



## BOARD OF HEALTH

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### **Johnson County Board of Health Position Statement On Electronic Cigarettes**

Johnson County Board of Health (JCBOH) supports the inclusion of a prohibition on the use of electronic cigarettes/vaping devices in state and local smoke-free air regulations and/or enacting tobacco/nicotine-free policies in order to maintain current standards for clean indoor air, prevent involuntary exposure to nicotine and other aerosolized emissions from e-cigarettes, and reduce the potential for renormalization of tobacco product use. As of January 1, 2023, there are 1,012 municipalities (a 24% increase in the number of laws from 2019), 26 states, commonwealths and territories laws (a 73% increase from 2019) in the U.S. restricting e-cigarette use in 100% smoke-free venues. Since May 2019, Johnson County has been entirely covered by either a city or county ordinance prohibiting the use of electronic cigarettes/vaping devices in the same places traditional smoking is prohibited.

Research shows that youth and young adults are particularly attracted to e-cigarettes due to the flavors, menthol included, combined with targeted marketing practices. Then the high nicotine levels get them addicted quickly and intensely. The Surgeon General issued an advisory on e-cigarette use among youth in December 2018. He declared “e-cigarette use among youth an epidemic in the United States,” and called for “aggressive steps to protect our children from these highly potent products that risk exposing a new generation of young people to nicotine.” E-cigarettes contain high levels of nicotine. Nicotine is highly addictive, and exposure during adolescence can harm the developing brain affecting learning, memory, mood, impulse control, and attention. Nicotine also impacts the cardiovascular system by increasing heart rate and blood pressure.

Sales of e-cigarettes with the highest levels of nicotine (5% or greater nicotine strength) have grown drastically in the past five years, increasing from 5% of total e-cigarette sales in 2017 to 81% in 2022, a nearly 15-fold increase. More than 90% of disposable e-cigarettes sold contained the highest levels of nicotine, and disposables are the type used most by youth. This popularity followed the federal loophole exempting disposables from flavored restrictions enacted in 2020. Use of disposables increased by about 1,000% among high school students between 2019 and 2020. Not so incidentally, the price of e-cigarettes with high nicotine levels either decreased or did not change, while those with lower nicotine levels became more expensive. Findings suggest that limiting the nicotine strength of e-cigarettes could be part of a comprehensive tobacco control strategy to reduce youth addiction to these products.

## *A community where all can achieve optimal health.*

Since 2014, e-cigarettes have been the most commonly used tobacco product among U.S. youth. In 2022, 2.55 million U.S. middle and high school students used e-cigarettes in the past 30 days, 3.3% (380,000) of middle school students and 14.1% (2.14 million) of high school students. In Iowa, the rates are even higher; 20.1% of high school students used e-cigarettes. Johnson County data from the Iowa Youth Survey is limited as the Iowa City Community School District and Clear Creek Amana School District did not participate in the 2018 or 2021 surveys. In 2021, 21.9% of University of Iowa undergraduate students used a vape product in the last three months. In comparison, 6.7% of high school students used regular cigarettes, and 8.3% of University of Iowa undergrads smoked cigarettes in the last three months (3.2% cigars, 1.9% chewing tobacco, 1.5% hookah).

Like other tobacco product use, inequities exist related to youth e-cigarette use. The industry's marketing and pricing strategies towards certain communities create or contribute to these inequities. Transgender youth (40.2 percent) and female sexual minority youth (37.9 percent) are more likely to report ever using e-cigarettes compared with cisgender (23.0 percent) youth and straight female youth (20.1 percent). Although non-Hispanic white youth are more likely to report frequent e-cigarette use and flavored e-cigarette use, Black and Hispanic youth initiate e-cigarettes significantly earlier than their white peers. Early initiation means increased nicotine dependence. In one study, students with disabilities were more likely to use e-cigarettes in the last 30 days (18.3 percent) compared with their nondisabled peers (12.3 percent). In addition, a recent systematic review found that youth e-cigarette use is associated with greater mental health problems (compared with nonuse), particularly among adolescents.

E-cigarette aerosol is not harmless. In addition to nicotine, the aerosol that users inhale and exhale from e-cigarettes contains other harmful substances including heavy metals, formaldehyde, acrolein, cancer-causing chemicals, volatile organic compounds, and ultrafine particles that can be inhaled deeply into the lungs. The nicotine present in e-cigarette aerosol is absorbed not only by users but by bystanders as well. Additionally, there is currently no conclusive scientific evidence that e-cigarettes promote long-term cessation, and e-cigarettes are not included as a recommended smoking cessation method by the U.S. Public Health Service. Unfortunately, e-cigarette use is "strongly associated" with the use of other tobacco products among youth and young adults, including traditional combustible cigarettes.

JCBOH concludes the evidence-based population-level strategy of including a prohibition on the use of e-cigarettes in state and local smoke-free air regulations and/or enacting tobacco/nicotine-free policies can address this public health epidemic by reducing e-cigarette use. JCBOH also recommends consideration of additional evidence-based population-level strategies to reduce e-cigarette use among young people: restricting young people's access to e-cigarettes in retail settings, licensing retailers, tax increases, banning flavors (including menthol), and implementing price policies/strategies to curb e-cigarette advertising and marketing that appeals to young people.

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