



Clearing the Air: The Truth About Vaping

Toolkit for Parents & Educators

**Meriden Department of
Health and Human Services**

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Drug Terminology & Aliases

DEA Intelligence Report: Slang Terms and Code Words

<https://ndews.umd.edu/sites/ndews.umd.edu/files/dea-drug-slang-terms-and-code-words-july2018.pdf>

WHO: Lexicon of Alcohol and Drug Terms

https://www.who.int/substance_abuse/terminology/who_lexicon/en/

Lessons & Curricula

Vaping and JUULing Curriculum

The Physician Advocacy Network has developed a curriculum for middle and high school students.

<http://www.panmn.org/teachers>

E-cigarette Lesson Plan

This lesson plan is for 1 class period for grade levels 6-12. Includes worksheets and writing prompts.

<https://teens.drugabuse.gov/teachers/lessonplans/e-cigarettes-what-you-need-know>

Stanford Electronic Smoking Device Curriculum

This module is broken down into 5 units. Each unit includes a PowerPoint, lesson activities, discussion guide, and Kahoot! quiz game.

<https://med.stanford.edu/tobaccopreventiontoolkit/E-Cigs.html>

Scholastic Teacher's Guide

This teacher's guide includes worksheets, writing prompts, paired readings, critical thinking questions for grades 6-12.

<http://headsup.scholastic.com/teachers/lesson-e-cigarettes-what-you-need-to-know>

Cigarette smoking is down, but about
34 MILLION
American adults still smoke

Cigarette smoking remains high among certain groups



Men



Adults 25-64
years old



Lower education



Below
poverty level



Midwest
and South



Uninsured
or Medicaid



Disabled



Serious
psychological
distress



American Indians,
Alaska Natives and
Multiracial



Lesbians, gays,
and bisexuals

Strategies essential to continue reducing cigarette smoking overall



Implement
smoke-free laws



Run mass
media campaigns

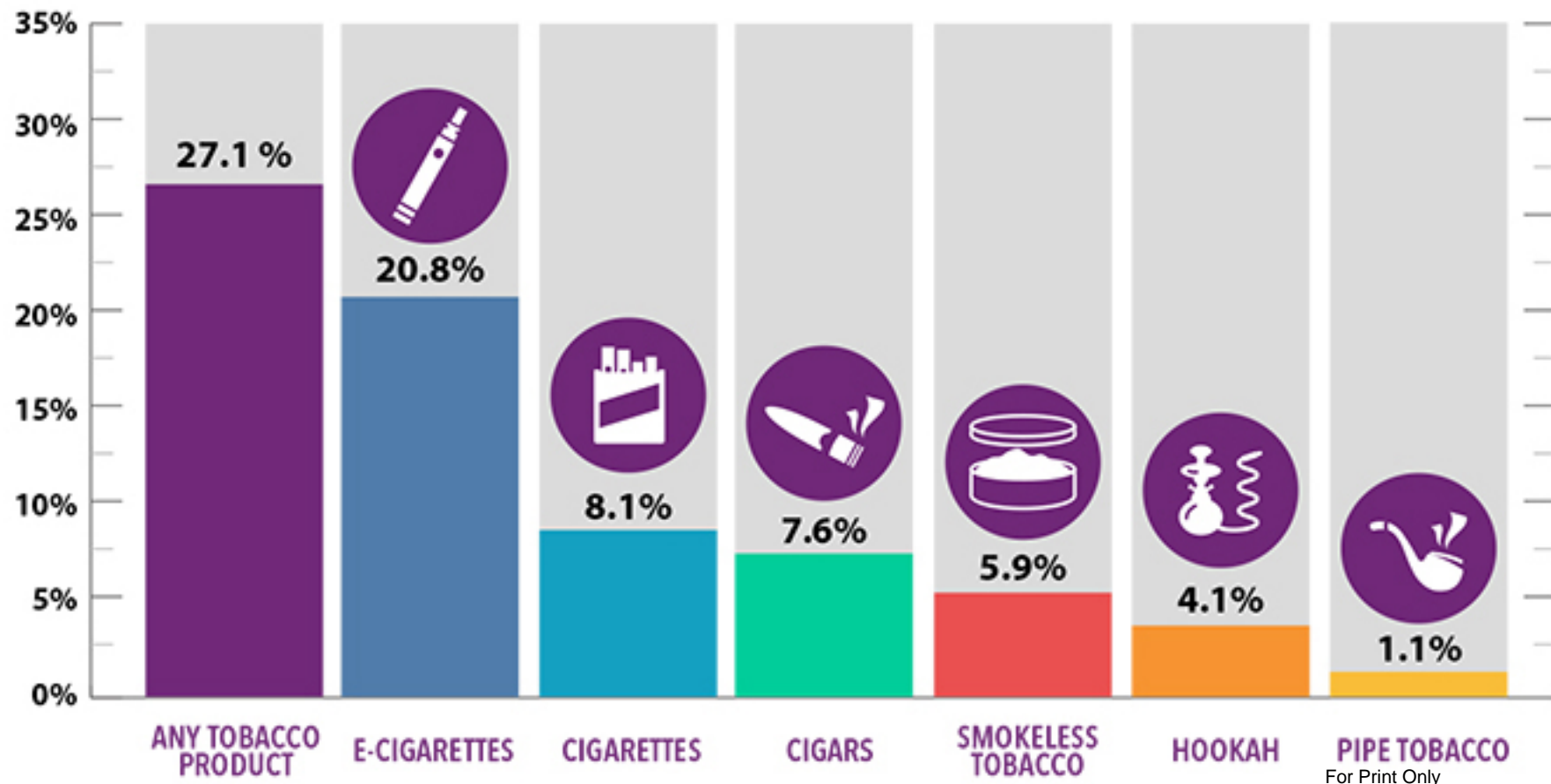


Raise
tobacco prices



Make quit help
easy to access

Tobacco Product Use Among High School Students – 2018



YOUTH E-CIGARETTE USE IS RISING

E-CIGARETTES TYPICALLY DELIVER NICOTINE

YOUTH NICOTINE EXPOSURE CAN:



- CAUSE ADDICTION
- HARM THE DEVELOPING BRAIN

E-CIGARETTE USE SURGED DURING 2017-2018

IN 2018:



1 IN 5 HIGH SCHOOL KIDS
1 IN 20 MIDDLE SCHOOL KIDS
**CURRENTLY USE
 E-CIGARETTES**

HELP PREVENT YOUTH E-CIGARETTE USE

- **KNOW** THE RISKS OF E-CIGARETTES
- **TALK** TO YOUTH ABOUT THESE DANGERS
- **BE** TOBACCO FREE





THINK BEFORE YOU VAPE

99% of e-cigarettes contain
NICOTINE

Most e-cigarettes contain
cancer-causing chemicals



One JUUL pod has as much
nicotine as 20 cigarettes



Nicotine harms

**BRAIN
DEVELOPMENT**



7 out of 10 middle and high school students who currently use tobacco have used a **FLAVORED** product.

63%

of students who currently use e-cigarettes have used **flavored** e-cigarettes.

(1.6 million)

61%

of students who currently use hookah have used **flavored** hookah.

(1 million)

64%

of students who currently use cigars have used **flavored** cigars.

(910,000)



Source: Morbidity and Mortality Weekly Report (MMWR)

nickel

Ni

**You want to
nail your
chemistry
experiment.
You don't
want to
become
one.**

If you vape, you may be
inhaling toxic metals like
nickel, chromium, and lead.



FDA

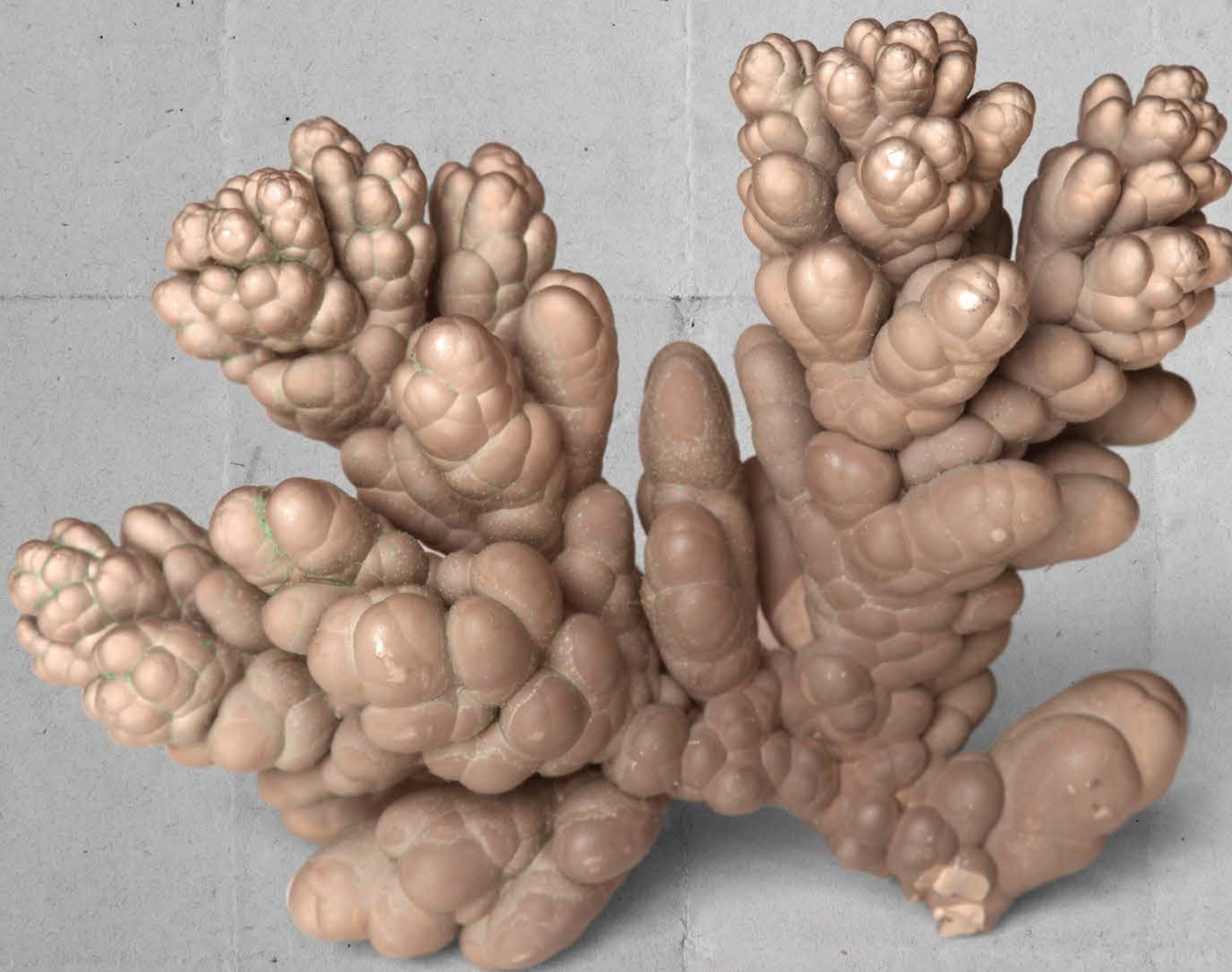
**U.S. FOOD & DRUG
ADMINISTRATION**

CTP-129

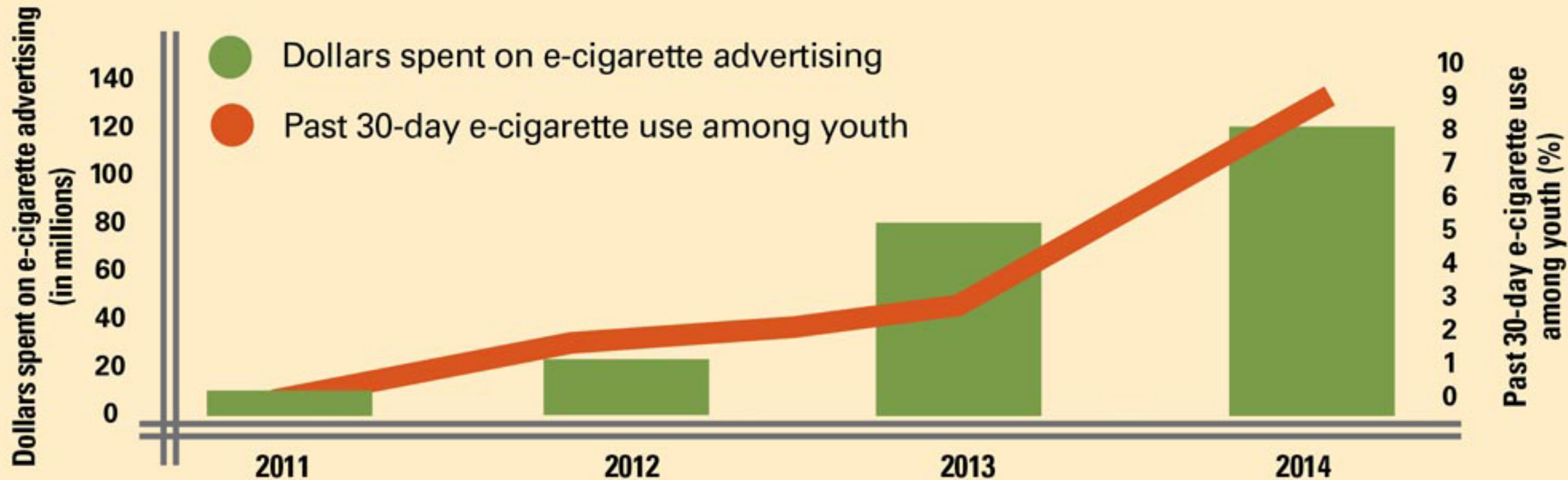
**FDA****U.S. FOOD & DRUG
ADMINISTRATION****chromium****Cr⁺⁶**

**This won't be on
your chemistry exam.
But if you vape, you
may already be
exposed to it.**

If you vape, you may be
inhaling toxic metals like
chromium, nickel, and lead.



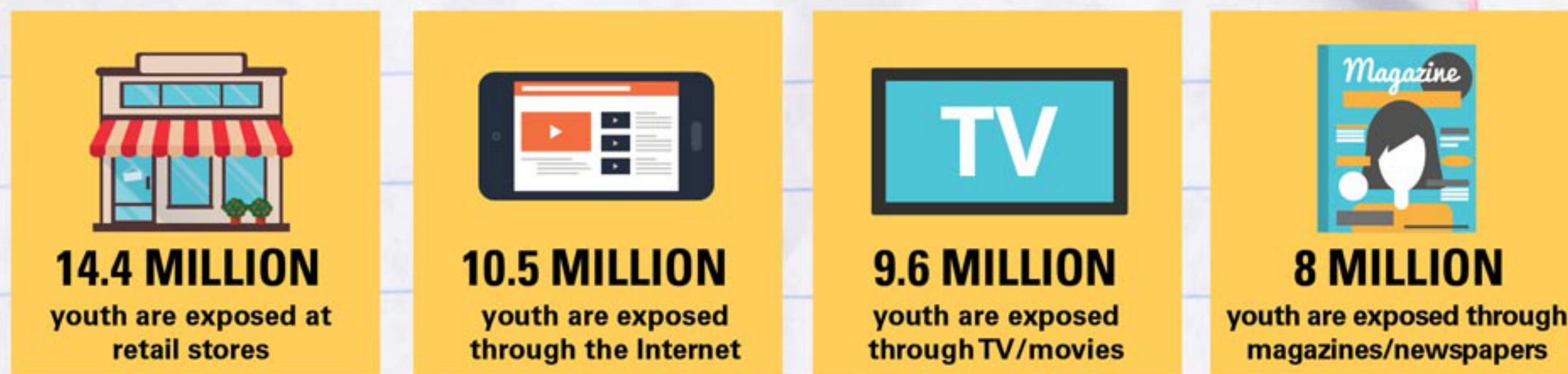
E-cigarette use among youth is rising as e-cigarette advertising grows



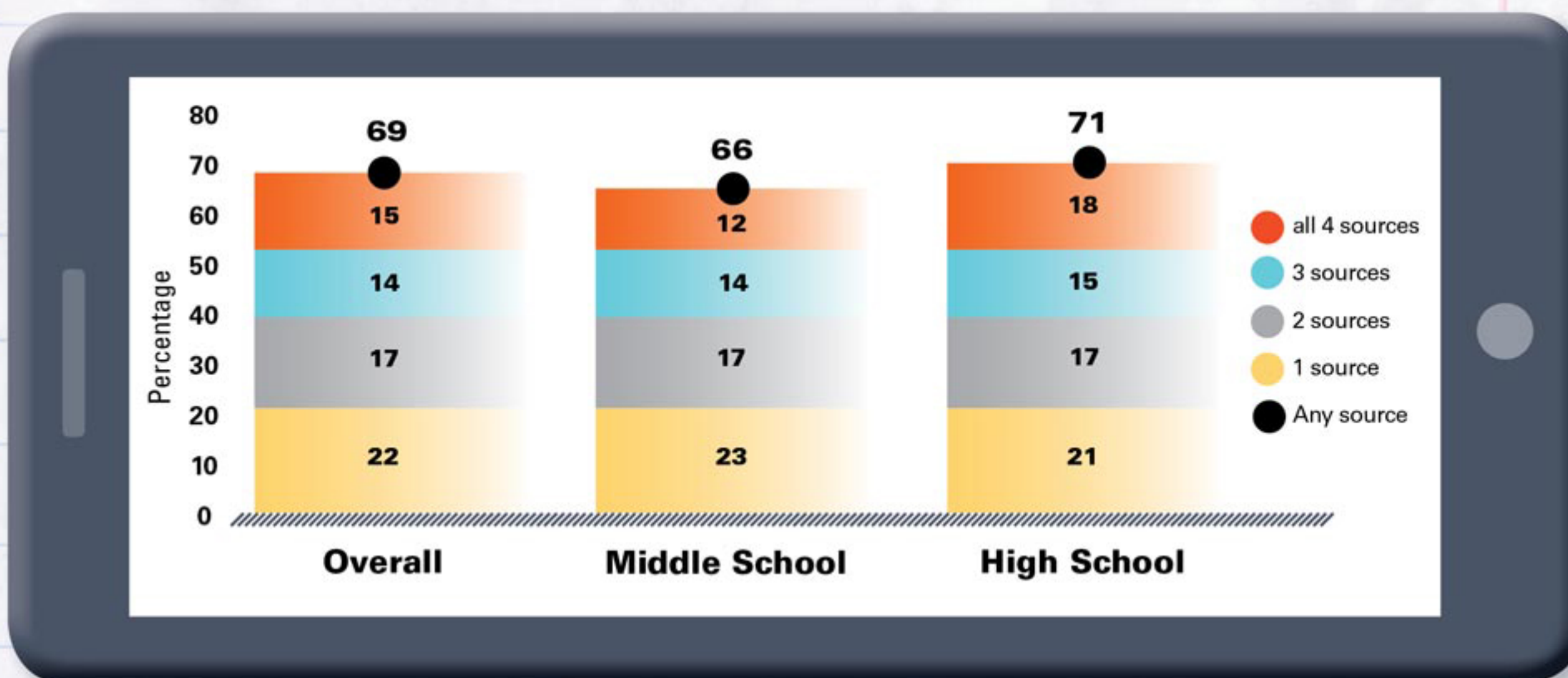
SOURCE: National Youth Tobacco Survey, 2011-2014; Kim et al (2014), Truth Initiative (2015).

