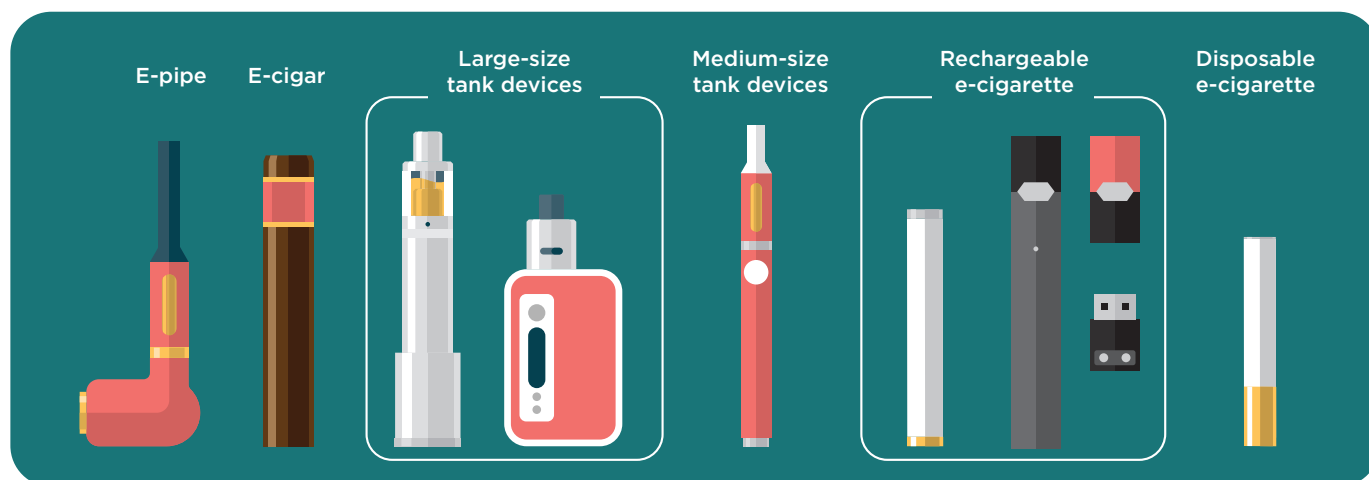


# ELECTRONIC CIGARETTES WHAT'S THE BOTTOM LINE?

- » 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.



