



## Respiratory Health Association Statement on Youth Vaping Epidemic

Respiratory Health Association is pleased to join with advocacy groups and service organizations throughout the United States in urging Congress to take affirmative action to restrict the proliferation of e-cigarettes and similar vaping products among our nation's youth.

In recent years, conventional cigarette use in the United States has declined, while electronic cigarette (e-cigarette) use rates have continued to climb, particularly among youth. Vaping devices, such as the widely popularized Juul, have become a mainstay in places of education. Recent data show that U.S. youth e-cigarette use increased by 78 percent in 2018, with over 3.6 million kids using e-cigarettes. This prompted U.S. Food and Drug Administration (FDA) Commissioner Gottlieb to declare youth use of e-cigarettes an "epidemic."

The increased use of e-cigarettes and vaping devices by youth poses a grave public health concern. These products are unregulated and contain at least 60 different chemical compounds, some of which are known to be toxic, carcinogenic and linked to cardiac disease. E-cigarette vapor is not just water vapor. E-cigarettes have not been proven safe—especially for young people. Exposure to nicotine during adolescence can negatively impact brain development and cognition and can serve as a gateway to conventional tobacco use. E-cigarette use is also associated with an increased risk of heart attack, heart disease and stroke.

E-cigarettes are extremely visible across social media platforms popular among youth, and depictions often glamorize and normalize e-cigarette use. E-cigarette manufacturers market heavily through social media platforms such as Instagram, YouTube, Twitter and Snapchat, and youth and young adults frequently share videos and photos of their use.

Another challenge is that e-cigarette designs and technology are constantly changing. The JUUL e-cigarette has surged in popularity, especially among teens. It appeals to youth with its flavored e-liquids and its discreet design, resembling a USB stick. One JUULpod e-liquid cartridge may contain as much nicotine as a pack of cigarettes, and the device is designed to deliver this highly concentrated nicotine faster than other electronic cigarettes. Also, more than 60% of youth and young adults who use JUUL were not aware that the product even contains nicotine, which is highly addictive.

The nicotine addiction cycle starts with a person using tobacco, which causes nicotine levels to increase in the brain within just 8-10 seconds of the first puff. These high nicotine levels stop the person from craving a cigarette, which causes a feeling of relaxation. Overtime, these nicotine levels begin to drop, and low nicotine levels lead to cravings to smoke. A person starts to feel tense, agitated, and unable to concentrate, which causes them to smoke a cigarette and start the cycle again.

Exposing an adolescent brain to nicotine can cause addiction and harm brain development. Growth occurs in the brain until about the age 25—it is the last organ in the human body to develop fully. Each time a new memory is created or a new skill is learned, stronger synapses are built between brain cells. Nicotine changes the way these synapses are formed, which can harm the parts of the brain that control attention and learning. Additionally, because addition is a form of learning, young people can get addicted more easily than adults. The nicotine in e-cigarettes and other tobacco products can also prime the brain for addition to other drugs, such as cocaine.

Respiratory Health Association neither advocates nor condones the use of e-cigarette and vaping products, especially among youth. We recommend additional regulation of such products and are committed to work with our elected officials to end the cycle of addiction.

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Respiratory Health Association has been a public health leader in Illinois working to prevent lung disease and promote clean air since 1906 . A policy leader, our organization remains committed to advancing innovative and meaningful tobacco control policies. We have been one of the state's leading advocates for Tobacco 21, Smoke-Free Illinois and other tobacco product policies. For more information, visit [www.resphealth.org](http://www.resphealth.org).