Youth are exposed to e-cigarette advertisements from multiple sources.

Sources of e-cigarette advertisement exposure



US students exposed to e-cigarette advertisements, by school type and number of sources of exposure



* Percentages may not add up exactly to any source due to rounding.

SOURCE: National Youth Tobacco Survey 2014.

Youth Exposure to Advertising and E-Cigarette Use

Greater exposure to e-cigarette ads is associated with higher odds of youth e-cigarette use. Most e-cigarettes contain NICOTINE, which can cause ADDICTION, may harm brain development, and could lead to continued tobacco product use among youth.

Efforts to reduce youth exposure to tobacco advertising are crucial to prevent all forms of tobacco use among youth.

SOURCE: Pediatrics, April 2016



Sources of E-Cigarette Advertising



14.4 million

youth are exposed
at retail stores



10.5 million

youth are exposed
through the internet



9.6 million

youth are exposed
through TV/movies



8 million

youth are exposed
through magazines
and newspapers

SOURCE: CDC Vital Signs, January 2016

bit.ly/YouthTobaccoUse





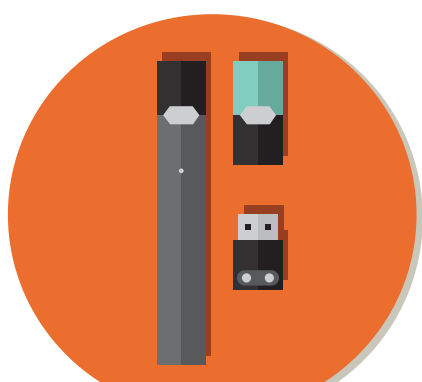
TEACHERS AND PARENTS: That USB Stick Might Be an *E-cigarette*



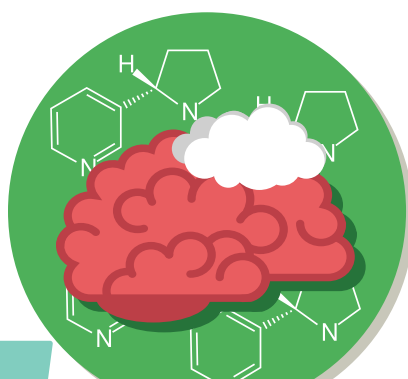
E-cigarettes are the most commonly used tobacco product among U.S. middle and high school students.



Some e-cigarettes don't look like tobacco products, so some kids use them unnoticed in schools, including in classrooms and bathrooms.



An increasingly popular e-cigarette, called JUUL, is shaped like a USB flash drive.



JUUL delivers a high dose of nicotine. Nicotine is highly addictive and can harm adolescent brain development.



**TOBACCO PRODUCT
USE IN ANY FORM,
INCLUDING
E-CIGARETTES, IS
UNSAFE FOR YOUTH.**

LEARN MORE about the risks of e-cigarettes for youth and access tips for talking to youth at:
<https://e-cigarettes.surgeongeneral.gov/resources.html>



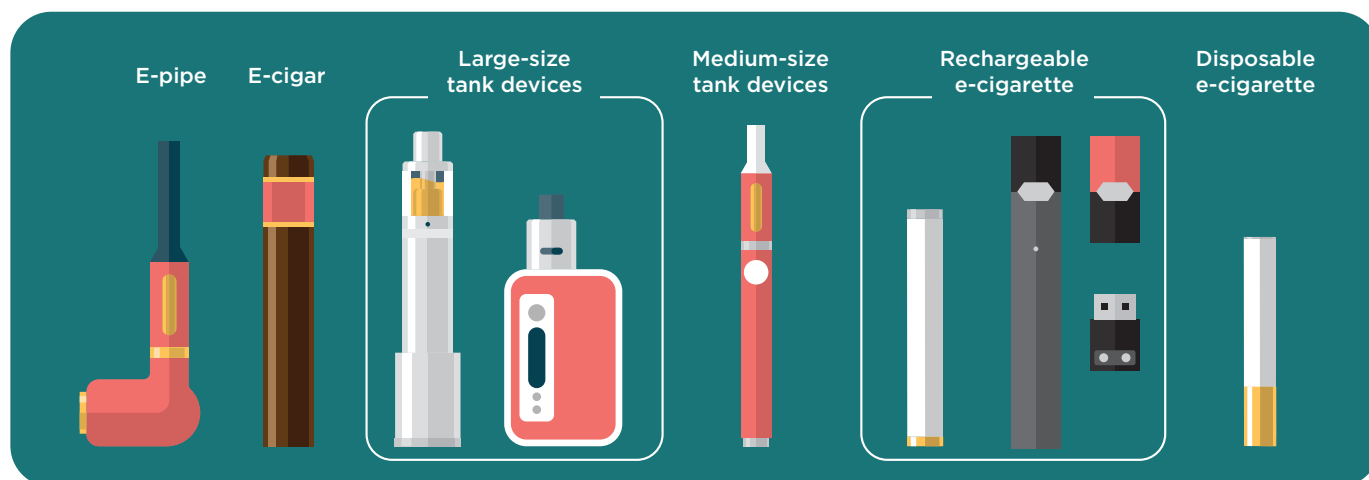
U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

ELECTRONIC CIGARETTES WHAT'S THE BOTTOM LINE?

- » E-cigarettes have the potential to benefit adult smokers who are not pregnant if used as a complete substitute for regular cigarettes and other smoked tobacco products.
- » E-cigarettes are not safe for youth, young adults, pregnant women, or adults who do not currently use tobacco products.
- » While e-cigarettes have the potential to benefit some people and harm others, scientists still have a lot to learn about whether e-cigarettes are effective for quitting smoking.
- » If you've never smoked or used other tobacco products or e-cigarettes, don't start.

WHAT ARE E-CIGARETTES?

- » E-cigarettes are known by many different names. They are sometimes called “e-cigs,” “e-hookahs,” “mods,” “vape pens,” “vapes,” “tank systems,” and “electronic nicotine delivery systems.”
- » Some e-cigarettes are made to look like regular cigarettes, cigars, or pipes. Some resemble pens, USB sticks, and other everyday items.
- » E-cigarettes produce an aerosol by heating a liquid that usually contains nicotine—the addictive drug in regular cigarettes, cigars, and other tobacco products—flavorings, and other chemicals that help to make the aerosol. Users inhale this aerosol into their lungs. Bystanders can also breathe in this aerosol when the user exhales into the air.
- » E-cigarettes can be used to deliver marijuana and other drugs.



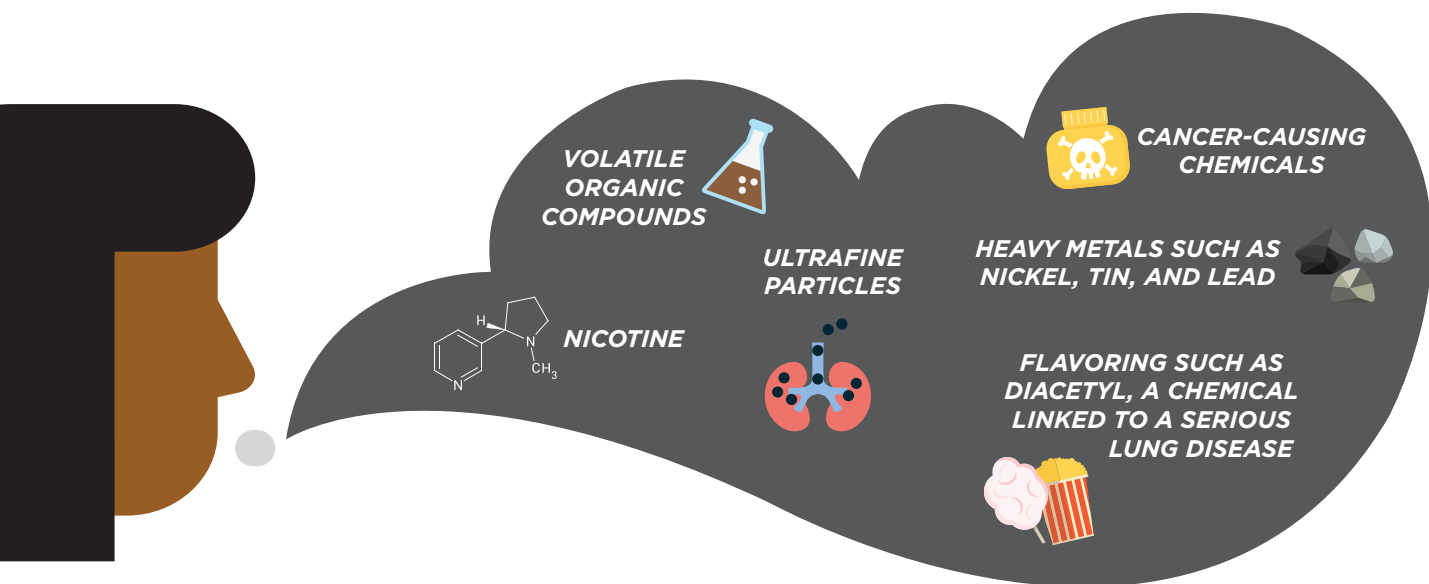
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Control and Prevention

WHAT IS IN E-CIGARETTE AEROSOL?

THE E-CIGARETTE AEROSOL THAT USERS BREATHE FROM THE DEVICE AND EXHALE CAN CONTAIN HARMFUL AND POTENTIALLY HARMFUL SUBSTANCES:



It is difficult for consumers to know what e-cigarette products contain. For example, some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine.

ARE E-CIGARETTES LESS HARMFUL THAN REGULAR CIGARETTES?



VS



YES, but that doesn't mean e-cigarettes are safe.

E-cigarette aerosol generally contains fewer toxic chemicals than the deadly mix of 7,000 chemicals in smoke from regular cigarettes. However, e-cigarette aerosol is not harmless. It can contain harmful and potentially harmful substances, including nicotine, heavy metals like lead, volatile organic compounds, and cancer-causing agents.

WHAT ARE THE HEALTH EFFECTS OF USING E-CIGARETTES?

SCIENTISTS ARE STILL LEARNING ABOUT THE LONG-TERM HEALTH EFFECTS OF E-CIGARETTES. HERE IS WHAT WE KNOW NOW.

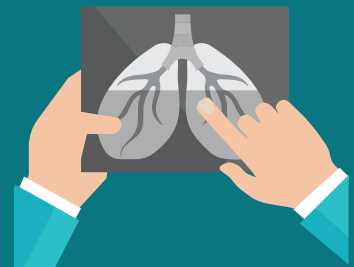
1 Most e-cigarettes contain nicotine, which has known health effects

- » Nicotine is highly addictive.
- » Nicotine is toxic to developing fetuses.
- » Nicotine can harm adolescent brain development, which continues into the early to mid-20s.
- » Nicotine is a health danger for pregnant women and their developing babies.



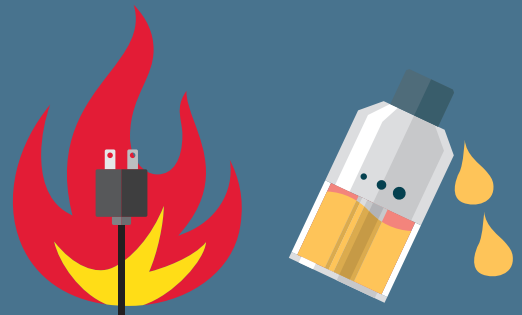
2 Besides nicotine, e-cigarette aerosol can contain substances that harm the body.

- » This includes cancer-causing chemicals and tiny particles that reach deep into lungs. However, e-cigarette aerosol generally contains fewer harmful chemicals than smoke from burned tobacco products.

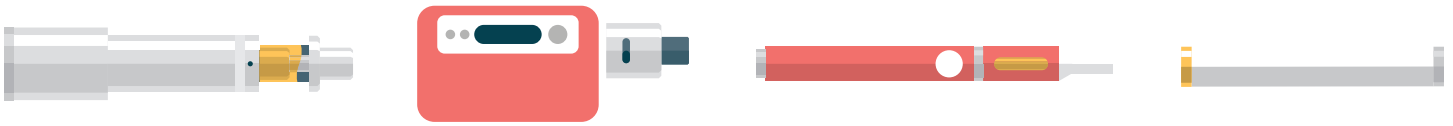


3 E-cigarettes can cause unintended injuries.

- » Defective e-cigarette batteries have caused fires and explosions, some of which have resulted in serious injuries.
- » In addition, acute nicotine exposure can be toxic. Children and adults have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid.



CAN E-CIGARETTES HELP ADULTS QUIT SMOKING CIGARETTES?



E-CIGARETTES ARE NOT CURRENTLY APPROVED BY THE FDA AS A QUIT SMOKING AID.

The U.S. Preventive Services Task Force, a group of health experts that makes recommendations about preventive health care, concluded that the evidence is insufficient to recommend e-cigarettes for smoking cessation in adults, including pregnant women.



HOWEVER, e-cigarettes may help non-pregnant adult smokers if used as a complete substitute for all cigarettes and other smoked tobacco products.

TO DATE, THE FEW STUDIES ON THE ISSUE ARE MIXED.

Evidence from two randomized controlled trials found that e-cigarettes with nicotine can help smokers stop smoking in the long term compared with placebo (non-nicotine) e-cigarettes.

A recent CDC study found that many adults are using e-cigarettes in an attempt to quit smoking. However, most adult e-cigarette users do not stop smoking cigarettes and are instead continuing to use both products (“dual use”). Because smoking even a few cigarettes a day can be dangerous, quitting smoking completely is very important to protect your health.

WHO IS USING E-CIGARETTES?

E-CIGARETTES ARE THE MOST COMMONLY USED TOBACCO PRODUCT AMONG YOUTH.

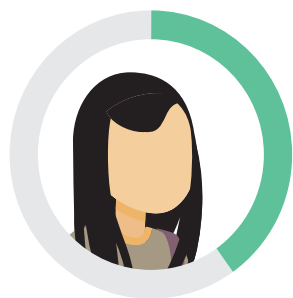
IN THE U.S.,
YOUTH ARE
MORE LIKELY
THAN ADULTS
TO USE
E-CIGARETTE



4.9%
MIDDLE SCHOOL
STUDENTS

In 2018, more than
3.6 MILLION
U.S. middle and high school
students used e-cigarettes in
the past 30 days, including:

20.8%
HIGH SCHOOL
STUDENTS



AMONG CURRENT E-CIGARETTE USERS AGED 45 YEARS AND OLDER
in 2015, most were either current or former regular cigarette smokers, and
1.3% had never been cigarette smokers.

IN CONTRAST, AMONG CURRENT E-CIGARETTE USERS AGED 18–24 YEARS,
40.0% had **NEVER BEEN** regular cigarette smokers

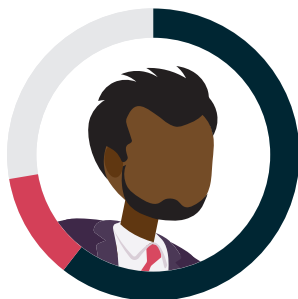
IN 2015, AMONG ADULT E-CIGARETTE
USERS OVERALL:

29.8%

were former
regular cigarette
smokers

11.4%

had never been
regular cigarette
smokers



58.8%

were current regular
cigarette smokers

ADULTS

In 2017, **2.8%**
of U.S. adults were current
e-cigarette users



CIGARRILLOS ELECTRÓNICOS ¿CUÁL ES LA CONCLUSIÓN?

- » Los cigarrillos electrónicos tienen el potencial de beneficiar a las personas adultas que fuman y que no están embarazadas si se usan como un sustituto completo de los cigarrillos regulares y de otros productos de tabaco para fumar.
- » Los cigarrillos electrónicos no son seguros para los jóvenes, los adultos jóvenes, las mujeres embarazadas o los adultos que no estén usando productos de tabaco en la actualidad.
- » Aunque los cigarrillos electrónicos tienen el potencial de beneficiar a algunas personas y de causarles daños a otras, los científicos todavía tienen mucho que aprender sobre si los cigarrillos electrónicos son eficaces para dejar de fumar.
- » Si nunca ha fumado o usado otros productos de tabaco o cigarrillos electrónicos, no comience.

¿QUÉ SON LOS CIGARRILLOS ELECTRÓNICOS?