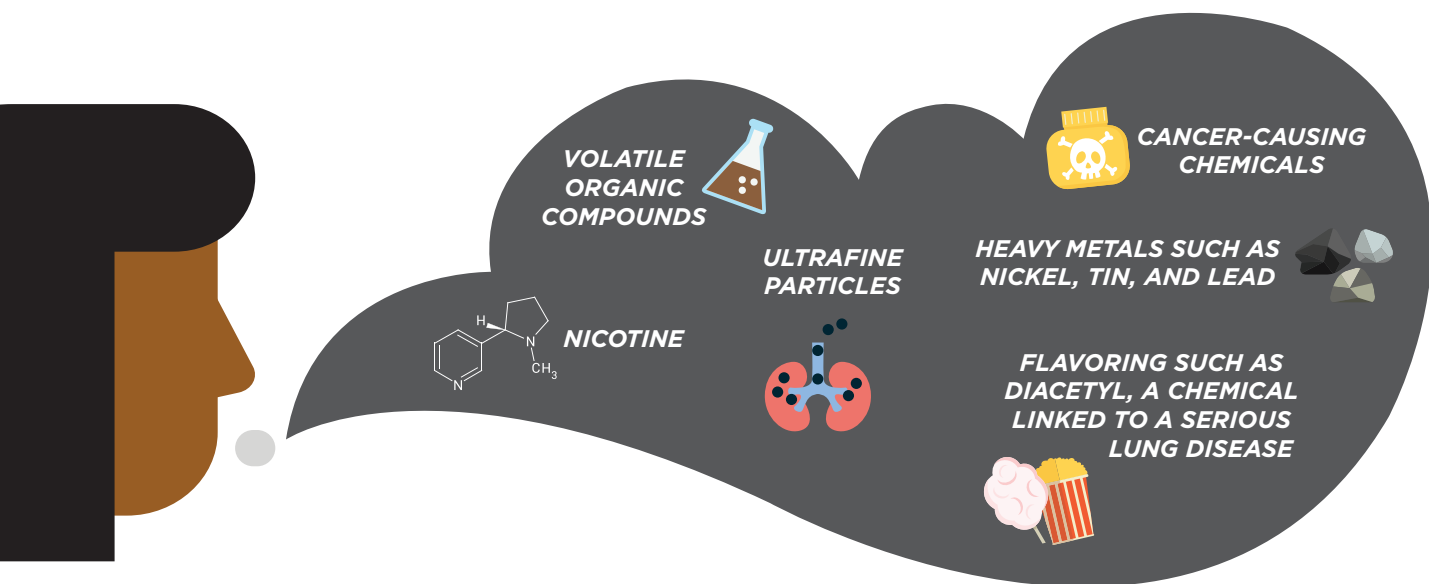
CS284159-B



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

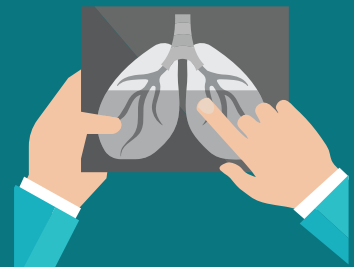
## 1 Most e-cigarettes contain nicotine, which has known health effects

- » 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.



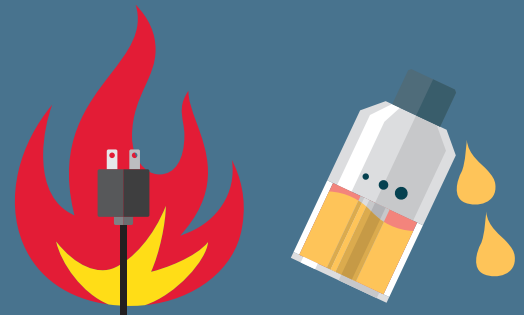
## 2 Besides nicotine, e-cigarette aerosol can contain substances that harm the body.

- » 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.

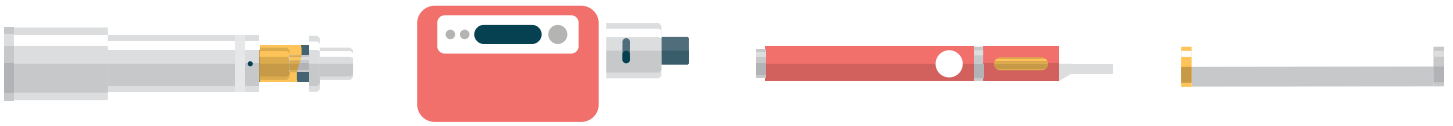


## 3 E-cigarettes can cause unintended injuries.

- » 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.

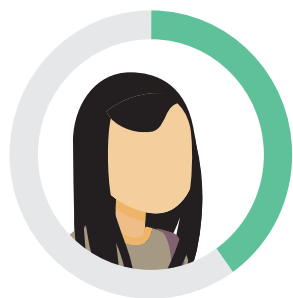
IN THE U.S.,  
YOUTH ARE  
MORE LIKELY  
THAN ADULTS  
TO USE  
E-CIGARETTE



**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

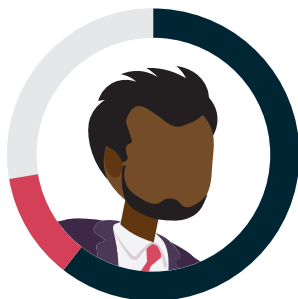
IN 2015, AMONG ADULT E-CIGARETTE  
USERS OVERALL:

