, whites and Hispanics, and those with less education.

**The use of products containing nicotine poses dangers to youth, pregnant women, and fetuses. The use of products containing nicotine in any form among youth, including in e-cigarettes, is unsafe.**

- Many e-cigarettes contain nicotine, which is highly addictive.
- The brain is the last organ in the human body to develop fully. Brain development continues until the early to mid-20s. Nicotine exposure during periods of significant brain development, such as adolescence, can disrupt the growth of brain circuits that control attention, learning, and susceptibility to addiction.
- The effects of nicotine exposure during youth and young adulthood can be long-lasting and can include lower impulse control and mood disorders.
- The nicotine in e-cigarettes and other tobacco products can prime young brains for addiction to other drugs, such as cocaine and methamphetamine.

- Nicotine can cross the placenta and affect fetal and postnatal development. Nicotine exposure during pregnancy can result in multiple adverse consequences, including sudden infant death syndrome (SIDS).
- Ingestion of e-cigarette liquids containing nicotine can cause acute toxicity and possible death if the contents of refill cartridges or bottles containing nicotine are consumed.

**E-cigarette aerosol is not harmless. It can contain harmful and potentially harmful constituents including nicotine. Nicotine exposure during adolescence can cause addiction and can harm the developing adolescent brain.**

- The constituents of e-cigarette liquids can include solvents, flavorants, and toxicants.
- The aerosol created by e-cigarettes can contain ingredients that are harmful and potentially harmful to the public's health, including: 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.

**E-cigarettes are marketed by promoting flavors and using a wide variety of media channels and approaches that have been used in the past for marketing conventional tobacco products to youth and young adults.**

- E-cigarettes are an estimated \$3.5 billion business in the United States. In 2014, e-cigarette manufacturers spent \$125 million advertising their products in the U.S.
- In 2014, more than 7 of 10 middle and high school students said they had seen e-cigarette advertising. Retail stores were the most frequent source of this advertising, followed by the internet, TV and movies, and magazines and newspapers.
- The 2012 Surgeon General's Report on tobacco use among youth and young adults found that tobacco product advertising causes young people to start using tobacco products. Much of today's e-cigarette advertising uses approaches and themes similar to those that were used to promote conventional tobacco products.
- E-cigarettes are available in a wide variety of flavors, including many that are especially appealing to youth. More than 85% of e-cigarette users ages 12-17 use flavored e-cigarettes, and flavors are the leading reason for youth use. More than 9 of 10 young adult e-cigarette users said they use e-cigarettes flavored to taste like menthol, alcohol, fruit, chocolate, or other sweets.

**Action can be taken at the national, state, local, tribal and territorial levels to address e-cigarette use among youth and young adults. Actions could include incorporating e-cigarettes into smokefree policies, preventing access to e-cigarettes by youth, price and tax policies, retail licensure, regulation of e-cigarette marketing likely to attract youth, and educational initiatives targeting youth and young adults.**

- The Food and Drug Administration (FDA) now regulates the manufacturing, importing, packaging, labeling, advertising, promotion, sale, and distribution of e-cigarettes.  
In August 2016, FDA began enforcing a ban on vending machine sales unless in adult-only facilities and a ban on free samples and sales to minors.
- Parents, teachers, health care providers, and others who influence youth and young adults can advise and inform them of the dangers of nicotine; discourage youth tobacco use in any form, including e-cigarettes; and set a positive example by being tobacco-free themselves.

**Citation:** 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.

**Website:** [E-cigarettes.Surgeongeneral.gov](http://E-cigarettes.Surgeongeneral.gov)