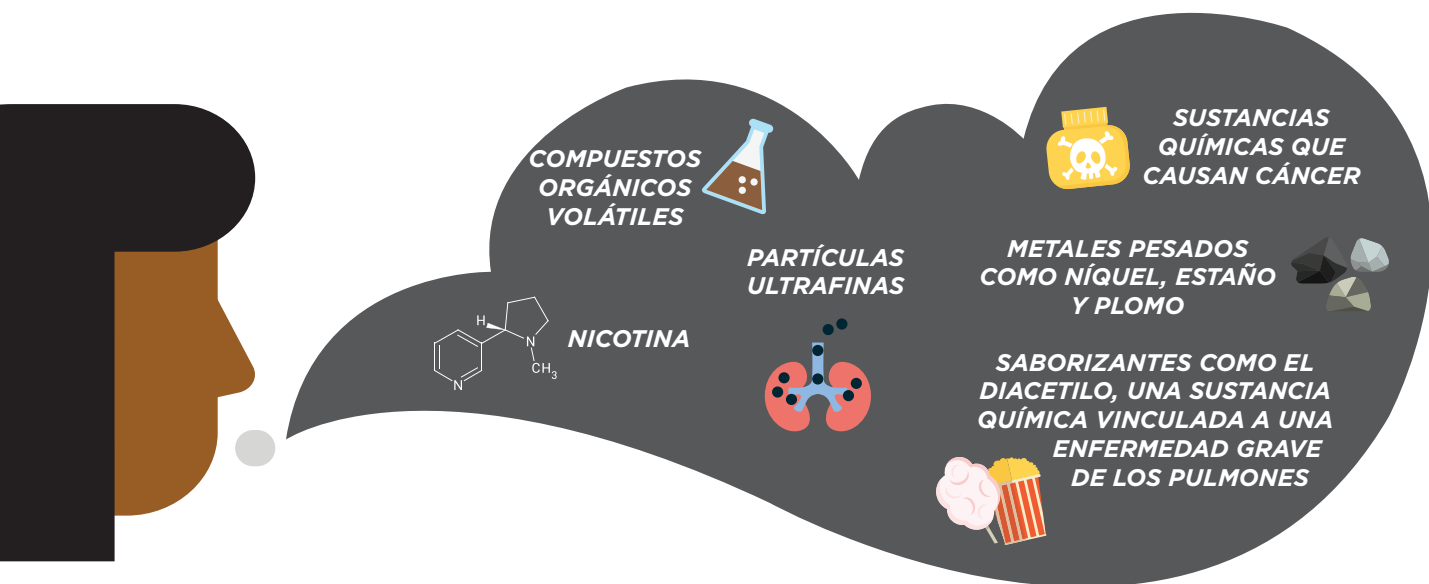
- » Los cigarrillos electrónicos se conocen con muchos nombres diferentes. A veces los llaman “e-cigarrillos” o “e-cigarettes”, “e-cigs”, “narguiles electrónicos” o “e-hookahs”, “mods”, “plumas de vapor”, “vapeadores”, “sistemas de tanque” y “sistemas electrónicos de suministro de nicotina”.
- » Algunos cigarrillos electrónicos han sido fabricados para que parezcan cigarrillos, cigarros o pipas regulares. Otros parecen bolígrafos, unidades de memoria USB u otros artículos de uso cotidiano.
- » Los cigarrillos electrónicos producen un aerosol al calentar un líquido que por lo general contiene nicotina —la droga adictiva que tienen los cigarrillos regulares, cigarros y otros productos de tabaco—, saborizantes y otras sustancias químicas que ayudan a producir el aerosol. Los usuarios de los cigarrillos electrónicos inhalan este aerosol en sus pulmones. Las personas que estén cerca también pueden inhalar este aerosol cuando el usuario lo exhala al aire.
- » Los cigarrillos electrónicos se pueden usar para suministrar marihuana y otras drogas.



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¿QUÉ HAY EN EL AEROSOL DE UN CIGARRILLO ELECTRÓNICO?

EL AEROSOL DE UN CIGARRILLO ELECTRÓNICO QUE LOS USUARIOS INHALAN Y LUEGO EXHALAN PUEDE CONTENER SUSTANCIAS DAÑINAS Y POTENCIALMENTE DAÑINAS:



Para los consumidores es difícil saber qué productos contienen los cigarrillos electrónicos. Por ejemplo, se ha descubierto que algunos cigarrillos electrónicos que se comercializan como productos sin nicotina sí tienen nicotina.

¿SON LOS CIGARRILLOS ELECTRÓNICOS MENOS DAÑINOS QUE LOS CIGARRILLOS REGULARES?



FRENTE A



SÍ, pero esto no quiere decir que los cigarrillos electrónicos sean seguros.

Generalmente, el aerosol del cigarrillo electrónico contiene menos sustancias químicas tóxicas que la mezcla mortal de 7000 sustancias químicas que hay en el humo de los cigarrillos regulares. Sin embargo, el aerosol del cigarrillo electrónico no es inofensivo. Puede contener sustancias dañinas y potencialmente dañinas, como la nicotina, metales pesados como el plomo, compuestos orgánicos volátiles y agentes que causan cáncer.

¿CUÁLES SON LOS EFECTOS DE LOS CIGARRILLOS ELECTRÓNICOS EN LA SALUD?

LOS CIENTÍFICOS TODAVÍA ESTÁN APRENDIENDO SOBRE LOS EFECTOS QUE TIENEN LOS CIGARRILLOS ELECTRÓNICOS EN LA SALUD A LARGO PLAZO. ESTO ES LO QUE YA SABEMOS:

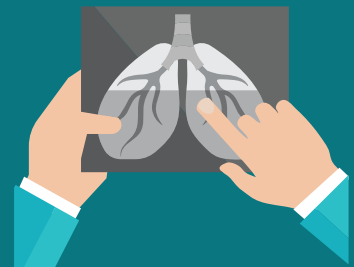
1 La mayoría de los cigarrillos electrónicos contienen nicotina, la cual tiene efectos conocidos en la salud.

- » La nicotina es poderosamente adictiva.
- » La nicotina es tóxica para los fetos en desarrollo.
- » La nicotina puede afectar el desarrollo del cerebro en los adolescentes que continúa hasta los 20 a 25 años.
- » La nicotina es un peligro para la salud de las mujeres embarazadas y su bebé en gestación.



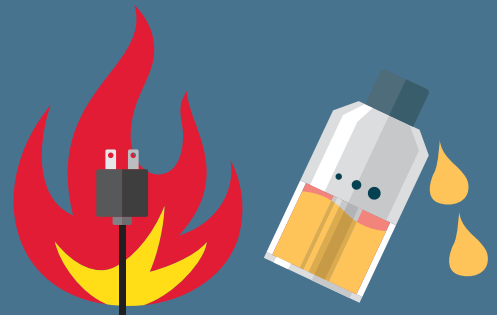
2 Además de nicotina, el aerosol del cigarrillo electrónico puede contener sustancias que dañan el cuerpo.

- » Esto incluye sustancias químicas que causan cáncer y diminutas partículas que llegan hasta el fondo de los pulmones. Sin embargo, el aerosol del cigarrillo electrónico generalmente contiene menos sustancias químicas dañinas que el humo que sale de los productos de tabaco que se queman.

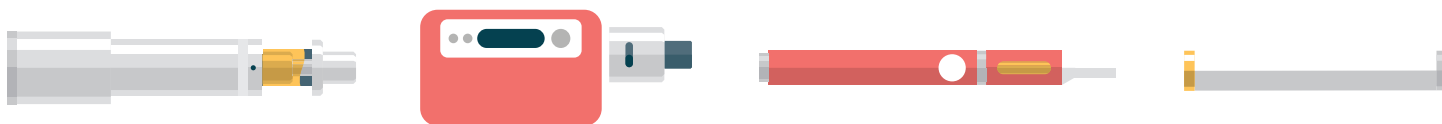


3 Los cigarrillos electrónicos pueden causar lesiones involuntarias.

- » Las baterías defectuosas de los cigarrillos electrónicos han causado incendios y explosiones, algunos de los cuales han provocado lesiones graves.
- » Además, la exposición aguda a la nicotina puede ser tóxica. Hay niños y adultos que se han intoxicado al tragar, inhalar o absorber el líquido de los cigarrillos electrónicos.



¿PUEDEN LOS CIGARRILLOS ELECTRÓNICOS AYUDAR A LOS ADULTOS A DEJAR DE FUMAR CIGARRILLOS REGULARES?



LOS CIGARRILLOS ELECTRÓNICOS NO HAN SIDO APROBADOS POR LA FDA COMO UNA AYUDA PARA LA CESACIÓN DEL TABAQUISMO.

El Grupo de Trabajo sobre Servicios Preventivos de los Estados Unidos —un grupo de expertos en salud que hace recomendaciones sobre la atención médica preventiva— concluyó que no hay suficiente evidencia para recomendar los cigarrillos electrónicos para la cesación del tabaquismo en los adultos, incluidas las mujeres embarazadas.



SIN EMBARGO, los cigarrillos electrónicos podrían ayudar a las personas adultas que fuman y que no están embarazadas si se usan como sustituto completo de todos los cigarrillos regulares y otros productos de tabaco que se fuman.

HASTA LA FECHA, LOS POCOS ESTUDIOS QUE SE HAN HECHO SOBRE ESTE ASUNTO TIENEN RESULTADOS DESIGUALES.

Los hallazgos de dos ensayos controlados aleatorizados indican que los cigarrillos electrónicos con nicotina pueden ayudar a los fumadores a dejar de fumar a largo plazo, en comparación con los cigarrillos electrónicos usados como placebo (sin nicotina).

Un reciente estudio de los CDC halló que muchos adultos están usando los cigarrillos electrónicos en un intento por dejar de fumar. Sin embargo, la mayoría de los adultos que usan cigarrillos electrónicos no dejan de fumar cigarrillos regulares y, por el contrario, siguen usando ambos productos (“uso doble”). Debido a que fumar —aunque sean unos pocos cigarrillos al día— puede ser peligroso, es muy importante dejar de hacerlo por completo para proteger su salud.

¿QUIÉNES USAN CIGARRILLOS ELECTRÓNICOS?

LOS CIGARRILLOS ELECTRÓNICOS SON LOS PRODUCTOS DE TABACO DE USO MÁS FRECUENTE ENTRE LOS JÓVENES.

EN LOS EE. UU.,
LOS JÓVENES
TIENEN MÁS
PROBABILIDADES
QUE LOS ADULTOS
DE USAR
CIGARRILLOS
ELECTRÓNICOS.



el 4.9 %

DE LOS ESTUDIANTES
DE ESCUELA
SECUNDARIA
MEDIA

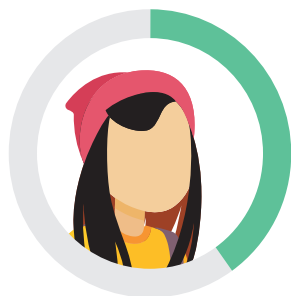
En el 2018, más de

3.6 MILLONES

de estudiantes de escuela
secundaria media y superior en los
EE. UU. habían usado cigarrillos
electrónicos en los 30 días anteriores;
esto incluye:

el 20.8 %

DE LOS ESTUDIANTES
DE ESCUELA
SECUNDARIA
SUPERIOR



ENTRE LOS USUARIOS CORRIENTES DE CIGARRILLOS ELECTRÓNICOS DE 45 AÑOS O MÁS EN EL 2015, la mayoría era fumador o exfumador de cigarrillos regulares, y el 1.3 % nunca había sido fumador de cigarrillos regulares.

EN CAMBIO,
ENTRE LOS USUARIOS CORRIENTES DE CIGARRILLOS ELECTRÓNICOS DE 18 A 24 AÑOS,
el 40.0 % NUNCA HABÍA SIDO FUMADOR DE CIGARRILLOS REGULARES.

ADULTOS

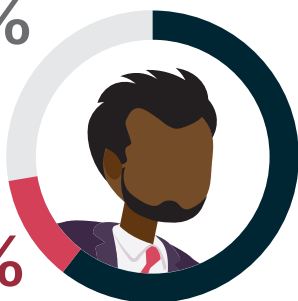
EN EL 2015, ENTRE LOS USUARIOS
ADULTOS DE CIGARRILLOS ELECTRÓNICOS
EN GENERAL:

el 29.8 %

había sido
fumador de
cigarrillos
regulares

el 11.4 %

nunca había sido
fumador de cigarrillos
regulares



el 58.8 %

eran fumadores de cigarrillos
regulares

En el 2017, **el 2.8 %**

de los adultos en los EE. UU.
eran usuarios de cigarrillos
electrónicos



In the past year alone,
vaping among
high schoolers has increased **78%**

CENTER FOR
TOBACCO
PRODUCTS



How much **do you know** about the epidemic?

E-cigarettes, also known as “vapes,” are becoming increasingly popular among teens.^{1,2}

In fact, they are the most commonly used tobacco product among both middle and high school students. You may have already seen or heard about students vaping in your school, but it is important to know that certain types of vapes can be used very discreetly.



SOME TEENS REPORT USING E-CIGARETTES IN SCHOOL BATHROOMS AND EVEN IN THE CLASSROOM.

Learning more about the different types of e-cigarette products is an important first step in addressing youth vaping.

DID YOU KNOW:

E-cigarettes come in a variety of shapes and sizes and may not look like a tobacco product, which can make them hard to spot.³

Some devices popular among teens—like JUUL and myblu—are as small as a USB flash drive and even look like one.

Certain products emit very low amounts of aerosol or “vapor,” which makes them easier to use discreetly than combustible cigarettes.

Most e-cigarettes contain nicotine, the same highly addictive drug in cigarettes.^{4,5} Some e-cigarettes may contain as much nicotine as a pack of 20 regular cigarettes.³

A Big Problem... A SMALL DEVICE



Over
10.7
million
youth aged 12–17
are at-risk for using
e-cigarettes.^{6,7}

Many teens have dangerous misperceptions that lead them to believe that vaping is harmless.

Common myths

believed about vaping, along with the facts.

“It’s just flavoring.”

Vapes get their flavors from chemicals. While these flavorings are safe to eat in food, they’re not safe to inhale. Inhaling flavor chemicals can harm your lungs.¹¹

Want an example?

Some buttery-flavored vapes like caramel contain diacetyl and acetoin. Inhaling diacetyl has been linked to popcorn lung, a lung disease that doesn’t have a cure.¹¹

“It’s just water vapor.”

But it’s not.

Vaping can expose the user’s lungs to harmful chemicals like formaldehyde, diacetyl and acrolein, as well as toxic metal particles like nickel, tin and lead.^{4,8-10,11-13}

“I don’t have an addictive personality—I won’t get hooked on vapes.”

Some vapes that claim they are nicotine-free are not.^{8,17-22}

“My vape says it’s nicotine-free. There’s no way I’ll become addicted.”

Vaping delivers nicotine to the brain in as little as 10 seconds.^{14,15}

A teen’s brain is still developing, making it more vulnerable to nicotine addiction.¹⁶

“Nicotine isn’t that bad for me.”

Nicotine exposure during the teen years can disrupt normal brain development. It can have long-lasting effects, like increased impulsivity and mood disorders.²³⁻²⁵

“Just because I vape doesn’t mean I’m going to smoke cigarettes.”

Research shows teens who vape are more likely to try smoking cigarettes.²⁶

FDA’s Efforts to Curb Youth E-Cigarette Use

FDA is committed to protecting youth from the dangers of e-cigarettes. In addition to our national peer-to-peer public education campaign called “The Real Cost,” we’re joining forces with Scholastic to provide teachers and school administrators with the resources they need to educate their students about e-cigarettes.

Together, we’ve created a **free lesson plan and research activity** for teachers to educate their students on the health risks of e-cigarette use. Please visit the [Scholastic youth-vaping-risks site](#) to access these resources.

Share This Information



Please share this infographic with other teachers and school administrators. In addition, if you’d like to learn more about e-cigarettes, check out these resources:

- » [Surgeon General Fact Sheet](#) – E-cigarette use among youth and young adults
- » [Parent Tip Sheet](#) – How parents can talk with their teen about vaping
- » [CDC Infographic](#) – E-cigarette ads and youth infographics
- » [Smokefree Teen](#) – If you know a teen who is addicted to any tobacco product, including cigarettes and e-cigarettes, there are resources to help them quit

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Tan solo en el año pasado, el **vapear** aumentó un

78%

entre los

estudiantes de preparatoria

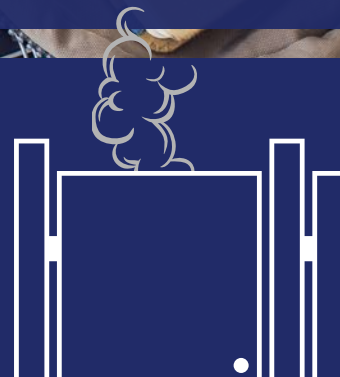
CENTRO PARA
PRODUCTOS
DE TABACO



¿Cuánto sabe de la epidemia?

Los cigarrillos electrónicos, también conocidos como “vaporizadores,” son cada vez más populares entre los jóvenes.^{1,2}

De hecho, son el producto de tabaco más utilizado entre los estudiantes de secundaria y preparatoria. Es posible que ya haya visto o escuchado sobre estudiantes que vapean en su escuela, por eso es importante saber que ciertos tipos de vaporizadores se pueden usar de manera muy discreta.



ALGUNOS JÓVENES INFORMAN QUE USAN LOS CIGARRILLOS ELECTRÓNICOS EN LOS BAÑOS DE LA ESCUELA Y HASTA EN EL SALÓN DE CLASES.

El aprender más sobre los diferentes tipos de cigarrillos electrónicos es un buen primer paso para abordar el vapeo entre los jóvenes.

SABÍA QUE:

Los cigarrillos electrónicos vienen en una variedad de formas y tamaños y puede que no parezcan un producto de tabaco, lo que puede hacer difícil reconocerlos.³

Algunos dispositivos populares entre los jóvenes, como JUUL y myblu, son tan pequeños como una unidad flash USB e incluso se parecen a una.

Ciertos productos emiten cantidades bien bajas de aerosol o “vapor” lo que los hace más fáciles de usar discretamente que los cigarrillos tradicionales.

La mayoría de los cigarrillos electrónicos contienen nicotina, la misma droga altamente adictiva que contienen los cigarrillos.^{4,5} Algunos cigarrillos electrónicos pueden contener tanta nicotina como una cajetilla (paquete) regular de 20 cigarrillos.³

Un problema grande...

UN DISPOSITIVO PEQUEÑO



Más de
10.7 millones
de jóvenes entre las
edades de 12 a 17 años
están en riesgo de usar
cigarrillos electrónicos.^{6,7}

Muchos jóvenes tienen ideas falsas y peligrosas que les hacen creer que el vapear no hace daño.

Mitos comunes

que los jóvenes creen sobre el vapear, junto con los hechos.

“Es solo saborizante”

Los vaporizadores obtienen sus sabores de productos químicos. Si bien estos saborizantes son seguros cuando se comen en la comida, estos no son seguros cuando se inhalan. El inhalar productos químicos con sabor puede dañar sus pulmones.¹¹

¿Quiere un ejemplo?

Algunos vaporizadores con sabores mantequillosos, como caramelo, contienen diacetilo y acetoin. El inhalar el diacetilo ha sido vinculado a la enfermedad pulmonar “popcorn,” una enfermedad pulmonar que no tiene cura.¹¹

“Es solo vapor de agua.”

No, no lo es.

El vapeo puede exponer a los pulmones del usuario a productos químicos dañinos, como formaldehído, diacetilo, y acroleína, y también a partículas de metales tóxicos como el níquel, estaño y el plomo.^{4,8-13}

“Yo no tengo personalidad adictiva —no me voy a quedar enganchado con los vaporizadores.”