**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



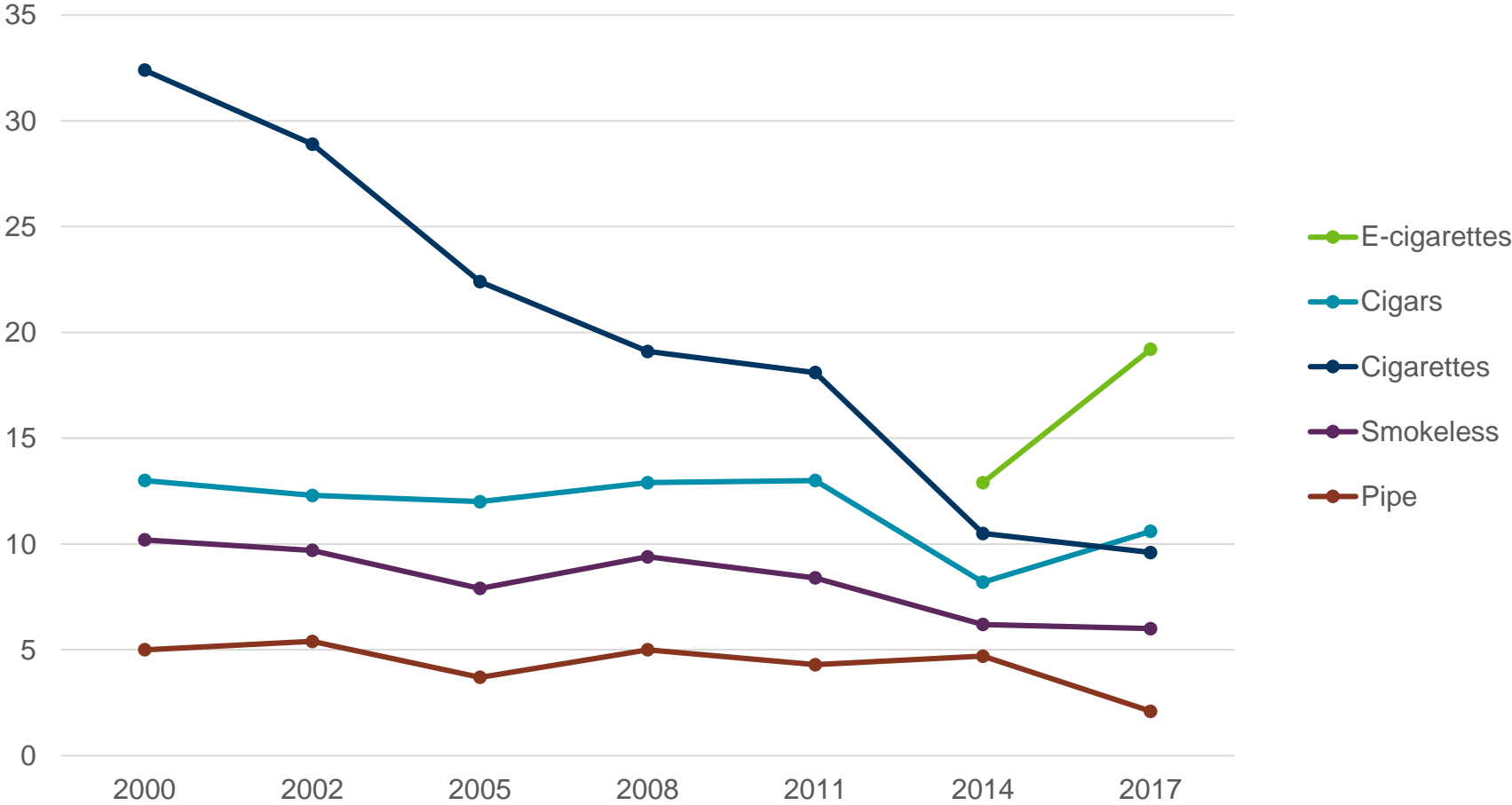
