



# RISING USE OF E-CIGARETTES IN U.S. AND KANSAS SPARKS CONCERN

## Federal, State and Local Regulatory Actions

### Introduction

On September 12, 2018, the U.S. Food and Drug Administration (FDA) announced enforcement actions taken against 1,300 electronic cigarette (e-cigarette) retailers across the country related to the illegal sale of JUUL and other e-cigarette products to minors. In a press release, FDA Commissioner Scott Gottlieb, M.D., said the use of e-cigarettes by teenagers had reached epidemic proportions.

This issue brief, the first of a two-part series, highlights the increased use of e-cigarettes among teens and adults as well as regulatory action at the federal, state and local levels. The second brief [bit.ly/ECigHealth](http://bit.ly/ECigHealth) examines the latest research concerning the health effects of e-cigarettes.

Gottlieb's assessment came as no surprise to those monitoring this public health issue. In February 2016, the Kansas Health Institute (KHI) published a series of three issue briefs discussing the use, [bit.ly/ECigarettes01](http://bit.ly/ECigarettes01), public health issues, [bit.ly/ECigarettes02](http://bit.ly/ECigarettes02), and regulation, [bit.ly/ECigarettes03](http://bit.ly/ECigarettes03), of e-cigarettes. At that time, e-cigarette use, especially by teens, was rising nationally and public health experts were debating whether e-cigarettes are a "safe" alternative



### Youth E-Cigarette Use

*For this issue brief, e-cigarettes include electronic vapor products, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs and hookah pens. These products are battery-powered and usually contain nicotine and flavors such as fruit, mint or menthol.*

to traditional tobacco products or are "unsafe" because they are introducing a new generation of teens and young adults to nicotine addiction.

Three years later, data show the use of e-cigarettes among adolescents has grown significantly and dual-use – smoking conventional cigarettes and using e-cigarettes – among young adults also is prevalent.

### KEY POINTS

- ✓ The National Youth Tobacco Survey found one in five (20.8 percent) U.S. high school students in 2018 had used e-cigarettes in the last 30 days – up from 11.7 percent in 2017 and 1.5 percent in 2011.
- ✓ An estimated 4.6 percent of Kansas adults currently use e-cigarettes, and of those, two in five (40.7 percent) users are vaping daily.
- ✓ Half (50.3 percent) of Kansas adults who currently use e-cigarettes also currently smoke conventional cigarettes – known as "dual use."
- ✓ Among Kansas adults who currently use e-cigarettes, three in 10 (29.3 percent) are age 18-24.
- ✓ With youth e-cigarette usage at "epidemic" levels, manufacturers and retailers are being monitored closely by federal, state and local regulators.

# E-Cigarette Use

## Youth

Smoking initiation among youth remains a concern. A 2018 report, [bit.ly/NASEMReport](http://bit.ly/NASEMReport), by the National Academies of Sciences, Engineering, and Medicine (NASEM) found substantial evidence that electronic cigarette use (vaping) by youth is strongly associated with an increased risk of ever using conventional cigarettes (smoking) and is moderately associated with progressing to more regular smoking of conventional cigarettes. Three different national studies have reported similar trends among middle and/or high school students who are current users, meaning they have used e-cigarettes at least once in the last 30 days.