Algunos vaporizadores que dicen que son libres de nicotina no lo son.^{8,17-22}

“Mi vaporizador dice que es libre de nicotina. No hay forma de que yo me vuelva adicto.”

Los vaporizadores le entregan nicotina al cerebro en tan solo 10 segundos.^{14,15}

El cerebro de un joven todavía se está desarrollando, lo cual lo hace más vulnerable a la adicción a la nicotina.¹⁶

“La nicotina no es mala para mí.”

El exponerse a la nicotina durante la adolescencia puede alterar el desarrollo normal del cerebro. Puede tener efectos a largo plazo, como mayor impulsividad y desórdenes del estado de ánimo.²³⁻²⁵

“Solo porque vapeo no quiere decir que voy a consumir cigarrillos.”

Según las investigaciones científicas, los jóvenes que vapean son más propensos a experimentar con fumar cigarrillos.²⁶

Los esfuerzos de la FDA para reducir el consumo de cigarrillos electrónicos en los jóvenes.

La FDA se compromete a la protección de los jóvenes de los daños de los cigarrillos electrónicos. Además de nuestra campaña nacional de educación pública para jóvenes “The Real Cost,” estamos uniendo fuerzas con Scholastic para proporcionarles a los maestros y administradores de escuelas los recursos que necesitan para educar a sus estudiantes sobre los cigarrillos electrónicos.

Juntos hemos creado un plan de clase gratis y una actividad de investigación para que los maestros eduquen a sus estudiantes sobre los riesgos a la salud del consumo de cigarrillos electrónicos. Por favor visite [el sitio web de Scholastic sobre el riesgo de los vaporizadores para los jóvenes](#) para acceder a estos recursos.

Comparta esta información



Por favor comparta esta infografía con otros maestros y administradores de escuela. Además, si quisiera aprender más sobre los cigarrillos electrónicos, vea estos recursos:

- » [La hoja informativa del cirujano general](#) – Sobre el consumo de los cigarrillos electrónicos en los jóvenes y los adultos jóvenes
- » [Hoja de consejos para padres](#) – Sobre como los padres pueden hablar con sus hijos sobre el vapear
- » [Infografía del CDC](#) – Sobre anuncios de cigarrillos electrónicos e infografías para jóvenes
- » [Smokefree Español](#) – Si conoce a un joven que sea adicto a cualquier producto de tabaco, incluyendo cigarrillos electrónicos, hay recursos para ayudarlos a dejar de fumar

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YOUTH ACCESS TO E-CIGARETTES

States with Laws Restricting Youth Access to E-Cigarettes¹

Enacted as of September 15, 2019

| State | ≥1 Laws Restricting Youth Access | Minimum Legal Sales Age | State | ≥1 Laws Restricting Youth Access | Minimum Legal Sales Age |
|----------------------|----------------------------------|-------------------------|----------------|----------------------------------|-------------------------|
| Alabama | Yes | 19 | Montana | Yes | 18 |
| Alaska | Yes | 19 | Nebraska | Yes | 19 |
| Arizona | Yes | 18 | Nevada | Yes | 18 |
| Arkansas | Yes | 21* | New Hampshire | Yes | 18 |
| California | Yes | 21* | New Jersey | Yes | 21 |
| Colorado | Yes | 18 | New Mexico | Yes | 18 |
| Connecticut | Yes | 21 | New York | Yes | 21 |
| Delaware | Yes | 21 | North Carolina | Yes | 18 |
| District of Colombia | Yes | 21 | North Dakota | Yes | 18 |
| Florida | Yes | 18 | Ohio | Yes | 21 |
| Georgia | Yes | 18 | Oklahoma | Yes | 18 |
| Hawaii | Yes | 21* | Oregon | Yes | 21 |
| Idaho | Yes | 18 | Pennsylvania | | |
| Illinois | Yes | 21 | Rhode Island | Yes | 18 |
| Indiana | Yes | 18 | South Carolina | Yes | 18 |
| Iowa | Yes | 18 | South Dakota | Yes | 18 |
| Kansas | Yes | 18 | Tennessee | Yes | 18 |
| Kentucky | Yes | 18 | Texas | Yes | 21* |
| Louisiana | Yes | 18 | Utah | Yes | 19^ |
| Maine | Yes | 21* | Vermont | Yes | 21 |
| Maryland | Yes | 21* | Virginia | Yes | 21*† |
| Massachusetts | Yes | 21* | Washington | Yes | 21 |
| Michigan | Yes | 18 | West Virginia | Yes | 18 |
| Minnesota | Yes | 18 | Wisconsin | Yes | 18 |
| Mississippi | Yes | 18 | Wyoming | Yes | 18 |
| Missouri | Yes | 18 | | | |

¹ As used in this table, *e-cigarette* broadly refers to any product, and its component parts and accessories, that contains nicotine and/or other substances intended for use in the form of an aerosol, often referred to as vapor.

* Certain exceptions apply; see specific law for details.

† Effective date: July 1, 2019.

^ Minimum legal sales age will be increased to age 20 on July 1, 2020 and to age 21 on July 1, 2021

E-CIGARETTE PRODUCT PACKAGING

States with Laws on Product Packaging of E-Cigarettes¹

Enacted as of September 15, 2019

| State | Product Packaging Requirement | Effective ² | State | Product Packaging Requirement | Effective ² |
|----------------------|-------------------------------|------------------------|----------------|-------------------------------|------------------------|
| Alabama | Yes | 8/1/2019 | Montana | | |
| Alaska | | | Nebraska | | |
| Arizona | | | Nevada | | |
| Arkansas | Yes | 7/22/2015 | New Hampshire | Yes | 1/6/2017 |
| California | Yes | 6/9/2016 | New Jersey | Yes | 1/19/2016 |
| Colorado | | | New Mexico | Yes | 4/8/2015 |
| Connecticut | | | New York | Yes | 12/29/2014 |
| Delaware | | | North Carolina | Yes | 12/1/2015 |
| District of Colombia | | | North Dakota | Yes | 4/8/2015 |
| Florida | | | Ohio | Yes | 8/2/2014 |
| Georgia | | | Oklahoma | | |
| Hawaii | | | Oregon | Yes | 5/26/2015 |
| Idaho | | | Pennsylvania | Yes | 10/1/2016 |
| Illinois | Yes | 1/1/2015 | Rhode Island | Yes | 1/1/2015 |
| Indiana | Yes | 7/1/2015 | South Carolina | Yes | 4/26/2019 |
| Iowa | | | South Dakota | Yes | 3/28/2014 |
| Kansas | | | Tennessee | Yes | 1/1/2016 |
| Kentucky | | | Texas | Yes | 1/1/2015 |
| Louisiana | | | Utah | Yes | 7/1/2015 |
| Maine | Yes | 1/1/2016 | Vermont | Yes | 1/1/2015 |
| Maryland | | | Virginia | Yes | 4/15/2015 |
| Massachusetts | Yes | 9/25/2015 | Washington | Yes | 6/28/2016 |
| Michigan | Yes | 9/2/2019 | West Virginia | | |
| Minnesota | Yes | 5/21/2014 | Wisconsin | | |
| Mississippi | | | Wyoming | Yes | 7/1/2015 |
| Missouri | Yes | 8/28/2015 | | | |

¹ As used in this table, *e-cigarette* broadly refers to any product, and its component parts and accessories, that contains nicotine and/or other substances intended for use in the form of an aerosol, often referred to as vapor.

² If multiple laws, earliest effective date is listed in table.

E-CIGARETTE REGULATIONS- CONNECTICUT

Are e-cigarettes in any section of the state's statutes included in the definition of "Tobacco Products"?

Yes.

[Conn. Gen. Stat. § 12-330a \(2019\)](#) (effective October 1, 2019)

How does the state define an e-cigarette?

Youth Access and Use Restrictions

Electronic nicotine delivery system means "an electronic device used in the delivery of nicotine or other substances to a person inhaling from the device, and includes, but is not limited to, an electronic cigarette, electronic cigar, electronic cigarillo, electronic pipe or electronic hookah and any related device and any cartridge or other component of such device, including, but not limited to, electronic cigarette liquid."

[Conn. Gen. Stat. § 21a-415\(6\) \(2019\)](#) (new definition effective October 1, 2019)

Liquid nicotine container means "a container that holds a liquid substance containing nicotine that is sold, marketed or intended for use in an electronic nicotine delivery system or vapor product, except 'liquid nicotine container' does not include such a container that is prefilled and sealed by the manufacturer and not intended to be opened by the consumer"

[Conn. Gen. Stat. § 19-342a \(a\)\(3\) \(2019\)](#)

Vapor product means "any product that employs a heating element, power source, electronic circuit or other electronic, chemical or mechanical means, regardless of shape or size, to produce a vapor that may or may not include nicotine, that is inhaled by the user of such product..."

[Conn. Gen. Stat. § 21a-415\(7\) \(2019\)](#)

Electronic cigarette liquid means "a liquid, that when used in an electronic nicotine delivery system or vapor product, produces a vapor that may or may not include nicotine and is inhaled by the user of such electronic nicotine delivery system or vapor product."

[Conn. Gen. Stat. § 21a-415 \(2019\)](#)

Is there a state excise or special tax (non-sales tax) placed on e-cigarettes?

Electronic cigarette products prefilled and sealed by manufacturer and not intended to be refillable are taxed at \$0.40/ml of electronic cigarette liquid; other electronic cigarette products taxed at 10% of wholesale price.

[2019 Conn. Pub. Acts 19-117, § 351](#) (effective October 1, 2019)

What regulations are in place for e-cigarette packaging?

N/A

What restrictions are in place for retail or youth access?

Sale/delivery of electronic nicotine delivery system or vapor product to persons under age 21 prohibited.

[Conn. Gen. Stat. § 53-344b\(b\) \(2019\)](#) (increase in MLSA effective October 1, 2019)

Self-service displays prohibited for electronic nicotine delivery systems or vapor products except in adult-only facilities.

[Conn. Gen. Stat. § 21a-416\(b\) \(2019\)](#)

Is a retail license or permit required to sell e-cigarettes?

Yes, retailers and manufacturers must be registered.

[Conn. Gen. Stat. §§ 21a-415\(b\); 21a-415a\(a\) \(2019\)](#)

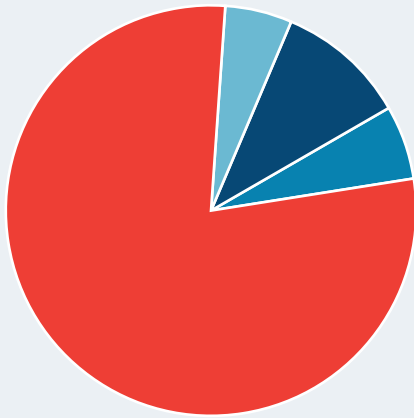
What smoke-free restrictions exist for e-cigarette use?

Use of electronic nicotine delivery system or vapor product prohibited in any state building, health care institution, retail food store, restaurant, liquor store, bar (except smoking sections of outdoor seating areas), school buildings and grounds, child care facilities and grounds thereof, elevators, college dormitories, race tracks, and in 75% or more of hotel/motel rooms (with some exceptions).

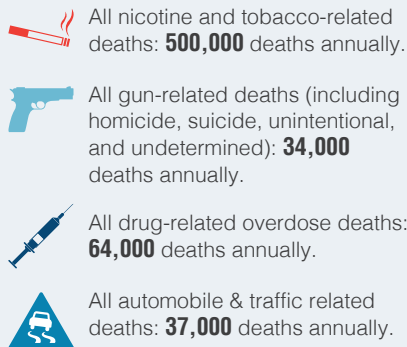
[Conn. Gen. Stat. § 19a-342a\(b\)-\(c\) \(2019\)](#)

The Toll of Tobacco

- Tobacco kills half a million people a year: equivalent to three 747s crashing each day, and more than car crashes, gun violence and drug overdoses combined.
- The developing teenage brain is particularly vulnerable to the addictive effects of nicotine.
- Early nicotine use in susceptible teens may lead to addiction and multi-substance abuse, as well as mental illnesses including anxiety, depression, suicidality, bipolar and schizophrenia.



LEADING PREVENTABLE CAUSES OF DEATH



- More than 95% of smokers started before age 21
- 350 teens become regular smokers each day in the U.S.
- The Centers for Disease Control (CDC) projects that without a trajectory change nicotine addiction and tobacco use will **dramatically shorten the lives of 5.6 million kids alive today.**

The Rise of Juul

The Addiction Sweeping American Schools

Imagine a potent little device, as slender as a USB memory stick and as sleek as an iPhone. From it comes only the pleasant smell and taste of Mango, Mint or Creme Brulee, yet it packs the nicotine punch of a full pack of cigarettes. Juuls give a quick head rush of stimulation that kids love, but soon can't stop.



Essentially unregulated, Juul through its intense social media campaign and new formulation of nicotine has exploded in popularity. In 18 months, Juuls climbed to a dominant market share and a \$15 billion valuation by addicting teens. To view a frightening middle-school video go to www.tobacco21.org/juuls

Cutting the Supply

- On average American kids try smoking for the first time at age 13.7.
- The primary source of tobacco products for underage smokers are their 18 to 20 year old peers.
- Tobacco 21 laws disrupt the social availability of all Nicotine products to young people. **But without strict enforcement this intervention ultimately fails.**

“

Tobacco 21 is only effective if there is real enforcement, but the current age-18 system that depends on the police arresting the minimum-wage clerk simply doesn't work. Using Health Department inspectors to insure retailer compliance is the secret to giving kids just a little more time to grow up addiction free.

—Rob Crane, MD
President, Preventing Tobacco Addiction Foundation

”

Dramatic Impact on Initiation

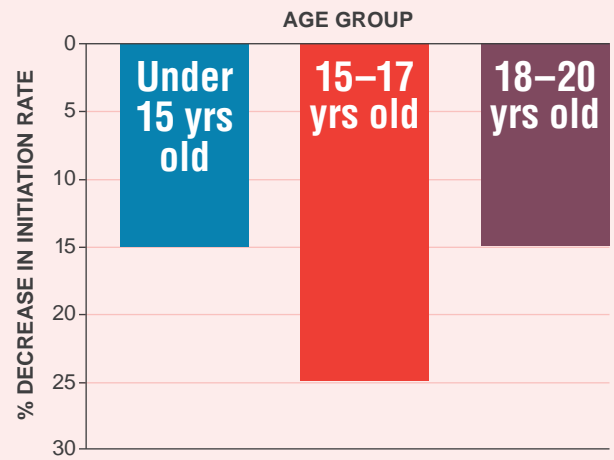


SALE OF CIGARETTES BY AGE

21 years and older ■ 18–20 years

○ The economic impact of T21 is minimal. Only 2% of U.S. cigarette sales go to those under 21.

A 360 page report by the National Academy of Sciences projected that if the entire country enacted Tobacco 21 legislation there would be a 25% drop in smoking initiation among high school students.



Tobacco 21 In Effect

Over 50% of the nation's population is covered by T21 policy

Tobacco 21 has decreased youth tobacco use in localities that have adopted it.

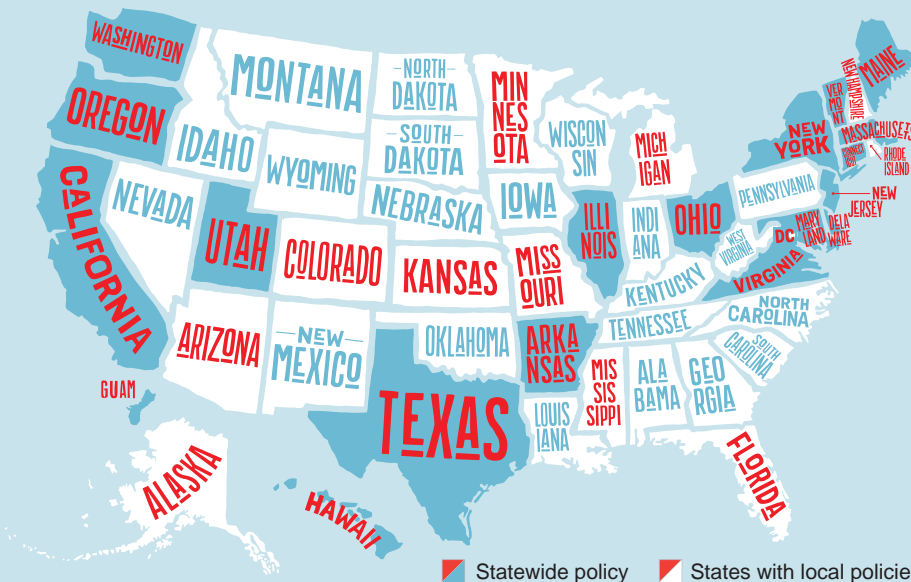
Needham Massachusetts showed a 48% drop in high school smoking rates after policy implementation, **a drop three times that of neighboring communities.**

In the year after implementation, **Chicago** found a 36% decrease in 18-20 year olds that reported currently smoking cigarettes.

In **California**, statewide retailer rates to under 18 year-olds decreased from 10.3% to 5.7% since implementation of their Tobacco 21 law.

In **Oregon**, recent initiation rates dropped statewide from 34% to 25% in 13 - 17 year-olds and from 23% to 18% in 18 - 20 year-olds within two years of T21.

485+ Cities & Counties in 29 States



Public Support for T21

75% of U.S. adults favor raising the Minimum Legal Sales Age for all tobacco products to 21.

Endorsing Organizations

American Academy of Family Physicians, American Academy of Pediatrics, American Public Health Association, American Heart Association, American Cancer Society, American Lung Association, American Veterans (AMVETS), Preventing Tobacco Addiction Foundation, Campaign for Tobacco Free Kids, American Medical Association, March of Dimes.



Talk with Your Teen About E-cigarettes: A Tip Sheet for Parents



BEFORE THE TALK

Know the facts.

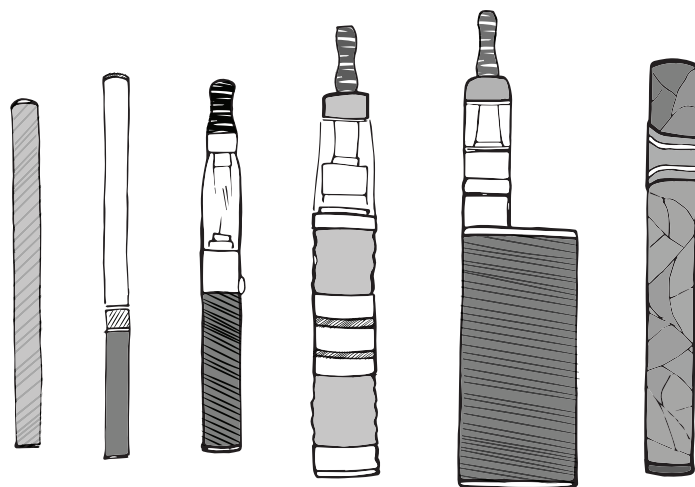
- Get credible information about e-cigarettes and young people at E-cigarettes.SurgeonGeneral.gov.

