

**Mission:**

*To improve Kentucky's health by protecting Kentuckians from secondhand smoke and other tobacco emissions, and by reducing the high rate of smoking and tobacco use in the Commonwealth.*

**Steering Committee:**

*American Cancer Society  
Cancer Action Network*

*American Heart Association  
American Stroke Association*

*American Lung Association*

*Baptist Health*

*Campaign for Tobacco-Free Kids*

*Foundation for a Healthy Kentucky*

*Humana*

*Kentucky Cancer Foundation*

*Kentucky Center for Smoke-free  
Policy*

*Kentucky Chamber of Commerce*

*Kentucky Council of Churches*

*Kentucky Equal Justice Center*

*Kentucky Health Collaborative*

*Kentucky Health Departments  
Association*

*Kentucky Hospital Association*

*Kentucky Medical Association*

*Kentucky Nurses Association*

*Kentucky School Boards  
Association*

*Kentucky Voices for Health*

*Kentucky Youth Advocates*

*Learn More:  
[www.smokefreetomorrow.org](http://www.smokefreetomorrow.org)*



## **E-Cigarettes**

First introduced to the U.S. market in 2006, e-cigarettes have grown tremendously in popularity in recent years. E-cigarettes, or electronic nicotine delivery systems (ENDS), are battery-operated devices that may resemble cigarettes, cigars, or pipes, or they may be uniquely shaped to look like entirely different items (e.g., Juul, Suorin). The device heats the liquid, or e-juice, that delivers highly-addictive nicotine, extracted from tobacco, chemicals and particles in the form of an inhaled aerosol. In addition to nicotine, e-cigarettes also contain a wide variety of flavorings, including mint, fruit, bubble gum and candy flavors. The Food and Drug Administration (FDA) considers e-cigarettes as a tobacco product. The FDA also states that youth use of electronic cigarettes has hit epidemic proportions,<sup>i</sup> and the data show that Kentucky youth are trying and using e-cigarettes at higher rates than traditional, combustible cigarettes.

## **The Science:**

E-cigarette aerosol includes additives, heavy metals, chemicals, ultrafine particles, and other toxic gases that pose health risks to users and bystanders. They are frequently used in addition to cigarettes, rather than as a substitute for cigarettes, which increases total exposure to nicotine and the risk of other substance use and addiction. As relatively new products with few ingredient standards, there is only limited available data on safety.<sup>ii</sup>

### Adults:

Current research shows that use of e-cigarettes by adults can result in nicotine dependence, but also may pose fewer health risks than smoking combustible cigarettes, because the aerosol contains fewer toxicants. According to the U.S. Clinical Preventive Task Force Guidelines, there is insufficient evidence to support the use of e-cigarettes for quitting tobacco use. More research is needed on both their effectiveness as a smoking cessation tool and the long-term effects of using e-cigarettes on health and mortality.

### Youth:

A December 2016 report from the U.S. Surgeon General<sup>iii</sup> found that e-cigarettes are now the most commonly used form of tobacco by youth in the United States, which constitutes a serious public health concern. Nationwide, current use among high school youth rose from 1.5 percent in 2011 to 16 percent in 2015. In addition, the report found:

- Exposure to nicotine can harm brain development and the future physical and mental health of children.
- The flavorings in e-cigarettes are one of the main reasons that youth use them.
- E-cigarette aerosol is not safe.

- E-cigarette use is strongly associated with the use of other tobacco products among youth and young adults. (Several more recent studies have reinforced this finding.<sup>iv</sup>)
- Ingestion of e-cigarette liquids containing nicotine can cause acute toxicity and even death if consumed.