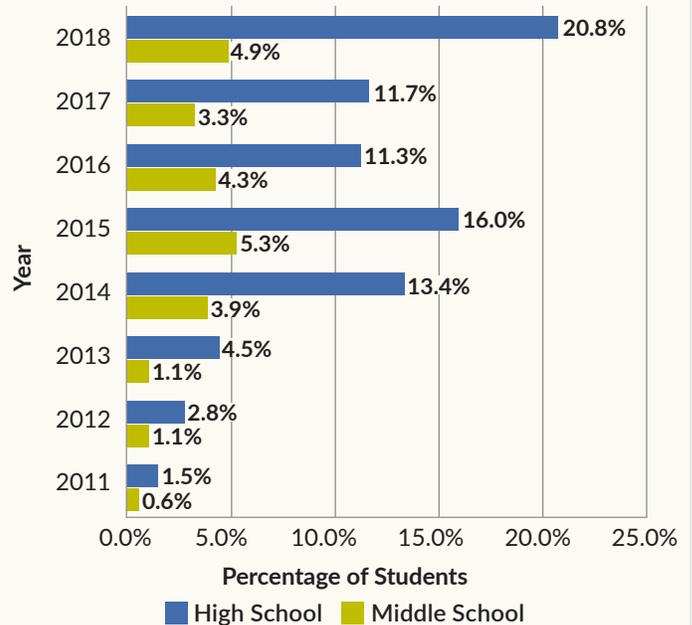
### The National Youth Tobacco Survey

This survey conducted collaboratively by the Centers for Disease Control and Prevention (CDC), Office on Smoking and Health and FDA Center for Tobacco Products – began collecting data on e-cigarette use among a representative sample of middle and high school students in 2011 and found that 1.5 percent (220,000 U.S. high school students) had used e-cigarettes at least once in the past 30 days (i.e., current use). E-cigarette use increased dramatically to 16.0 percent of high school students currently using e-cigarettes in 2015. Then, in 2016 and 2017, e-cigarette use prevalence rates dropped to 11.3 percent and 11.7 percent, respectively. The federal agencies, along with the U.S. Surgeon General, attributed the reduction to tobacco prevention and control strategies, such as educational campaigns, youth access restrictions, and updated smoke-free policies that included e-cigarettes. Nevertheless, the following year, the prevalence rate increased dramatically by 77.8 percent (from 11.7 percent in 2017 to 20.8 percent or 3.05 million students in 2018), which the FDA attributes to targeted marketing of flavored products by e-cigarette manufacturers (Figure 1).

### The Monitoring the Future Survey

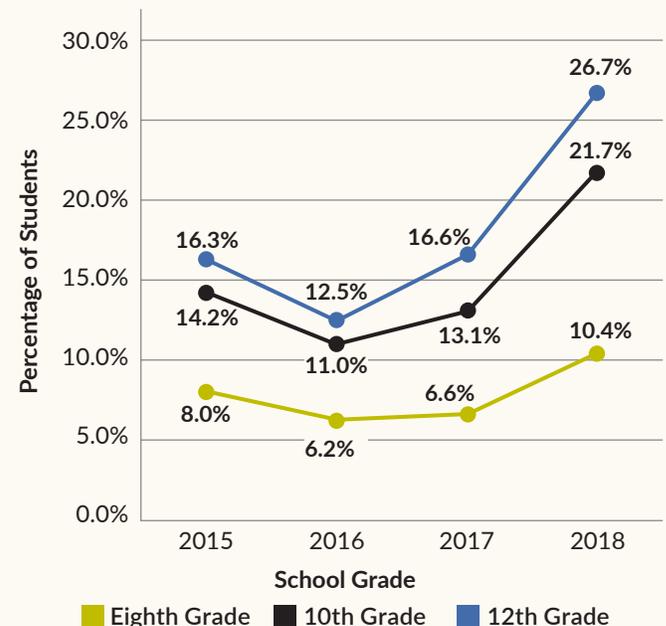
This survey, funded by the National Institute on Drug Abuse, has been collecting annual data since 2015 on vaping among eighth-, 10th- and 12th-graders. In this survey, the questions on vaping asked about any vaping in general, which can include nicotine, marijuana or just flavoring. The survey reported a substantial decline in vaping from 2015 to 2016 among all grades. However, this downward trend did not last. Again from 2017 to

Figure 1. Percentage of High School and Middle School Students in the U.S. Who Currently Use E-Cigarettes (in the Past 30 Days), 2011-2018



Source: KHI analysis of data from the 2011-2018 National Youth Tobacco Survey.

Figure 2. Percentage of Eighth-, 10th- and 12th-Grade Students in the U.S. Who Currently Vape (in the past 30 Days), 2015-2018



Note: In this survey, the questions on vaping asked about any vaping in general, which can include nicotine, marijuana or just flavoring.