Be patient and ready to listen.

- Avoid criticism and encourage an open dialogue.
- Remember, your goal is to have a conversation, not to deliver a lecture.
- It's OK for your conversation to take place over time, in bits and pieces.

Set a positive example by being tobacco-free.

- If you use tobacco, it's never too late to quit. For free help, visit smokefree.gov or call **1-800-QUIT-NOW**.



START THE CONVERSATION

Find the right moment.

- A more natural discussion will increase the likelihood that your teen will listen. Rather than saying “we need to talk,” you might ask your teen what he or she thinks about a situation you witness together, such as:
 - » Seeing someone use an e-cigarette in person or in a video.
 - » Passing an e-cigarette shop when you are walking or driving.
 - » Seeing an e-cigarette advertisement in a store or magazine or on the internet.



Ask for support.

- Not sure where to begin? Ask your health care provider to talk to your teen about the risks of e-cigarettes.
- You might also suggest that your teen talk with other trusted adults, such as relatives, teachers, faith leaders, coaches, or counselors whom you know are aware of the risks of e-cigarettes.
- These supportive adults can help reinforce your message as a parent.

ANSWER THEIR QUESTIONS

Here are some questions and comments you might get from your teen about e-cigarettes and some ideas about how you can answer them.

Why don't you want me to use e-cigarettes?

- Science shows that e-cigarettes contain ingredients that are addictive and could harm different parts of your body.
- Right now, your brain is still developing, which means you are more vulnerable to addiction. Many e-cigarettes contain nicotine, and using nicotine can change your brain to make you crave more nicotine. It can also affect your memory and concentration. I don't want that for you!
- E-cigarettes contain chemicals that are harmful. When people use e-cigarettes, they breathe in tiny particles that can harm their lungs.

- The cloud that people exhale from e-cigarettes can expose you to chemicals that are not safe to breathe.

What's the big deal about nicotine?

- Your brain is still developing until about age 25. The Surgeon General reported that nicotine is addictive and can harm your brain development.
- Using nicotine at your age may make it harder for you to concentrate, learn, or control your impulses.
- Nicotine can even train your brain to be more easily addicted to other drugs like meth and cocaine.

- I don't say this to scare you, but I want you to have the facts because nothing is more important to me than your health and safety.

Aren't e-cigarettes safer than conventional cigarettes?

- Because your brain is still developing, scientific studies show that it isn't safe for you to use any tobacco product that contains nicotine, including e-cigarettes.
- Whether you get nicotine from an e-cigarette or a cigarette, it's still risky.
- Some e-cigarette batteries have even exploded and hurt people.

I thought e-cigarettes didn't have nicotine — just water and flavoring?

- I used to think that too. But many e-cigarettes have nicotine. There are also other chemicals in them that can be harmful.
- Let's look at the Surgeon General's website on e-cigarettes (E-cigarettes.SurgeonGeneral.gov) together so you can see for yourself.

I (or my friends) have tried e-cigarettes and it was no big deal.

- I appreciate your honesty. In the future, I hope you (or your friends) will stay away from e-cigarettes and other tobacco products, including cigarettes. Science shows that e-cigarettes contain ingredients that are addictive and could harm different parts of your body.
- Next time we go to the doctor, let's ask about the risks of nicotine, e-cigarettes, and other tobacco products.

You used tobacco, so why shouldn't I?

- If I could live my life over again, I never would have started smoking. I learned that people who smoke cigarettes are much more likely to develop, and die from, certain diseases than people who don't smoke. This was really scary, so I quit smoking.
- Quitting was really hard, and I don't want you to go through that. The best thing is to not start at all.



KEEP THE CONVERSATION GOING

Many parents find that texting is a great way to reach their teens. Here are some suggestions for text messages that might catch your teen's attention. And, you can easily share pages of the website (E-cigarettes.SurgeonGeneral.gov) with your teen.



Share this page

Look for this symbol, click it, type in the message you want or use the message provided, and share with your teen via Facebook, Twitter, or email.

Connect and encourage.

- You always liked science. Check out the science about e-cigarettes and young people: **E-cigarettes.SurgeonGeneral.gov**
- Getting off nicotine is hard but I'm so happy I quit. Don't make that mistake and get addicted. Smoking and tobacco use, including using e-cigarettes, are unsafe for young people.

Remind and repeat.

- Most teenagers don't use e-cigarettes. E-cigarettes with nicotine can mess with your brain, and your brain is still developing until you are at least 25.
- You might be tempted by e-cigarette flavors, but inhaling certain flavorings that have been found in some e-cigarettes can be harmful.

Share facts and resources.

- Just learned that many e-cigarettes have nicotine in them. That's the drug that makes cigarettes so addictive. Nicotine can also mess with your brain development.
- Just saw a report from the Surgeon General that e-cigarettes can mess with how your brain develops and might even affect your mood and focus. Please don't use any products that contain nicotine.
- Hope none of your friends use e-cigarettes around you. Even breathing the cloud they exhale can expose you to nicotine and chemicals that can be dangerous to your health.



Centers for Disease
Control and Prevention
Office on Smoking
and Health





HOW TO TALK TO YOUR KIDS ABOUT VAPING

This guide is intended to help you have an important talk about vaping with your kids. Sure, they may think you are uncool and annoying for bringing this up, but it is important that you do. The health risks **The Vape Talk** with your kids today.

ids, know the facts.

WHAT PARENTS NEED TO KNOW

You've probably heard a variety of terminology, but don't let that confuse you. JUUL, vapes and vape pens are all forms of e-cigarettes and they're all dangerous.

In fact, one JUUL pod contains as much nicotine as 20 cigarettes, or about one pack of cigarettes. Vaping is highly addictive. Vape pods also contain toxins and carcinogens, including formaldehyde, propylene glycol and acrolein, which can cause irreversible lung damage. And because vaping is new, we're still uncovering its long-term health effects.

All these risks are being funded by a familiar foe, Big Tobacco. Altria, the owner of Marlboro, in the best position to protect their kids against such powerful and dangerous opponents.

SIGNS YOUR KID MIGHT ALREADY BE VAPING

Over 27% of high school students have used e-cigarettes in the last month, and it's likely their parents don't even know. Vaping is easy to hide. Unlike traditional cigarettes, e-cigarettes don't leave the telltale scent of tobacco. But there are clues.

Look for changes in your kid's behavior. They might start cutting back on caffeine or getting frequent nosebleeds. Also look for signs around the house. Vape pens can look like markers or USB And since vape

TIPS FOR A

HEALTHY DISCUSSION

CHOOSE THE RIGHT TIME AND PLACE

Choose a time when your kid won't feel rushed and a place where they feel relaxed, like when you're riding in the car or sitting at the dinner table. By choosing a place you both feel comfortable, you'll both be more inclined to open up.

APPEAL TO THEIR GOOD JUDGEMENT

Your kid makes smart decisions every day. Resisting the temptation to vape can be one of them. Compliment their good judgement. Remind them that they are an independent thinker who doesn't
Tell them you're proud of their courage and principles.

ASK OPEN-ENDED QUESTIONS

Instead of asking yes or no questions, ask open-ended questions that encourage participation. If you're genuinely curious, your kid will be less likely to get defensive.

CONVERSATION STARTERS

Here are some suggested conversation openers. Remember, don't blow up if they share things you didn't expect to hear. Listen to their answers, ask more questions and keep the lines of communication open.

1

Are a lot of kids vaping at your school? Are your friends vaping?

Be sure you don't react, just listen.

2

What do you think about vaping?

You may hear him say, "It's harmless – it's just water vapor," but it's not and you'll share more about that next.

3**Do you know what is in JUUL pods and other vapes?**

Then tell them you have been studying and here's what you know:

- Vape pods contain harmful ingredients, including formaldehyde, propylene glycol and acrolein (ə-'krō-lē-ən), which causes irreversible lung damage. It's not just water vapor, and it's not safe.
- Even the Surgeon General has established how dangerous vaping is. JUUL
- Most vaping manufacturers, including JUUL, are owned by tobacco companies, the same companies that sell addictive cigarettes, which cause millions of deaths. These companies are now focusing their marketing efforts on replacing former cigarette customers with kids, by hooking them on e-cigarettes.

4**Do you know how vaping can damage your health?**

Tell them why that matters.

- Vaping is smoking – one JUUL pod can contain as much nicotine as a pack of cigarettes.
- Once you start vaping, nicotine addiction follows – and quitting is really hard. (At this point, if you're a smoker or former smoker, you may want to share your own experience with nicotine addiction.)
- Your lungs will suffer the effects – maybe not today, but eventually. There are multiple cases in the news of kids having seizures from e-cigarette nicotine poisoning, experiencing vaping-related lung injuries, and even death. We don't even know yet how bad this is going to be for your health long term.

5**Do you know the other ways vaping affects your life?**

Tell them why they should care.

- Over time, the chemicals in e-cigarettes will affect your attention span, memory and lungs.
- Once you're addicted, vaping will be the boss of you. Even when you don't want to do it, you'll have to do it. And that's only good for the tobacco companies.
- You're smarter about health than previous generations were. Vaping goes against all the other healthy choices you're already making.

ONCE IS NOT ENOUGH

off guard and reluctant to engage. But once you open the door to the topic, they'll be more inclined to talk to you about it later. If your kid is still skeptical, here are some links you can suggest so they can make up their own mind.

Surgeon General: [E-Cigarettes.SurgeonGeneral.gov/](https://www.e-cigarettes.surgeongeneral.gov/)

CDC: [CDC.gov/tobacco/basic_information/e-cigarettes/index.htm](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm)

American Lung Association: [Lung.org/ecigs](https://www.lung.org/ecigs) and [Lung.org/help-teens-quit](https://www.lung.org/help-teens-quit).

FOR HELP:

The American Lung Association's Lung Helpline is staffed by registered nurses, respiratory therapists, and tobacco treatment specialists who are there to answer your questions about tobacco, including vaping, cessation. Call 1-800-LUNG-USA or visit [Lung.org/helpline](https://www.lung.org/helpline).

The (City/County) School Board recognizes that the use of tobacco products is a health, safety, and environmental hazard for students, employees, visitors, and school facilities. The Board believes that the use of tobacco products on school grounds, in school buildings and facilities, on school property or at school-related or school-sponsored events is detrimental to the health and safety of students, staff and visitors.

The Board acknowledges that adult employees and visitors serve as role models for students. The Board recognizes that it has an obligation to promote positive role models in schools and to promote a healthy learning and working environment, free from unwanted smoke and tobacco use for the students, employees, and visitors on the school campus.

Tobacco Use Prohibited

No student, staff member or school visitor is permitted to use any tobacco product at any time, including non-school hours (24/7):

- in any building, facility, or vehicle owned, leased, rented or chartered by the (City/County) Public Schools;
- on any school grounds and property – including athletic fields and parking lots – owned leased, rented or chartered by (City/County) Public Schools; or
- at any school-sponsored or school-related event on-campus or off-campus.

In addition, school district employees, school volunteers, contractors or other persons performing services on behalf of (City/County) Public Schools also are prohibited from using tobacco products at any time while on duty and in the presence of students, either on or off school grounds.

Further, no student shall be permitted to possess a tobacco product while in any school building; while on school grounds or property; or at any school-sponsored or school-related event, or at any other time that students are under the authority of school personnel.

Tobacco products may be included in instructional or research activities in public school buildings, if the activity is conducted or supervised by the faculty member overseeing the instruction or research project, and the activity does not include smoking, chewing, or otherwise ingesting the tobacco product.

Definitions

For the purposes of this policy, the following definitions have the following meanings:

- 1) “Electronic Smoking Device” means any electronic device, the use of which may resemble smoking, which can be used to deliver an inhaled dose of nicotine or other substances to the user. “Electronic Smoking Device” includes any such electronic smoking device, whether manufactured,

distributed, marketed, or sold as an electronic cigarette, electronic cigar, electronic cigarillo, electronic pipe, electronic hookah, vape pen or any other product name or descriptor.

2) “Smoke or Smoking” means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, including hookahs and marijuana, whether natural or synthetic, in any manner or in any form. “Smoking” also includes the use of an electronic smoking device which creates an aerosol or vapor, in any manner or in any form.

3) “Tobacco Product” means:

(a) Any product containing, made, or derived from tobacco or nicotine that is intended for human consumption, whether smoked, heated, chewed, absorbed, dissolved, inhaled, snorted, sniffed, or ingested by any other means, including, but not limited to cigarettes, cigars, little cigars, chewing tobacco, pipe tobacco, snuff;

(b) Any electronic smoking device that delivers nicotine or other substances to the person inhaling from the device, including, but not limited to an electronic cigarette, cigar, pipe, or hookah;

(c) “tobacco product” includes any component, part, or accessory of a tobacco product.

4) “Tobacco use” means smoking, chewing, dipping, or any other use of tobacco products, including electronic smoking devices.

Signage

Signs will be posted in a manner and location that adequately notify students, staff and visitors about the 100 percent tobacco-free schools policy.

Enforcement for Students

Consequences for students engaging in the prohibited behavior will be provided in accordance with the Student Code of Conduct. Students who violate the school districts tobacco use policy will be referred to the guidance counselor, a school nurse, or other health or counseling services for all offenses for health information, counseling and referral. Parents/guardians will be notified of all violations and actions taken by the school.

Enforcement for Staff and Visitors

Consequences for employees who violate the tobacco use policy will be in accordance with personnel policies and may include verbal warning, written reprimand, or termination. Visitors using tobacco products will be asked to refrain while on school property or leave the premises. Law enforcement officers may be contacted to escort the person off the premises or

cite the person for trespassing if the person refuses to leave the school property. Forfeiture of any fee charged for admission will be enforced for visitors violating this policy.

Opportunities for Cessation

The administration will consult with the county health department and other appropriate health organizations to provide students and employees with information and referral to support systems, programs and services to encourage them to abstain from the use of tobacco products.

Prevention Education

The administration will consult with appropriate health organizations to identify and provide tobacco use prevention programs that follow the guidance from the Centers for Disease Control and Prevention. Such programs should provide opportunities for students to gain a greater understanding of the health hazards of tobacco use and the impact of tobacco use as it relates to providing a safe, orderly, clean and inviting school environment. The administration should not use programs sponsored by a tobacco company.

Procedures for Implementation

The administration will develop a plan for communicating the policy that may include information in student and employee handbooks, announcements at school-sponsored or school-related events, and appropriate signage in buildings and around the school campus. An enforcement protocol, which identifies consequences for students, staff and visitors who violate the policy, will be created and communicated to all students, staff and parents.

Effective Date

This policy shall take effect in full on [INSERT DATE].



JUUL and Youth: Rising E-Cigarette Popularity

What is JUUL?

The term “electronic cigarettes” covers a wide variety of products now on the market, from those that look like cigarettes or pens to somewhat larger products like “personal vaporizers” and “tank systems.” Instead of burning tobacco, e-cigarettes most often use a battery-powered coil to turn a liquid solution into an aerosol that is inhaled by the user. One e-cigarette device, called a JUUL, has become increasingly popular since its launch in 2015.

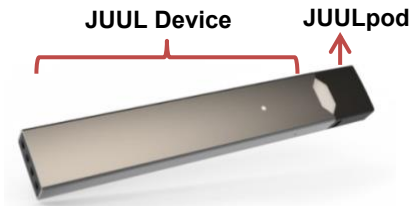


Image from JUUL website, accessed 1/24/18



JUULpods. Image from JUUL website, accessed 1/24/18



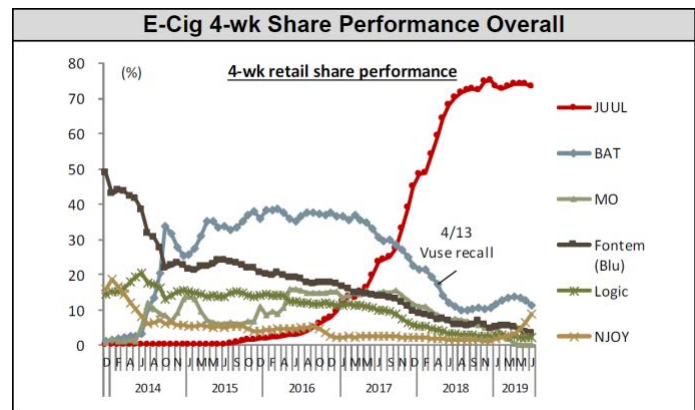
JUUL device charging in the USB port of a laptop. Image from JUUL website, accessed 1/24/18.

JUUL Labs produces the JUUL device and JUULpods, which are inserted into the JUUL device. In appearance, the JUUL device looks quite similar to a USB flash drive, and can in fact be charged in the USB port of a computer. According to JUUL Labs, all JUULpods contain flavorings and 0.7mL e-liquid with 5% or 3% nicotine by weight; JUUL Labs claims that the 5% pods contain the equivalent amount of nicotine as a pack of cigarettes. JUULpods come in eight flavors: Mango, Fruit, Cucumber, Creme, Mint, Menthol, Virginia Tobacco and Classic Tobacco.¹ Other companies manufacture “JUUL-compatible” pods in additional flavors; for example, the website Eonsmoke sells JUUL-compatible pods in Blueberry, Silky Strawberry, Mango, Cool Mint, Watermelon, Tobacco, and Caffé Latte flavors.² There are also companies that produce JUUL “wraps” or “skins,” decals that wrap around the JUUL device and allow JUUL users to customize their device with unique colors and patterns (and may be an appealing way for younger users to disguise their device).