# YOUTH E-CIGARETTE USE

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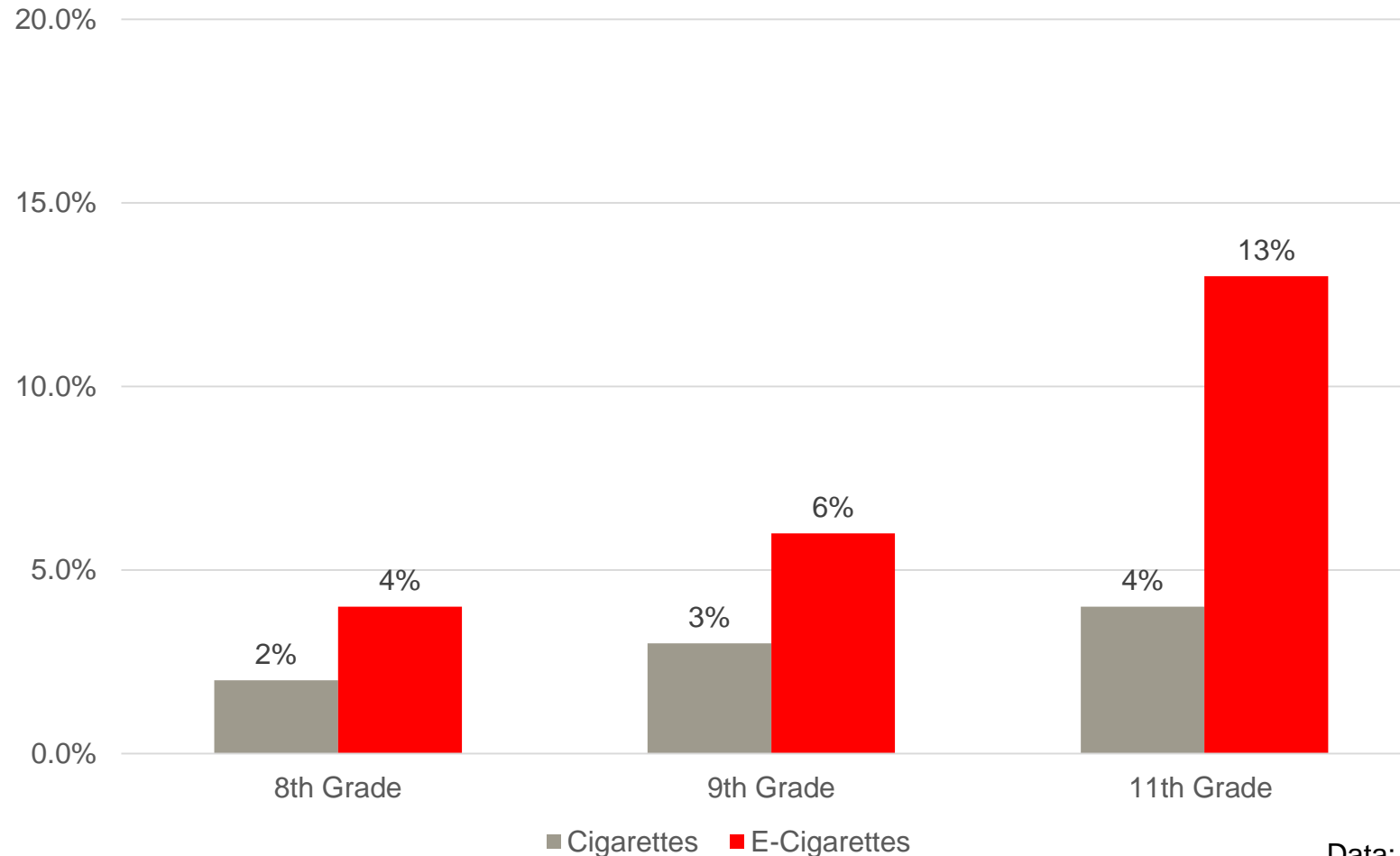