Source: KHI analysis of data from the 2015-2018 Monitoring the Future Survey.

2018, U.S. vaping in the past 30 days among middle school and high school students rose dramatically – from 16.6 percent to 26.7 percent among 12th-grade students, from 13.1 percent to 21.7 percent among 10th-grade students, and from 6.6 percent to 10.4 percent among eighth-grade students (Figure 2).

## The High School Youth Risk Behavior Survey (YRBS)

This biennial survey conducted by the CDC since 2015 is a national and state-level survey on current use of electronic vapor products among high school students. It has shown a drop in current e-cigarette use from 24.1 percent in 2015 to 13.2 percent in 2017 among U.S. high school students. Kansas did not report data in 2015 for e-cigarette use among high school students due to a low opt-in survey completion rate. However, data from the 2017 Kansas YRBS reported that one in 10 (10.6 percent) Kansas high school students used an electronic vapor product in the last 30 days. The next survey will be administered in 2019.

## Adults

For adults who currently smoke conventional cigarettes, the NASEM report, [bit.ly/NASEMReport](http://bit.ly/NASEMReport), concluded that e-cigarettes, while not without health risks, are likely to be far less harmful than conventional cigarettes. However, NASEM also reported that there is limited evidence that e-cigarettes may be effective aids to smoking cessation.

The Behavioral Risk Factor Surveillance System (BRFSS) has reported national- and state-level data on current e-cigarette use among adults starting in 2016.

- Results of the 2017 U.S. BRFSS (Figure 3) estimated 4.4 percent (10.6 million) of U.S. adults currently use e-cigarettes. Of those currently using e-cigarettes, one in three (34.5 percent) are vaping daily, more than one-quarter (28.4 percent) are young adults age 18-24, and half (50.4 percent) of U.S. adults who currently use e-cigarettes also currently smoke conventional cigarettes — known as “dual use.”
- Results of the 2017 Kansas BRFSS reported that approximately 4.6 percent of Kansas adults currently use e-cigarettes, and of those, two in five (40.7 percent) users are vaping daily. Almost three in 10 (29.3 percent) are young adults age 18-24, and half (50.3 percent) are dual-users.
- The Kansas BRFSS has collected data since 2013 on adults who ever have used or tried e-cigarettes. The percentage of Kansas adults who had ever used or tried e-cigarettes rose from 14.3 percent in 2013 to 22.7 percent in 2017. The U.S. BRFSS began collecting this data in 2016 and reported that 20.4 percent of adults ever used or tried e-cigarettes in 2017.

Figure 3. E-Cigarette Use Among Adults in Kansas and the U.S., 2017

	Kansas	U.S.
<b>Currently Use E-Cigarettes (in last 30 days)</b>	4.6%	4.4%
<b>Of those currently using e-cigarettes:</b>		
Current Users Who Vape Daily	40.7%	34.5%
Current E-Cigarette Users Age 18-24	29.3%	28.4%
Current Dual Users for Electronic and Conventional Cigarettes	50.3%	50.4%
<b>Ever Used or Tried E-Cigarettes</b>	22.7%	20.4%

Note: The Behavioral Risk Factor Surveillance System (BRFSS) has reported national- and state-level data on current e-cigarette use (in past 30 days) among adults starting in 2016.

Source: KHI analysis of data from the U.S. and Kansas 2017 Behavioral Risk Factor Surveillance System.

## Regulatory Actions

### Federal

Effective August 8, 2016, the FDA finalized a rule to regulate e-cigarettes under the Family Smoking Prevention and Tobacco Control Act. The FDA issued a number of regulations that included prohibiting sales of e-cigarettes to anyone under age 18, addressing sales and marketing methods, and prohibiting free samples.

In 2018, the FDA began intensifying its focus on the epidemic use of e-cigarettes by youth and began targeted actions against e-cigarette industry leader JUUL Labs and other e-cigarette manufacturers and retailers.