JUUL skins. Images from <https://www.mightyskins.com/juul/>

According to data from Wells Fargo, JUUL’s popularity has grown dramatically in the last two years, with unit sales increasing more than 600 percent in 2017. In mid-2016, dollar sales share for JUUL products was less than 5 percent, the lowest compared to products sold by the main companies in Nielsen-tracked channels.* But by the end of 2017, JUUL sales had surpassed all other companies’ products (see adjacent graph). As a result, JUUL is now more popular than the e-cigarette brands manufactured by the major tobacco companies (blu, Vuse). According to the most recent data about three-quarters of the e-cigarette market share.³ In December 2018, Altria announced that it was purchasing a 35 percent share in JUUL Labs for \$12.8 billion and valued the company at \$38 billion.⁴ As JUUL has surged in popularity, other companies have sought to mimic JUUL’s sleek design



Source: Nielsen Total US xAOC/Convenience Database & Wells Fargo Securities, LLC

* Tracked data includes mass channel and convenience stores; does not include online sales or sales from tobacco and vape shops.

and pod-based system, with new devices such as MLV's PHIX, Mylé Vapor's Mylé, Altria's MarkTen Elite†, Reynolds' Vuse Solo, and ITG Brands' myblu.⁵ As of September 2018, researchers had identified at least 39 JUUL "knock off" devices.⁶ JUUL has filed patent infringement complaints against many of these copycat devices.⁷

JUUL Use among Youth and Young Adults

In December 2018, the Surgeon General issued an advisory on e-cigarette use among youth, declaring the growing problem an epidemic.⁸ According to the 2019 National Youth Tobacco Survey, 27.5 percent of high school students and over 5 million youth were current e-cigarette users.^{9,10} From 2017 to 2019, e-cigarette use increased by an alarming 135 percent for high schoolers.¹¹ According to the CDC, "The rise in e-cigarette use during 2017-2018 is likely because of the recent popularity of e-cigarettes shaped like a USB flash drive, such as JUUL; these products can be used discreetly, have a high nicotine content, and come in flavors that appeal to youths."¹² A study from Truth Initiative found that a quarter of youth and young adult JUUL users don't refer to JUUL use as "e-cigarette use" or "vaping," but rather as "JUULing."¹³ Therefore, it is possible that existing surveys still may not be capturing the full spectrum of youth e-cigarette use.

News articles, letters from school officials, and anecdotal evidence indicate that JUUL has gained popularity among youth and young adults across the country, from middle schools to college campuses. A 2018 study found that nearly one-fifth of youth (ages 12-17) surveyed reported having seen JUUL used in their school.¹⁴ News stories attribute JUUL's sleek and discreet design to its appeal among this population. For example:

"High school and college students are rushing to retailers to buy the product because its discreet design makes it easy to hide from parents and teachers while also giving the user a big hit of nicotine. Some students have bragged on social media of using the JUUL in class, even though e-cigarettes are banned indoors at most schools." – Pittsburgh Post-Gazette¹⁵

"An editor for New York University's student newspaper documented JUUL's rising on-campus popularity, even in dorm rooms. A student newspaper at the University of Illinois called JUUL a 'new epidemic is sweeping across campus.' And in suburban D.C., a high school's principal took doors off its bathroom stalls to keep students from using drugs inside —namely JUUL." – USA Today¹⁶

"One reason JUUL and vape pens are so popular among teens currently might be that they can be used indoors without attracting unwanted attention or creating a stench...On Twitter, teens post about their usage in school. The most brazen of them fire up their e-cigarettes while their teachers' backs are turned." - NPR¹⁷

The availability of flavors may also contribute to JUUL's popularity among youth. Data from the 2016-2017 wave of the FDA's Population Assessment of Tobacco and Health (PATH) study found that 96.1 percent of 12-17 year olds who had initiated e-cigarette use since the last survey wave started with a flavored product. Additionally, it found that 97 percent of current youth e-cigarette users had used a flavored e-cigarette in the past month and 70.3 percent say they use e-cigarettes "because they come in flavors I like."¹⁸ More recent data also found that the vast majority of youth e-cigarette users had used flavored products.¹⁹ In addition, current use of menthol or mint flavored e-cigarettes among high school e-cigarette users increased from 42.3 percent in 2017 to 51.2 percent in 2018.²⁰

Health Concerns and JUUL

The number of youth using e-cigarettes, including JUUL, is alarming and raises serious concerns that e-cigarettes could be an entryway to nicotine addiction and use of regular cigarettes for some kids. Though there is insufficient research on the long-term effects of using e-cigarettes in general, and certainly not specific to JUUL, the use of such products still raises concerns because they contain nicotine. The

† Altria pulled the MarkTen Elite device from the market shortly before announcing its plan to purchase a minority share of JUUL Labs.

company claims that the nicotine in JUUL is from “nicotine salts found in leaf tobacco, rather than free-base nicotine,” which they claim “accommodate cigarette-like strength nicotine levels.”²¹ According to a 2018 Surgeon General advisory on e-cigarette use among youth, nicotine salts allow users to inhale high levels of nicotine more easily and with less irritation than e-cigarettes that use free-base nicotine. As a result, it could be easier for young people to initiate the use of nicotine with these products.²²

While it is still an open scientific question whether e-cigarettes might be able to help adult smokers give up cigarettes, kids should not be using any tobacco product, including e-cigarettes. Nicotine is a highly addictive drug that can have lasting damaging effects on adolescent brain development.²³ Nicotine also impacts the cardiovascular system.²⁴ The Surgeon General concluded that, “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.”²⁵ Educating youth about the dangers of JUUL and nicotine use is critical because a study from Truth Initiative found that 63 percent of 15-24 year old JUUL users did not know the product always contains nicotine (all pods sold from JUUL do contain nicotine).²⁶

The Surgeon General found that while more research is needed, evidence from several longitudinal studies suggests that e-cigarette use is “strongly associated” with the use of other tobacco products among youth and young adults, including conventional cigarettes.²⁷ The National Academy of Sciences, Engineering and Medicine (formerly the Institute of Medicine) also concluded in its 2018 report that, “There is substantial evidence that e-cigarette use increases risk of ever using combustible tobacco cigarettes among youth and young adults.”²⁸

JUUL’s Youth-Friendly Marketing Launch

When JUUL first launched in 2015, the company used colorful, eye-catching designs and youth-oriented imagery and themes, such as young people dancing and using JUUL. JUUL’s original marketing campaign included billboards in New York City’s Times Square, YouTube videos, advertising in *Vice Magazine*, launch parties and a sampling tour. According to the *New York Times*, “Cult Collective, the marketing company that created the 2015 campaign, “Vaporized,” claimed that the work “created ridiculous enthusiasm” for the campaign hashtag, part of a larger advertising effort that included music event sponsorships and retail marketing.”²⁹



JUUL billboard in Times Square, New York City, 2015. <https://www.spencer-pederson.com/work-1/2017/2/23/juul-go-to-market>

Social media continued to fuel JUUL’s popularity, with lasting effects. JUUL was one of the first major e-cigarette brands to rely heavily on social media to market and promote its products. JUUL’s initial marketing expenditures in traditional channels were modest compared to competing brands, and these expenditures decreased as the brand increased content and received more promotion on social media channels like Instagram and Twitter.³⁰ A study in *JAMA Pediatrics* found that 8 out of 10 of JUUL’s Twitter followers in April 2018 were between the ages of 13 to 20.³¹ Additionally, user-generated posts that tag (e.g., #JUULvapor, #doit4JUUL) and feature JUUL do not have any restrictions. These kinds of social media posts can increase exposure to pro-e-cigarette imagery and messaging, by making JUUL use look cool and rebellious.



JUUL officials claim that its popularity among youth is purely accidental and that the product's viral social media presence following its launch was beyond the company's control. Ashley Gould, Chief Administrative Officer of JUUL Labs, said that the explosion of youth users *"was not anticipated and completely unexpected to us."*³² Gould has noted that, *"All of the things you see on social media, we have absolutely nothing to do with."*³³ Contrary to these claims, a *New York Times* investigation interviewed a former senior manager at JUUL who *"said that he and others in the company were well aware the campaign launch might appeal to youth. After Juuls went on sale in June 2015, he said, the company quickly realized that teenagers were, in fact, using them because they posted images of themselves vaping Juuls on social media."*³⁴

In April 2018, the FDA sent an official request for information to JUUL Labs to obtain more information about the youth appeal of the product, including the company's marketing practices.³⁵ JUUL subsequently updated its marketing code³⁶ with the purported goal of limiting youth exposure to its advertising. In June 2018, JUUL announced a new social media policy that would no longer use models on those platforms, but instead would feature former smokers who switched to JUUL.³⁷ FDA later called on JUUL and other major e-cigarette makers to develop "robust plans on how they'll convincingly address the widespread use of their products by minors."³⁸ As part of its response to FDA, in November 2018 JUUL announced the suspension of its official social media accounts on Instagram and Facebook, and limits on its Twitter posts to "non-promotional communications only," as well as age-restricting its Twitter account. In this same announcement, JUUL noted its coordination with the major social media platforms to attempt to "police" content and "remove youth-oriented social media content from third-parties or users."³⁹

Availability and Accessibility of JUUL

JUUL devices and JUULpods are available for sale on JUUL's website and other online retailers as well as in convenience stores, vape shops, and tobacco retailers. To access JUUL's website, users must indicate that they are 21 or older by simply clicking on a button, but JUUL asserts that it uses stricter age verification processes (21+) for online purchases. FDA law prohibits sales of e-cigarettes to those under age 18 and some state and local laws have higher minimum age-of-sale laws.

Youth obtain JUUL products from social sources who may be over age 18, online or in-person from retailers that are incompliant with state or federal law, or from online resellers like ebay[‡] and Craigslist that have no age verification. According to the 2018 Monitoring the Future Survey, more than 60% of 10th grade students say it is easy to get vaping devices and e-liquids.⁴⁰ The 2018 NYTS found that 14.8 percent of middle and high school e-cigarette users under 18 report obtaining e-cigarettes from a vape shop in the past month, 8.4 percent from a gas station or convenience store, and 6.5 percent from the Internet.⁴¹ A 2018 study found that among surveyed youth JUUL users (ages 12-17), half had gotten JUUL from a social source.⁴² In April 2018, the FDA sent warning letters to 40 retailers across the country for illegally selling JUUL products to minors.⁴³



Photo courtesy of CounterTobacco.org:

October 20, 2018, North Port, FL.

https://countertobacco.org/wp-content/gallery/main-gallery/2018_LowJuul_NorthPortFL.jpg

[‡] ebay policy prohibits sale of tobacco products; however, JUUL products have been found for sale on the website under other categories such as electronics, with product listings that neglect to use the terms "tobacco" and/or "nicotine." In April 2018, FDA contacted ebay regarding these violations and ebay has worked to remove JUUL listings and implement measures to prevent new JUUL listings (although some JUUL products are still available on ebay).

JUUL touted that the December 2018 investment by Altria will improve the products' distribution to and presence in retail stores, as well as "expand its reach."⁴⁴

Though the up-front cost of the device is high (a JUUL starter kit, which includes the device, charger and 4 JUULpods of various flavors, is \$49.99 on the JUUL website), advocates have shared stories of kids pooling together money to share a device and sell "hits" from the device to recoup the cost. In addition, JUUL products are sometimes offered for a lower price with promotions at retail locations.

JUUL has also expanded its reach internationally, with sales in Canada, the European Union, Indonesia, South Korea and the Philippines. JUUL launched in Canada in September 2018, and just that same month, a survey found that 7.0% of Canadian teens had already tried JUUL and it had become the third most popular brand among past-month users, with 10.3% reporting it as their usual brand.⁴⁵

Regulatory Action Needed to Curb JUUL Use among Youth

As part of its November 2018 response to FDA, JUUL announced that it planned to take several voluntary actions, including limiting sales of its flavored refill pods (except for mint, menthol, and tobacco) exclusively to its website instead of retail stores; limiting purchases from its website to prevent bulk purchases; enhancing its online age-verification system for purchases; and enforcement against unauthorized online sales, including third-party sales.⁴⁶ FDA has since proposed to restrict sales of all flavored e-cigarettes (except for tobacco, mint, and menthol flavors) to age-restricted retail stores and require more effective age-verification processes for online sales.⁴⁷

Insisting that more needs to be done to reverse the epidemic of youth e-cigarette use, public health groups have called on FDA to go further, including implementing marketing restrictions and stopping the sales of all flavored e-cigarette products that have not been subject to public health review by the FDA as the law requires.⁴⁸

Campaign for Tobacco-Free Kids, September 12, 2019 / Laura Bach

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Vital Signs: Tobacco Product Use Among Middle and High School Students — United States, 2011–2018

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Abstract

Introduction: Tobacco use is the leading cause of preventable disease and death in the United States; nearly all tobacco product use begins during youth and young adulthood.

Methods: CDC, the Food and Drug Administration, and the National Cancer Institute analyzed data from the 2011–2018 National Youth Tobacco Surveys to estimate tobacco product use among U.S. middle and high school students. Prevalence estimates of current (past 30-day) use of seven tobacco products were assessed; differences over time were analyzed using multivariable regression (2011–2018) or t-test (2017–2018).

Results: In 2018, current use of any tobacco product was reported by 27.1% of high school students (4.04 million) and 7.2% of middle school students (840,000); electronic cigarettes (e-cigarettes) were the most commonly used product among high school (20.8%; 3.05 million) and middle school (4.9%; 570,000) students. Use of any tobacco product overall did not change significantly during 2011–2018 among either school level. During 2017–2018, current use of any tobacco product increased 38.3% (from 19.6% to 27.1%) among high school students and 28.6% (from 5.6% to 7.2%) among middle school students; e-cigarette use increased 77.8% (from 11.7% to 20.8%) among high school students and 48.5% (from 3.3% to 4.9%) among middle school students.

Conclusions and Implications for Public Health Practice: A considerable increase in e-cigarette use among U.S. youths, coupled with no change in use of other tobacco products during 2017–2018, has erased recent progress in reducing overall tobacco product use among youths. The sustained implementation of comprehensive tobacco control strategies, in coordination with Food and Drug Administration regulation of tobacco products, can prevent and reduce the use of all forms of tobacco products among U.S. youths.

Introduction

Tobacco use is the leading cause of preventable disease and death in the United States; nearly all tobacco product use begins during youth and young adulthood (1,2). Cigarette smoking among U.S. youths has steadily declined over the past 2 decades (1,2). However, recent changes to the tobacco product landscape (3) and the introduction of new electronic cigarette (e-cigarette) devices have shifted the types of tobacco products used by youths (4). Since 2014, e-cigarettes have been the most commonly used tobacco product among U.S. middle and high school students (5).

Although e-cigarettes have the potential to benefit adult smokers if used as a complete substitute for combustible tobacco smoking (1), the use of any form of tobacco product by youths is unsafe (3). E-cigarettes typically contain nicotine (3,4). The Surgeon General has concluded that exposure to nicotine during adolescence can cause addiction and harm the developing adolescent brain (3). This report provides the most

recent national estimates of tobacco product use among U.S. middle and high school students.

Methods

The National Youth Tobacco Survey (NYTS) is an annual cross-sectional, voluntary, school-based, self-administered, pencil-and-paper survey of U.S. middle school (grades 6–8) and high school (grades 9–12) students.* A three-stage cluster sampling procedure is used to generate a nationally representative sample of U.S. students attending public and private schools in grades 6–12. This report used data from eight NYTS waves (2011–2018); sample sizes (response rates) were 18,866 (72.7%) in 2011; 24,658 (73.6%) in 2012; 18,406 (67.8%) in 2013; 22,007 (73.3%) in 2014; 17,711 (63.4%) in 2015; 20,675 (71.6%) in 2016; 17,872 (68.1%) in 2017; and 20,189 (68.2%) in 2018.

*https://www.cdc.gov/tobacco/data_statistics/surveys/nyts/index.htm.

Participants were asked about use of seven tobacco products: cigarettes, cigars (cigars, little cigars, and cigarillos), smokeless tobacco,[†] e-cigarettes,[§] hookahs,[¶] pipe tobacco,^{**} and bidis.^{††} Current use of each product was defined as use on ≥ 1 day during the past 30 days. Any tobacco product use was defined as current use of one or more of the seven assessed tobacco products. Use of ≥ 2 tobacco product types was defined as current use of two or more of the seven assessed tobacco products. Any combustible tobacco product use was defined as current use of one or more of the following: cigarettes, cigars, hookahs, pipe tobacco, and bidis. Among respective users, frequent tobacco product use, defined as use on ≥ 20 of the past 30 days, was assessed for cigarettes, cigars, smokeless tobacco, e-cigarettes, and hookahs.^{§§}

Data were weighted to account for the complex survey design and adjusted for nonresponse. National prevalence estimates with 95% confidence intervals were computed; population

totals were estimated from extrapolated probability weights. In 2018, current use estimates were determined for any tobacco product overall, ≥ 2 tobacco products, any combustible tobacco product, and individual tobacco products, overall and by selected demographics (sex and race/ethnicity) within each school level (middle and high school). The presence of linear and nonlinear (quadratic) trends during 2011–2018 were assessed, adjusting for sex, race/ethnicity, and grade level.^{¶¶} Differences in current and frequent tobacco product use during 2017–2018 were assessed by t-test. For all analyses, p-values < 0.05 were considered statistically significant.

Results

In 2018, 27.1% of high school students (an estimated 4.04 million) reported current use of any tobacco product, including 13.9% (2.07 million; 51.3% of current tobacco product users) who used any combustible tobacco product and 11.3% (1.68 million; 41.7% of current tobacco product users) who used ≥ 2 tobacco product types (Table). E-cigarettes were the most commonly used tobacco product among high school students (20.8%), followed by cigarettes (8.1%), cigars (7.6%), smokeless tobacco (5.9%), hookahs (4.1%), and pipe tobacco (1.1%). Use of any tobacco product, ≥ 2 tobacco products, e-cigarettes, cigarettes, cigars, smokeless tobacco, and pipe tobacco was higher among males than females ($p < 0.05$). Among high school students, use of any tobacco product was reported by 32.4% of non-Hispanic whites (whites), 21.7% of Hispanics, 18.4% of non-Hispanic students of other races, and 17.4% of non-Hispanic blacks (blacks). E-cigarettes were the most commonly used tobacco product among white (26.8%) and Hispanic (14.8%) high school students; cigars were the most commonly used tobacco product among black high school students (9.2%).

In 2018, 7.2% (an estimated 840,000) of middle school students reported current use of any tobacco product, including 3.3% (380,000; 45.8% of current tobacco product users) who used any combustible tobacco product and 2.4% (270,000; 33.3% of current tobacco product users) who used ≥ 2 tobacco products (Table). Among middle school students, the most commonly used tobacco product was e-cigarettes (4.9%), followed by cigarettes (1.8%), smokeless tobacco (1.8%), cigars (1.6%), hookahs (1.2%), and pipe tobacco (0.3%). Use of smokeless tobacco, any tobacco product, and ≥ 2 tobacco products was higher among males than females ($p < 0.05$). Among middle school students, use of any tobacco product

[†] Beginning in 2015, the definition of smokeless tobacco included chewing tobacco/snuff/dip, snus, and dissolvable tobacco to reflect this class of tobacco products better. Thus, estimates for individual smokeless tobacco products (chewing tobacco/snuff/dip, snus, and dissolvable tobacco) are not reported.