## Usage in Kentucky:

### Adults:

- 48 percent of Kentucky adults ages 18-29 had tried e-cigarettes in 2017,<sup>v</sup> compared to 37 percent in 2016<sup>vi</sup>

### Youth: (Note: The Youth Risk Behavior Survey from which this data is taken likely does not capture youth use of pod system e-cigarettes, such as Juul, which is an increasingly popular product among youth.<sup>vii</sup>)

- 44.5 percent of high school students had tried e-cigarettes, hookah pens or other electronic vapor products in 2017, about the same as in 2015<sup>viii</sup> (the 2017 “ever tried” e-cigarettes rate for high schoolers is higher than the rate for “ever tried” cigarettes, which was 40.5 percent in 2017)<sup>ix</sup>
- 14.1 percent of high school students were current users in 2017, compared to 23.4 percent in 2015<sup>x</sup> (the 2017 current cigarette use rate was about the same as the rate for current e-cigarette use)<sup>xi</sup>
- 15.1 percent of middle school students had tried an e-cigarette product in 2017, compared to 21.8 percent in 2015<sup>xii</sup> (the 2017 “ever tried” e-cigarettes rate for middle schoolers is higher than the rate for “ever tried” cigarettes, which was 12.1 percent in 2017)
- 3.9 percent of middle schoolers were current users in 2017, compared to 12.1 percent in 2015<sup>xiii</sup> (the 2017 current e-cigarette use rate for middle schoolers is higher than the current use rate for cigarettes, which was 2.7 percent in 2017))

## Regulation:

The U.S. Food and Drug Administration (FDA) extended its tobacco regulation authority to include e-cigarettes in May 2016. Manufacturers are required to register their products with the FDA, but the FDA will not begin reviewing the safety or other aspects of the products until 2022.

In September 2018, the FDA announced several enforcement actions designed to reduce what it called an epidemic of youth e-cigarette use and the illegal sale of these products to minors.<sup>xiv</sup>

## Policy Recommendations:

Tobacco use behaviors are typically established before age 18.<sup>xv</sup> We must enact policies that protect our youth and adults from being harmed by e-cigarettes, and prevent undermining the progress Kentucky has made in reducing smoking rates. Toward that goal, the Coalition for a Smoke-Free Tomorrow endorses the following policies:

- 1. Add a state excise tax on e-cigarettes that is at least equal to the rate on combustible cigarettes.**

- 2. Raise the minimum legal age to purchase tobacco products, including e-cigarettes, to 21.**
- 3. Enhance education about the dangers of e-cigarette use by youth and young adults.**
- 4. Include e-cigarettes and ENDS in all smoke-free and tobacco-free policies.**

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<sup>i</sup> <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm620184.htm>

<sup>ii</sup> <https://www.centeronaddiction.org/e-cigarettes/about-e-cigarettes/e-cigarettes-weighing-pros-and-cons>

<sup>iii</sup> “E-cigarette Use Among Youth and Young Adults: A report of the Surgeon General, 2016,”

<https://www.surgeongeneral.gov/library/2016ecigarettes/index.html>

<sup>iv</sup> <https://tobacco.ucsf.edu/even-non-nicotine-e-cigarettes-are-gateway-cigarettes-and-promote-youth-relapse>, <https://www.ncbi.nlm.nih.gov/pubmed/28786147>, and <https://www.aafp.org/news/health-of-the-public/20180330e-cigstudy.html>.

<sup>v</sup> <https://www.healthy-ky.org/res/images/resources/KHIP-e-cigarette-FINAL.pdf>

<sup>vi</sup> <https://www.healthy-ky.org/res/images/resources/KHIP-e-cigarettes-report-FINAL-1-31-17.pdf>

<sup>vii</sup> <https://www.cdc.gov/tobacco/infographics/youth/pdfs/e-cigarettes-usb-flash-508.pdf>

<sup>viii</sup> <https://education.ky.gov/curriculum/CSH/Documents/YRBS%20High%20School%20Trend%20Report.pdf>

<sup>ix</sup> Ibid

<sup>x</sup> Ibid

<sup>xi</sup> Ibid

<sup>xii</sup> <https://education.ky.gov/curriculum/CSH/Documents/YRBS%20Middle%20School%20Trend%20Report.pdf>

<sup>xiii</sup> Ibid

<sup>xiv</sup> <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm620184.htm>

<sup>xv</sup> Preventing Tobacco Use Among Youth and Young Adults,” U.S. Surgeon General’s report, 2012, <https://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf>