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Des Moines County Board of Health Position Statement on Electronic Cigarettes

Des Moines County Board of Health supports the inclusion of a prohibition on the use of e-cigarettes in state and local smoke-free air regulations and/or 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.

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." Nicotine is highly addictive, and exposure during adolescence can harm the developing brain impacting learning, memory, mood, impulse control and attention. Nicotine also impacts the cardiovascular system by increasing heart rate and blood pressure.

Since 2014, e-cigarettes have been the most commonly used tobacco product among U.S. youth. From 2017 to 2018, e-cigarette use among high school students increased 78% and 48% among middle school students. Research shows that youth and young adults are particularly attracted to e-cigarettes due to the sweet fruit, candy, cookie and cereal flavors combined with targeted marketing practices known to attract kids. In 2019, 4.1 million High School students used e cigarettes and 1.2 million Middle School students.

E-cigarettes go by many names; there are hundreds of brands and thousands of flavors. In 2017, a product named JUUL gained huge popularity with unit sales increasing by more than 600%. JUUL sales surpassed all other companies and in December 2018, Altria, maker of Marlboro, purchased a 35% stake in JUUL. This product has minimal exhaled aerosol, reduced odor, comes in menthol and fruit flavors, and has a sleek USB flash drive design. A JUUL cartridge or pod uses nicotine salts which allows for high levels of nicotine to be inhaled more easily with less irritation. These pods contain about as much

nicotine as an entire pack of 20 regular cigarettes. New devices allow users to mix their own filler liquids.

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, cancercausing 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. The FDA has just begun to regulate e-cigarettes so there is no mechanism for consumers to know for sure what is in the products or the aerosol.

In terms of disproportionate impact identified through national studies, among youth—older students, Hispanics, and Whites are more likely to use e-cigarettes than younger students and Blacks. Among young adults—males, Hispanics, Whites, and those with lower levels of education are more likely to use e-cigarettes than females, Blacks, and those with higher levels of education.

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.

At the federal level, President Trump has moved to increase the legal age to purchase vaping products to 21 years old and has limited the availability of flavored vaping products. While the Des Moines County Board of Health appreciates these efforts, the board 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 tobacco/nicotine-free policies is a necessary step to address this public health epidemic by reducing e-cigarette use. Des Moines County Board of Health 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, implementing price policies and strategies to curb e-cigarette advertising and marketing that are appealing to young people, and strategies to reduce access to flavored tobacco products by young people.

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