[§] During 2011–2013, e-cigarette use was assessed by the question “In the past 30 days, which of the following products have you used on at least one day?” and the response option, “Electronic cigarettes or e-cigarettes such as Ruyan or NJOY.” In 2014, current use of e-cigarettes was assessed by the question “During the past 30 days, on how many days did you use e-cigarettes such as Blu, 21st Century Smoke, or NJOY?” During 2015–2018, e-cigarette questions were preceded by an introductory paragraph defining the product. In 2015, current use of e-cigarettes was assessed by the question “During the past 30 days, on how many days did you use electronic cigarettes or e-cigarettes?” During 2016–2018, current use of e-cigarettes was assessed by the question “During the past 30 days, on how many days did you use e-cigarettes?”

[¶] During 2011–2015, current hookah smoking was assessed by the question “In the past 30 days, which of the following products have you used on at least one day?” Hookah was the fourth or fifth response option during 2011–2013, the first option in 2014, and the fourth option in 2015. During 2016–2018, hookah questions were preceded by an introductory paragraph defining the product; current hookah smoking was assessed by the question “In the past 30 days, on how many days did you smoke tobacco in a hookah or waterpipe?”

^{**} During 2011–2013, pipe tobacco use was assessed by the question “During the past 30 days, on how many days did you smoke tobacco in a pipe?” During 2014–2018, current use of pipe tobacco was assessed by the question “In the past 30 days, which of the following products have you used on at least one day?” and the response option “Pipes filled with tobacco (not waterpipe).” Pipe tobacco was the second response option available in 2014, the fifth option in 2015, and the second option during 2016–2018.

^{††} In 2018, bidis was assessed by the question, “In the past 30 days, which of the following tobacco products have you used on at least one day?” and the response option, “Bidis (small brown cigarettes wrapped in a leaf).” Beginning in 2018, prevalence estimates are not provided for bidis by school level, sex, or race/ethnicity. However, use of bidis is captured in the composite measures of any tobacco product use, ≥ 2 tobacco products use, and use of combustible tobacco products to maintain consistent definitions over time.

^{§§} Frequency of use data were available during 2011–2018 for cigarettes, cigars, and smokeless tobacco products (chewing tobacco, snuff, dip, only). Frequency of use data were available only for certain years for e-cigarettes (2014–2018), hookahs (2016–2018), and pipe tobacco (2011–2013). Frequency of use data were unavailable for bidis, snus, and dissolvable tobacco products during 2011–2018.

^{¶¶} Trends were assessed using multivariable-adjusted regression analysis. A test for linear trend was significant if an overall statistically significant decrease or increase occurred during the study period. Data also were assessed for the presence of nonlinear (quadratic) trends. A significant nonlinear trend indicated that the rate of change accelerated or decelerated across the study period.

TABLE. Estimated prevalence of tobacco product use in the past 30 days, by product,* school level, sex, and race/ethnicity[†] — National Youth Tobacco Survey, United States, 2018

| School level/ Tobacco product | % (95% CI) | | | | | | Estimated no. of users [§] | % (95% CI) |
|-----------------------------------|------------------|------------------|------------------------|------------------------|------------------|-----------------------------|--|------------------|
| | Sex | | Race/Ethnicity | | | | | |
| | Female | Male | White, non-Hispanic | Black, non-Hispanic | Hispanic | Other race, non-Hispanic | | |
| High school students | | | | | | | | |
| Any tobacco product [¶] | 24.9 (22.9–26.9) | 29.1 (27.1–31.3) | 32.4 (30.4–34.4) | 17.4 (14.5–20.7) | 21.7 (19.4–24.1) | 18.4 (15.0–22.4) | 4,040,000 | 27.1 (25.3–29.0) |
| Any combustible tobacco** | 13.0 (11.3–15.0) | 14.6 (13.3–16.0) | 14.7 (13.0–16.6) | 13.2 (10.8–15.9) | 13.7 (11.8–15.7) | 8.1 (5.8–11.1) | 2,070,000 | 13.9 (12.6–15.4) |
| ≥2 Tobacco products ^{††} | 9.3 (8.0–10.9) | 13.1 (11.7–14.6) | 13.6 (12.1–15.4) | 5.5 (4.0–7.5) | 9.9 (8.4–11.5) | 6.3 (4.1–9.6) | 1,680,000 | 11.3 (10.1–12.6) |
| E-cigarettes | 18.8 (16.7–21.1) | 22.6 (20.6–24.8) | 26.8 (24.7–29.0) | 7.5 (5.5–10.2) | 14.8 (12.9–17.0) | 14.5 (10.8–19.1) | 3,050,000 | 20.8 (18.8–22.9) |
| Cigarettes | 7.3 (6.1–8.7) | 8.8 (7.6–10.2) | 9.9 (8.5–11.6) | 3.2 (2.3–4.6) | 7.2 (5.8–8.8) | 4.4 (2.5–7.6) | 1,180,000 | 8.1 (7.1–9.3) |
| Cigars | 6.0 (4.9–7.4) | 9.0 (8.1–10.0) | 7.8 (6.7–9.1) | 9.2 (6.8–12.4) | 7.3 (5.9–9.1) | 3.4 (2.0–5.7) | 1,100,000 | 7.6 (6.7–8.6) |
| Smokeless tobacco | 3.3 (2.7–4.0) | 8.4 (6.9–10.1) | 7.6 (6.2–9.2) | 2.2 (1.4–3.3) | 4.2 (3.3–5.4) | 3.0 (1.7–5.3) | 870,000 | 5.9 (5.0–7.0) |
| Hookahs | 4.1 (3.2–5.3) | 4.0 (3.4–4.8) | 3.3 (2.6–4.1) | 3.7 (2.7–5.2) | 6.0 (4.7–7.7) | 4.1 (2.8–6.1) | 590,000 | 4.1 (3.5–4.9) |
| Pipe tobacco | 0.8 (0.6–1.2) | 1.4 (1.1–1.8) | 1.1 (0.8–1.6) | — ^{§§} | 1.4 (0.9–2.1) | — | 160,000 | 1.1 (0.9–1.4) |
| Middle school students | | | | | | | | |
| Any tobacco product [¶] | 6.3 (5.4–7.4) | 8.0 (6.9–9.3) | 6.6 (5.5–7.8) | 6.8 (5.2–9.0) | 9.5 (8.0–11.2) | 3.8 (2.1–6.6) | 840,000 | 7.2 (6.3–8.1) |
| Any combustible tobacco** | 2.9 (2.2–3.7) | 3.7 (2.9–4.6) | 2.5 (1.7–3.4) | 4.4 (3.0–6.3) | 4.7 (3.9–5.7) | — | 380,000 | 3.3 (2.7–4.0) |
| ≥2 Tobacco products ^{††} | 1.9 (1.4–2.5) | 2.8 (2.2–3.5) | 2.1 (1.5–3.0) | 1.5 (0.8–2.7) | 3.6 (2.9–4.4) | — | 270,000 | 2.4 (1.9–2.9) |
| E-cigarettes | 4.8 (3.9–5.7) | 5.1 (4.2–6.2) | 4.9 (4.0–5.9) | 3.0 (2.1–4.2) | 6.6 (5.1–8.5) | — | 570,000 | 4.9 (4.2–5.8) |
| Cigarettes | 1.5 (1.1–2.0) | 2.1 (1.6–2.7) | 1.6 (1.1–2.4) | — | 2.4 (1.8–3.1) | — | 200,000 | 1.8 (1.4–2.2) |
| Cigars | 1.6 (1.2–2.1) | 1.7 (1.3–2.3) | 1.1 (0.7–1.6) | 2.9 (1.8–4.5) | 2.2 (1.6–2.9) | — | 190,000 | 1.6 (1.3–2.1) |
| Smokeless tobacco | 0.9 (0.6–1.3) | 2.7 (2.1–3.6) | 1.8 (1.3–2.6) | — | 2.2 (1.7–3.0) | — | 210,000 | 1.8 (1.5–2.3) |
| Hookahs | 1.0 (0.7–1.4) | 1.5 (1.0–2.1) | 0.8 (0.5–1.3) | — | 2.2 (1.6–3.0) | — | 140,000 | 1.2 (0.9–1.6) |
| Pipe tobacco | 0.4 (0.2–0.6) | 0.3 (0.2–0.5) | — | — | 0.6 (0.4–1.0) | — | 30,000 | 0.3 (0.2–0.5) |

Abbreviations: CI = confidence interval; e-cigarettes = electronic cigarettes.

* Past 30-day use of e-cigarettes was determined by asking, "During the past 30 days, on how many days did you use e-cigarettes?" Past 30-day use of cigarettes was determined by asking, "During the past 30 days, on how many days did you smoke cigarettes?" Past 30-day use of cigars was determined by asking, "During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?" Past 30-day use of hookah was determined by asking, "During the past 30 days, on how many days did you smoke tobacco in a hookah or waterpipe?" Smokeless tobacco was defined as use of chewing tobacco, snuff, dip, snus, and/or dissolvable tobacco products. Past 30-day use of smokeless tobacco was determined by asking the following question for use of chewing tobacco, snuff, and dip: "During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?" and the following question for use of snus and dissolvable tobacco products: "In the past 30 days, which of the following products did you use on at least one day?" Responses from these questions were combined to derive overall smokeless tobacco use. Past 30-day use of pipe tobacco (not hookahs) was determined by asking, "In the past 30 days, which of the following products have you used on at least one day?"

[†] Blacks, whites, and others are non-Hispanic; Hispanic persons could be of any race.

[§] Estimated total number of users was rounded down to the nearest 10,000 persons.

[¶] Any tobacco product use was defined as use of any tobacco product (e-cigarettes, cigarettes, cigars, smokeless tobacco, hookahs, pipe tobacco, and/or bidis) on ≥1 day in the past 30 days.

** Any combustible tobacco product use was defined as use of cigarettes, cigars, hookahs, pipe tobacco, and/or bidis on ≥1 day in the past 30 days.

^{††} ≥2 tobacco products use was defined as use of ≥2 tobacco products (e-cigarettes, cigarettes, cigars, smokeless tobacco, hookahs, pipe tobacco, and/or bidis) on ≥1 day in the past 30 days.

^{§§} Dashes indicate that data are statistically unreliable because samples size was <50 or relative standard error was >0.3.

was reported by 9.5% of Hispanics, 6.8% of blacks, 6.6% of whites, and 3.8% of non-Hispanic students of other races. E-cigarettes were the most commonly used tobacco product among Hispanic (6.6%), white (4.9%), and black (3.0%) middle school students.

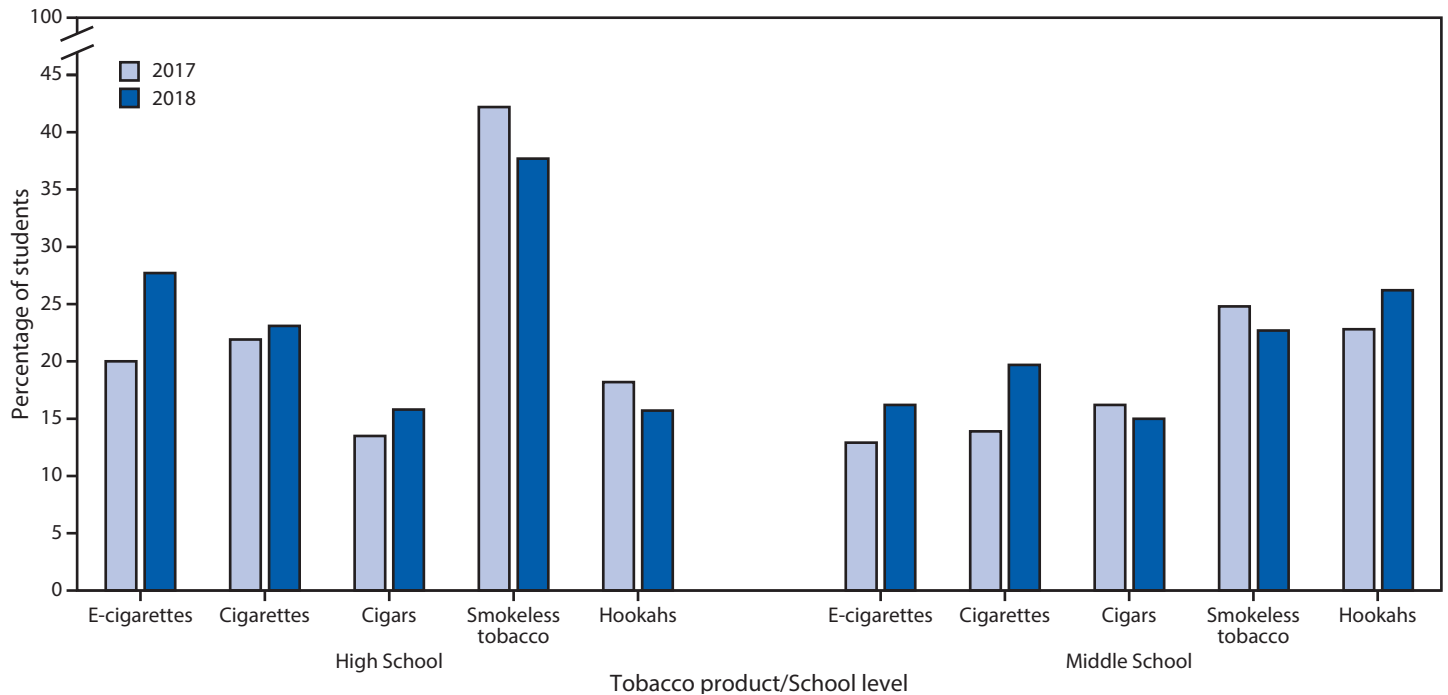
In 2018, frequent use among current product users in high school was 37.7% for smokeless tobacco, 27.7% for e-cigarettes, 23.1% for cigarettes, 15.8% for cigars, and 15.7% for hookahs (Figure 1). During 2017–2018, frequent e-cigarette use increased significantly by 38.5% among current e-cigarette users (from 20.0% to 27.7%); no significant change in frequent use was observed for other tobacco products. Among middle school students, frequent use among current product users was 26.2% for hookahs, 22.7% for smokeless tobacco, 19.7% for cigarettes, 16.2% for e-cigarettes, and

15.0% for cigars in 2018; no significant change in frequent use was observed for any product during 2017–2018.

Among current users of any tobacco product in 2018, exclusive use of e-cigarettes was reported by 42.0% of high school students and 42.7% of middle school students. However, among high school students who reported currently using ≥2 tobacco products, the most common combinations reported were "e-cigarettes + cigarettes" (14.8%); "e-cigarettes + cigars" (13.3%); and "e-cigarettes + smokeless tobacco" (9.0%). Among middle school students who reported currently using ≥2 tobacco products, the most common combinations reported were "e-cigarettes + cigarettes" (14.4%); "e-cigarettes + cigars" (9.1%); and "cigarettes + e-cigarettes + cigars + smokeless tobacco + hookah" (8.8%).

Among high school students, during 2011–2018, no significant trend in the reported use of any tobacco product overall

FIGURE 1. Frequent use* of selected tobacco products† among U.S. middle and high school students who currently used each tobacco product‡ — National Youth Tobacco Survey, 2017–2018¶



Abbreviation: e-cigarettes = electronic cigarettes.

* Frequent tobacco product use defined as use of each respective tobacco product on ≥ 20 of the past 30 days.

† Frequency of use during the past 30 days was not available for pipe tobacco in the 2017 or 2018 surveys.

‡ Among youths who currently report using each respective tobacco product, defined as a response other than "0 days" to each of the following questions: *E-cigarettes*: "During the past 30 days, on how many days did you use e-cigarettes?"; *Cigarettes*: "During the past 30 days, on how many days did you smoke cigarettes?"; *Cigars*: "During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?"; *Smokeless tobacco*: "During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?"; *Hookahs*: "During the past 30 days, on how many days did you smoke tobacco in a hookah or waterpipe?" For all questions, answer choices included, "0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 to 29 days, and All 30 days."

¶ During 2017–2018, a significant increase in frequent use of e-cigarettes was observed only among high school students ($p < 0.05$). No significant changes were observed for any other tobacco product during 2017–2018 among middle or high school students.

was observed (Figure 2). However, changes were observed for individual tobacco products over this period. A significant nonlinear increase in current e-cigarette use occurred from 2011 (1.5%) to 2018 (20.8%). During 2011–2018, significant linear declines in combustible tobacco product use (from 21.8% to 13.9%) and ≥ 2 tobacco product use (from 12.0% to 11.3%) occurred; by product type, significant linear declines occurred for cigars (from 11.6% to 7.6%), smokeless tobacco (from 7.9% to 5.9%), and pipe tobacco (from 4.0% to 1.1%). A significant nonlinear decline was observed for cigarettes (from 15.8% to 8.1%). A significant nonlinear change during 2011–2018 was observed for hookahs (from 4.1% to 4.1%).