- In the largest coordinated enforcement effort in agency history, the FDA issued more than 1,300 warning letters and civil penalty fines in September 2018 to retailers who illegally sold e-cigarette products to minors. The FDA also directed the five major e-cigarette manufacturers — blu, JUUL Labs, Logic, MarkTen XL and Vuse — to address youth use of their products in the next 60 days or the agency would consider requiring them to stop selling flavored pods.
- In November 2018, the FDA proposed advancing a new policy framework that would allow only age-restricted retail locations and online retailers to sell flavored electronic vapor products (i.e., any flavor besides the more widely available tobacco, mint or menthol). The agency specifically acknowledged that the availability of the mint- and menthol-flavored e-cigarettes may be important to adult smokers who are transitioning away from conventional cigarettes.



## Labeling Requirement

*FDA regulations now require all products that meet the statutory definition of “tobacco product” to have a health warning label. “WARNING: This product contains nicotine. Nicotine is an addictive chemical.”*

### State and Local

As the FDA considers regulation of flavors, more than 100 localities in California, Illinois, Massachusetts, Minnesota and Rhode Island have prohibited the sale of flavored tobacco products, including flavored e-cigarettes. States also continue to regulate e-cigarette use through the use of policies such as clean air and youth access laws, taxation and retail sales licensing.

#### As of September 2018:

- Seventeen states (not Kansas) include e-cigarettes in their definition of “tobacco product.”
- Ten states (including Kansas), the District of Columbia and the U.S. Virgin Islands tax e-cigarettes and/or liquid nicotine.
- Twenty-six states (not Kansas) have laws on product packaging of e-cigarettes.
- Twenty states (including Kansas), the District of Columbia and the U.S. Virgin Islands have laws requiring a retail license for sale of e-cigarettes.
- Twelve states (not Kansas), the District of Columbia, Puerto Rico and 752 localities have expanded their smoke-free air laws to also prohibit

e-cigarette use in places where cigarette smoking is prohibited, such as restaurants, bars and worksites. In Kansas, 11 localities have amended their Clean Indoor Air Ordinances to include e-cigarettes: Hutchinson, Kansas City, McPherson, Olathe, Overland Park, Salina, Topeka, Reno County, Park City, Manhattan and Eudora.

- Five states (not Kansas), the District of Columbia, Guam and an additional 297 localities in 15 states, have raised their minimum age of legal access (MLA) for sale of tobacco products, including e-cigarettes, to persons age 21 and older. Three states raised the MLA to age 19. While the MLA in the state of Kansas is age 18, there are 24 localities that have adopted Tobacco 21 ordinances, including most of the greater Kansas City metropolitan area, Iola, Garden City, Shawnee County (unincorporated), Topeka (under litigation), Parsons, Holcomb, Douglas County (unincorporated), Finney County (unincorporated) and, most recently, Edwardsville.

### Conclusion

On December 18, 2018, U.S. Surgeon General Jerome Adams issued an advisory on e-cigarette use among youth and stated that “vaping by U.S. teenagers has reached epidemic levels, threatening to hook a new generation of young people on nicotine.” Then, on January 18, 2019, FDA Commissioner Gottlieb increased federal pressure on the e-cigarette industry by suggesting they face an “existential threat” if youth use of e-cigarettes continues to significantly rise during 2019. While the scientific evidence on the health effects and public health concerns associated with e-cigarette use and exposure — including its impact on initiation and cessation of conventional tobacco cigarettes — slowly continues to grow, definitive conclusions appear unlikely in the short term. For now, federal and state regulators clearly are focused on finding ways to address e-cigarette use and the physical and psychological impact of nicotine addiction on teens and adults.

#### ABOUT THE ISSUE BRIEF

This brief is based on work done by Linda J. Sheppard, J.D., and Hina B. Shah, M.P.H. It is available online at [khi.org/policy/article/19-14](http://khi.org/policy/article/19-14).

#### KANSAS HEALTH INSTITUTE

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