Pa Houa Moua & Anna Oldenburg  
Olmsted County Public Health

# Percent of MN High School Students who used Tobacco Products in the Past 30 Days



# Percent of Olmsted County Students who used Tobacco Products Past 30 Days - 2016



**Public Health**  
Prevent. Promote. Protect.

Data: 2016 MN Student Survey



# E-cigarettes or vapes come in all shapes and sizes



# Flavors Hook Kids



E-liquid



Food product



E-liquid



Food product



E-liquid



Food product



E-liquid



Food product





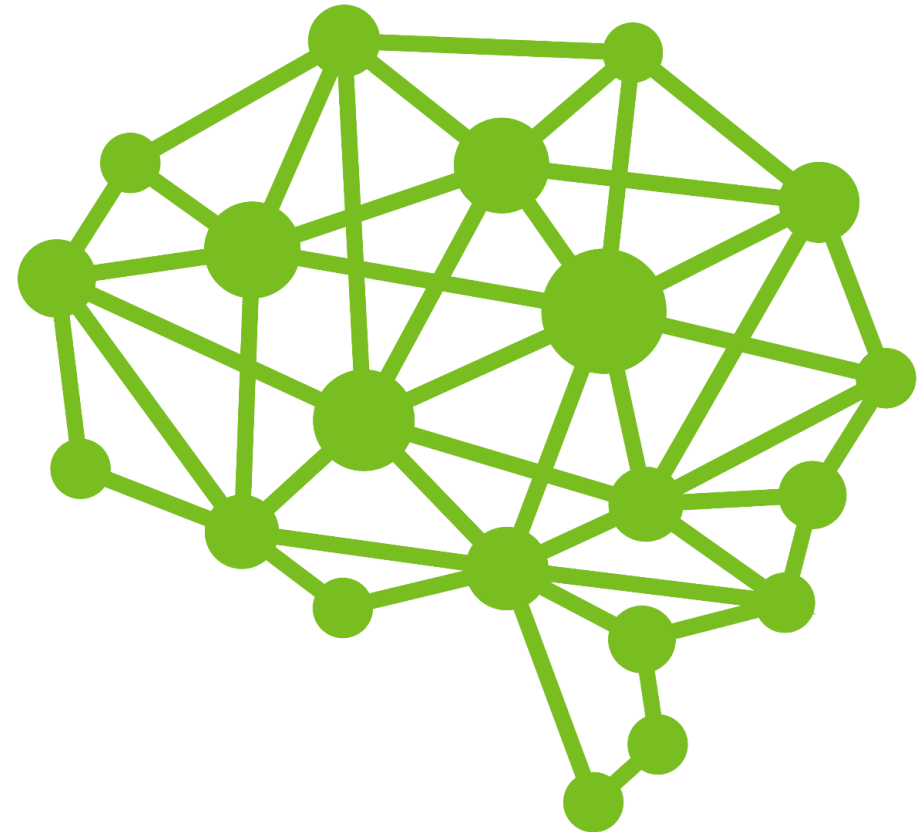
Nicotine in **1 JUUL Pod** = Nicotine in one  
pack of cigarettes



**Public Health**  
Prevent. Promote. Protect.

# Nicotine Primes Youth Brain for **Addiction**

Youth who use e-cigarettes  
are **4x** more likely to  
smoke conventional  
cigarettes



[Vector illustration credit: Vecteezy](#)



**Public Health**  
Prevent. Promote. Protect.

**One-third of high school e-cigarette users report having used their vaping device for recreational marijuana.**



# What Can We Do?

- **Understand** the risks of youth e-cigarette use
- Know how to **identify** e-cigarette products and devices
- **Educate** your kids and others about the risks of youth e-cigarette use
- **Support** local policy changes restricting youth access to tobacco products



**Public Health**  
Prevent. Promote. Protect.

## Tobacco Cessation Resources for Youth



### QUITPLAN SERVICES

Free quitting services available to all Minnesotans. QUITPLAN Services offers a variety of options to help people quit:

- QUITPLAN Helpline (telephone counseling) – All ages
- Printed Quit Guide – All ages
- Email program – Age 13 or older
- Use of quitplan.com – Intended for those aged 14 and above
- Text program – Age 18 or older
- Nicotine replacement therapy – Age 18 or older

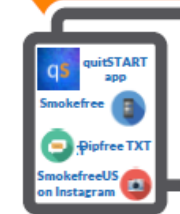
To register online at [www.quitplan.com](http://www.quitplan.com), users must be at least 13 years old. Anyone can call 888-354-PLAN (7526) to register at any time.



### TEEN.SMOKEFREE.GOV

Smokefree Teen helps teens stop using tobacco by providing information grounded in scientific evidence and offering free tools that meet teens where they are - on their mobile phones.

- Text messaging program
- quitSTART mobile app
- LiveHelp online chat



### HEALTH PLANS

- Call the number on the back of your insurance card to see what is available
- Each health plan will have their own options, youth and parents should check with their health plan



### EX PROGRAM BECOMEANEX.ORG

- Quit vaping text program
- Text QUIT to 202-804-9884
- Teens 13-18 who vape receive text message-only support



**AMERICAN  
LUNG  
ASSOCIATION.**

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

**[health.mn.gov/ecigarettes](https://health.mn.gov/ecigarettes)**



**Olmsted County Public  
Health**



**Public Health**  
Prevent. Promote. Protect.