Among middle school students, no significant change in use of any tobacco product overall occurred during 2011–2018 (Figure 3). However, changes for individual tobacco products were observed. A significant nonlinear increase in e-cigarette use occurred (from 0.6% to 4.9%) during 2011–2018. A significant linear decline was observed for combustible tobacco product use (from 6.4% to 3.3%), ≥ 2 tobacco products use (from 3.8% to 2.4%), cigarettes (from 4.3% to 1.8%), cigars

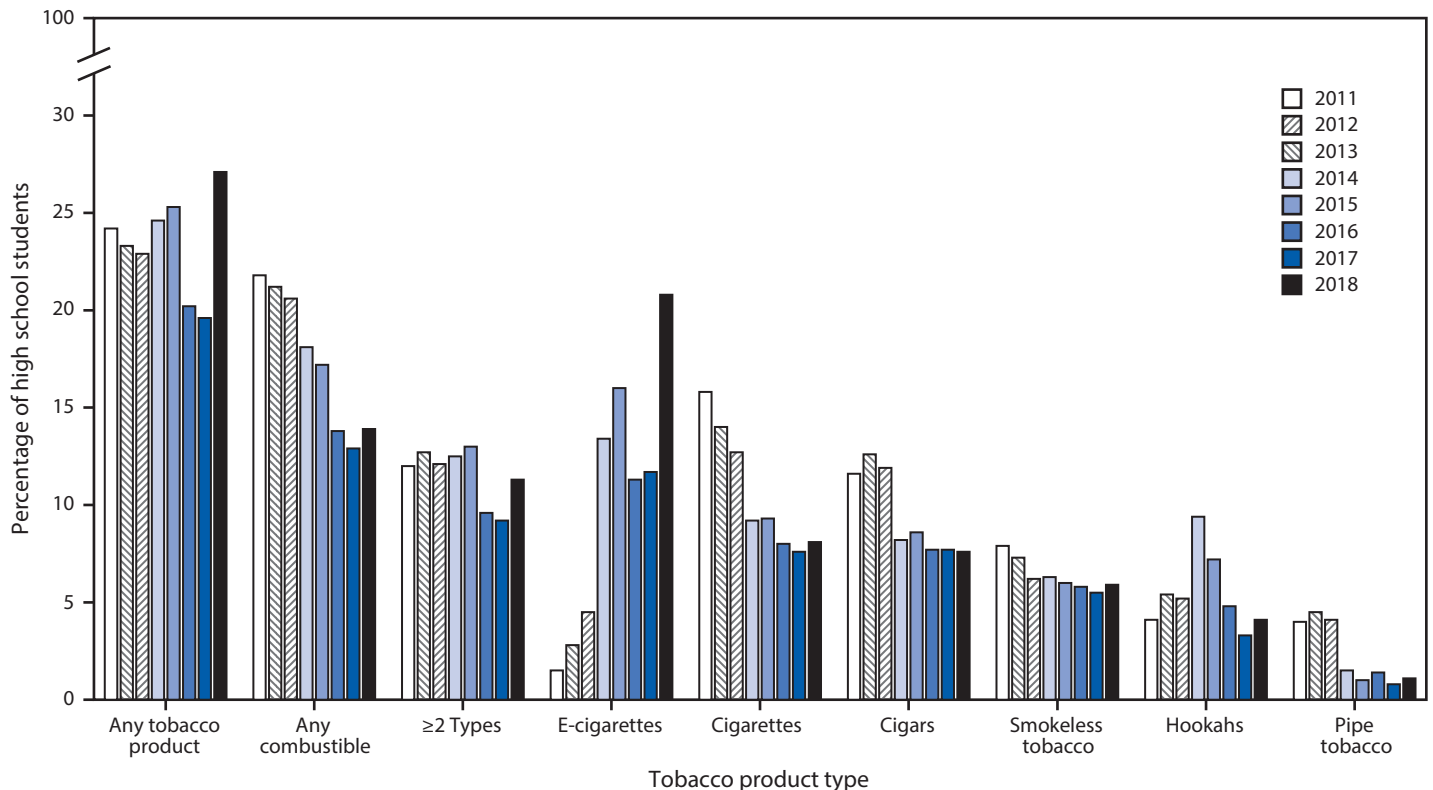
(from 3.5% to 1.6%), smokeless tobacco (from 2.7% to 1.8%), and pipe tobacco (from 2.2% to 0.3%); a significant nonlinear change occurred for hookah smoking (from 1.0% to 1.2%).

During 2017–2018, use of any tobacco product increased significantly by 38.3% (from 19.6% to 27.1%) among high school students (Figure 2) and by 28.6% (from 5.6% to 7.2%) among middle school students (Figure 3). Current use of ≥ 2 tobacco products increased significantly by 22.8% (from 9.2% to 11.3%) among high school students. Current e-cigarette use increased significantly by 77.8% (from 11.7% to 20.8%) among high school students and by 48.5% (from 3.3% to 4.9%) among middle school students during 2017–2018; no significant changes in use of other tobacco products was observed during this period, irrespective of grade level.

Conclusions and Comment

In 2018, approximately one in four U.S. high school students and one in 14 middle school students reported current use of any tobacco product. Among both high school and middle school students, current use of e-cigarettes increased

FIGURE 2. Estimated percentage of high school students who currently use any tobacco product,* any combustible tobacco product,[†] ≥ 2 tobacco product types,[§] and selected tobacco products — National Youth Tobacco Survey, 2011–2018^{¶,,††}**



Abbreviation: e-cigarettes = electronic cigarettes.

* Any tobacco product use was defined as use of e-cigarettes, cigarettes, cigars, hookahs, smokeless tobacco, pipe tobacco and/or bidis (small brown cigarettes wrapped in a leaf) on ≥ 1 day in the past 30 days.

[†] Any combustible tobacco product use was defined as use of cigarettes, cigars, hookahs, pipe tobacco, and/or bidis on ≥ 1 day in the past 30 days.

[§] Use of ≥ 2 tobacco product types was defined as use of ≥ 2 of the following tobacco products: e-cigarettes, cigarettes, cigars, hookahs, smokeless tobacco, pipe tobacco, and/or bidis on ≥ 1 day in the past 30 days.

[¶] During 2017–2018, current use of any tobacco product, ≥ 2 types of tobacco products, and e-cigarettes significantly increased ($p < 0.05$).

^{**} During 2011–2018, current use of combustible tobacco products, ≥ 2 types of tobacco products, cigars, smokeless tobacco, and pipe tobacco exhibited linear decreases ($p < 0.05$). Current use of cigarettes exhibited a nonlinear decrease ($p < 0.05$). Current use of hookahs exhibited a nonlinear change ($p < 0.05$). Current use of e-cigarettes exhibited a nonlinear increase ($p < 0.05$). No significant trend in use of any tobacco product overall was observed.

^{††} Beginning in 2015, the definition of smokeless tobacco included chewing tobacco/snuff/dip, snus, and dissolvable tobacco to better reflect this class of tobacco products. Thus, estimates for individual smokeless tobacco products (chewing tobacco/snuff/dip, snus, and dissolvable tobacco) are not reported. This definition was applied across all years (2011–2018) for comparability purposes.

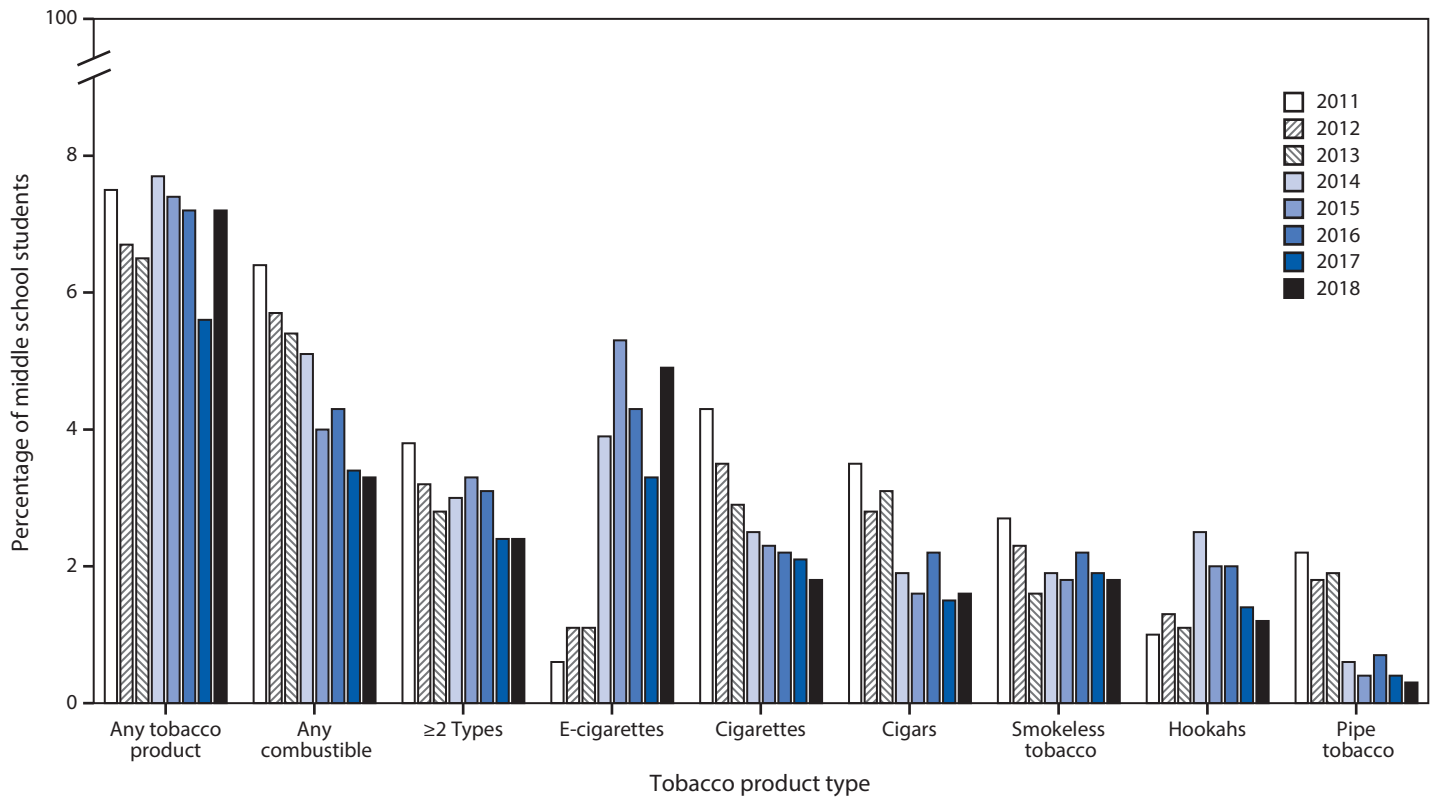
considerably between 2017 and 2018, reaching epidemic proportions, according to the U.S. Surgeon General (4); approximately 1.5 million more youths currently used e-cigarettes in 2018 (3.6 million) compared with 2017 (2.1 million) (5). However, no significant change in current use of combustible tobacco products, such as cigarettes and cigars, was observed in recent years (5) or during 2017–2018. This indicates that e-cigarettes were the driver of the observed increase in any tobacco product use. The recent changes in patterns of use of e-cigarettes and other tobacco products during 2017–2018 erased the decline in any tobacco product use that occurred in previous years (5).

E-cigarettes have been the most commonly used tobacco product among U.S. youths since 2014 (5). Before 2018, the

prevalence of e-cigarette use by U.S. high school students had peaked in 2015 before declining by 29% during 2015–2016 (from 16% to 11.3%) (6); this decline was the first ever recorded for e-cigarette use among youths in the NYTS since monitoring began, and it was subsequently sustained during 2016–2017 (5). However, current e-cigarette use increased by 77.8% among high school students and 48.5% among middle school students during 2017–2018, erasing the progress in reducing e-cigarette use, as well as any tobacco product use, that had occurred in prior years (7).

This recent increase in e-cigarette use among youths is consistent with observed increases in sales of the e-cigarette JUUL (8), a USB-shaped e-cigarette device with a high nicotine content that can be used discreetly and is available in flavors that can appeal

FIGURE 3. Estimated percentage of middle school students who currently use any tobacco product,* any combustible tobacco product,[†] ≥2 tobacco product types,[§] and selected tobacco products — National Youth Tobacco Survey, 2011–2018^{¶,,††}**



Abbreviation: e-cigarettes = electronic cigarettes.

* Any tobacco product use was defined as use of e-cigarettes, cigarettes, cigars, hookahs, smokeless tobacco, pipe tobacco and/or bidis (small brown cigarettes wrapped in a leaf) on ≥1 day in the past 30 days.

[†] Any combustible tobacco product use was defined as use of cigarettes, cigars, hookahs, pipe tobacco, and/or bidis on ≥1 day in the past 30 days.

[§] Use of ≥2 tobacco product types was defined as use of ≥2 of the following tobacco products: e-cigarettes, cigarettes, cigars, hookahs, smokeless tobacco, pipe tobacco, and/or bidis on ≥1 day in the past 30 days.

[¶] During 2017–2018, current use of any tobacco product and e-cigarettes significantly increased ($p < 0.05$).

^{**} During 2011–2018, current use of combustible tobacco products, ≥2 tobacco products, cigarettes, cigars, smokeless tobacco, and pipe tobacco exhibited significant linear decreases ($p < 0.05$). Use of e-cigarettes exhibited a significant nonlinear increase ($p < 0.05$), and use of hookahs exhibited a nonlinear change ($p < 0.05$). No significant trend in use of any tobacco product overall was observed.

^{††} Beginning in 2015, the definition of smokeless tobacco included chewing tobacco/snuff/dip, snus, and dissolvable tobacco to better reflect this class of tobacco products. Thus, estimates for individual smokeless tobacco products (chewing tobacco/snuff/dip, snus, and dissolvable tobacco) are not reported. This definition was applied across all years (2011–2018) for comparability purposes.

to youths. A single prefilled liquid nicotine JUUL pod contains as much nicotine as a pack of cigarettes (9). Media reports and a survey indicate that JUUL devices are being used among youths in schools, including inside bathrooms and classrooms.^{***} JUUL entered the U.S. market in 2015 and subsequently became a commonly used tobacco product among U.S. youths (10). Sales of JUUL increased by approximately 600% during 2016–2017 (8) and increased even further through 2018 (10). By December 2017, JUUL held the largest market share of any e-cigarette (8). Thus, given that NYTS is fielded annually in the spring, the 2018 data are the first to reflect the impact of rising

sales of JUUL and other USB-shaped devices on e-cigarette and overall tobacco product use among U.S. youths.

Any form of tobacco product use among youths, irrespective of frequency, is unsafe (1–4). During 2017–2018, frequent e-cigarette use increased significantly by 38.5% among high school student users. Thus, in addition to more youths using e-cigarettes overall, current e-cigarette users also are using them more frequently.

Furthermore, among current tobacco product users, approximately 40% of high school students and one third of middle school students reported currently using more than one tobacco product; the prevalence of using two or more tobacco products

^{***} <https://www.cdc.gov/tobacco/infographics/youth/pdfs/e-cigarettes-usb-flash-508.pdf>; <https://truthinitiative.org/news/nearly-1-5-youth-say-they-have-seen-juul-used-school>.

increased significantly by 22.8% among high school students during 2017–2018. E-cigarettes were the most commonly reported product used in combination with other products among both middle and high school students in 2018. Most e-cigarettes contain nicotine (11), which is highly addictive and can harm the developing adolescent brain (3). Among youths, symptoms of nicotine dependence are increased in multiple tobacco product users than in single product users (12). In addition, some evidence suggests that e-cigarette use increases the risk for ever using cigarettes among youths, and that e-cigarette use might increase the frequency and intensity of subsequent cigarette smoking (13).

Differences in individual tobacco product use were also observed across population groups. In 2018, e-cigarettes were the most commonly used product among all racial/ethnic groups except black high school students, among whom cigars were the most commonly reported product. Targeted advertising of cigars in locations with a greater proportion of black residents, a relatively lower price, and the availability of cigars for purchase as a single unit might contribute to higher cigar smoking among blacks (14).

The findings in this report are subject to at least three limitations. First, changes in the wording and placement of survey questions for certain tobacco products during 2011–2018 might limit comparability of estimates between years. Second, data were self-reported and might be subject to recall and response bias. Finally, findings might not be generalizable to all youths, including those who are home-schooled, have dropped out of school, or are enrolled in alternative schools. However, in 2016, nearly 97% of students aged 10–17 years were enrolled in school.^{†††}

Several factors continue to promote and influence tobacco product use among youths, including exposure to tobacco product advertising and imagery through various media, as well as the availability of flavored tobacco products (2,3,15,16). The sustained and comprehensive implementation of population-based strategies, in coordination with the regulation of tobacco products by the Food and Drug Administration (17), and continued research investments and cessation-related initiatives, including Smokefree Teen by the National Institutes of Health's National Cancer Institute^{§§§} can reduce all forms of

Summary

What is already known about this topic?

Tobacco use is the leading cause of preventable disease and death in the United States; nearly all tobacco product use begins during youth and young adulthood.

What is added by this report?

In 2018, 4.04 million high school students and 840,000 middle school students currently used any tobacco product; e-cigarettes were the most commonly used product. Driven by an increase in e-cigarette use, current tobacco product use significantly increased among high school and middle school students during 2017–2018, erasing the decline in tobacco product use among youths that occurred in previous years.

What are the implications for public health practice?

Sustained implementation of proven population-based strategies, in coordination with Food and Drug Administration regulation of tobacco products, is important for reducing tobacco product use and initiation among U.S. youths.

tobacco product use and initiation among U.S. youths (1–3). As a direct result of the considerable increase in e-cigarette use among youths during 2017–2018 (7), in November 2018, the Food and Drug Administration announced several proposed new steps to protect youths, including restricting sales of flavored e-cigarettes (other than tobacco, menthol, mint, or nonflavored) to physical locations with age restrictions or online with heightened age verification procedures, and plans to advance notices of proposed rulemaking that would ban menthol cigarettes and cigars and all other flavored cigars (18). Additional strategies to reduce tobacco product use among youths include increasing the price of tobacco products, implementing comprehensive smoke-free policies, implementing advertising and promotion restrictions and national antitobacco public education media campaigns, and implementing and enforcing policies that raise the minimum age of purchase for tobacco products to 21 years (1,3,19,20).

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^{†††} <https://www.census.gov/data/tables/2016/demo/school-enrollment/2016-cps.html>.

^{§§§} The National Cancer Institute created Smokefree.gov to help smokers quit smoking. Smokefree.gov is a part of an effort by the U.S. Department of Health and Human Services to reduce smoking rates in the United States, particularly among certain populations. Smokefree Teen (<https://teen.smokefree.gov/>) is part of the Smokefree.gov initiative, with the goal to reduce the number of youths who use tobacco.

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MERIDEN VAPING PREVENTION RESOURCES

Meriden Department of Health and Human Services

The Meriden Department of Health and Human Service's mission is to protect health, prevent disease, and promote the health of all persons in Meriden. Vaping presentations are available for youth and parent groups in Meriden.

Website: www.meridenhealth.com



City of Meriden Health & Human
Services Department



203-630-4239

Meriden Healthy Youth Coalition

The Meriden Healthy Youth Coalition (MYHC) is a community coalition created to work collaboratively to reduce and prevent alcohol, other substance use and their related problems through raising awareness while promoting healthy lifestyles. The MYHC serves the youth of Meriden CT.

Website: www.meridenhealthyyouthcoalition.com



Meriden Healthy Youth Coalition



203-238-6800

