What are electronic cigarettes?
Electronic cigarettes (e-cigarettes) are handheld, battery-powered devices that produce an inhalable aerosol by heating an internal solution (“e-liquid”), usually containing nicotine, flavorings and other additives. E-cigarette use is commonly referred to as “vaping”. The devices may visually resemble traditional cigarettes, USB memory sticks and tobacco pipes, and can be sold under such product names as vape pens, e-hookahs, e-cigars, mods and vapes.¹

The e-cigarette industry targets youth.
According to the Surgeon General, e-cigarettes are currently the most used tobacco product among youth.² In the last year, e-cigarette use has increased by 78% among high school students and 48% among middle school students.³ Youth who use e-cigarettes are more likely to start using conventional cigarettes and more likely to become daily smokers.⁴

E-cigarettes and e-liquids come in over 15,000 flavors⁵, including Cotton Candy, Cupcake and Fruit Squirts.⁶ Youth and young adults are drawn to trying e-cigarettes with candy or fruit flavors⁷: over a third of U.S. middle and high school students who use e-cigarettes report the availability of flavors as their reason for use.⁸

E-cigarettes are extremely visible across social media platforms popular among youth, and often glamorize and normalize e-cigarette use. E-cigarette manufacturers market heavily through social media platforms such as Instagram, Twitter and Snapchat, and youth and young adults frequently share videos and photos of their use.⁹

E-cigarette designs and technology are constantly changing. The JUUL e-cigarette is a new product that has surged in popularity, especially among teens. In only one year, JUUL saw a sales increase of over 600%.¹⁰ It appeals to youth with its flavored e-liquids and its discreet design, resembling a USB stick.¹¹ 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.¹²

More than 60% of youth and young adults who use JUUL were not aware that the product even contains nicotine, which is highly addictive.¹²

E-cigarettes are not safe.
Studies have found at least 60 different chemical compounds in e-liquids, some of which are known to be toxic, cancer-causing and/or linked to reproductive harm or respiratory and cardiac disease.¹³ Secondhand aerosol from e-cigarettes can also contain nicotine, ultrafine particles, heavy metals and cancer-causing chemicals.¹⁴

Exposure to nicotine during adolescence can negatively impact brain development and cognition, including reducing attention span and increasing impulsivity.²
E-cigarettes also carry the unforeseen risks of explosion and nicotine poisoning. E-cigarette explosions have caused third degree burns, facial lacerations and tooth fractures.\textsuperscript{15} Calls to U.S. poison control centers for exposure to liquid nicotine have spiked in the last five years, with more than 80% of those cases involving children under three years of age.\textsuperscript{16}

**E-cigarettes do not help people quit smoking.**

Although e-cigarettes are marketed as an alternative to conventional cigarettes, adult dual use of both products has actually become more prevalent. A 2015 survey found that more than half of all adult e-cigarette users aged 25 and older are also current cigarette smokers, while 40% of young adult e-cigarette users also smoked conventional cigarettes.\textsuperscript{17}

Moreover, e-cigarettes are not a Food and Drug Administration-approved (FDA) cessation device.\textsuperscript{18}

**E-cigarettes are not regulated.**

In 2016, the FDA finalized a rule that would extend its regulatory authority to all tobacco products, including e-cigarettes. In 2017, the FDA announced that enforcement of the rule would be delayed to August 2022. As a result, e-cigarette manufacturers are not required to show that their products meet applicable health standards set by law, and do not need to receive marketing authorization from the FDA.\textsuperscript{19} In the absence of labeling rules, there is no way to know ingredients in e-liquids or e-cigarettes, or their exact nicotine concentration.\textsuperscript{20}

Youth have easy access to purchasing e-cigarettes online. Internet vendors have a significant presence on social media networks, where they frequently market promotional discounts and loyalty programs. Additionally, most internet vendors do not have a robust form of age verification, allowing underage buyers to simply click through a self-verification popup.\textsuperscript{21}

The Smoke-free Illinois Act prohibits smoking in nearly all public places and places of employment, including offices, commercial establishments and schools. The state law does not explicitly address e-cigarette use, so counties, municipalities and schools are left to regulate e-cigarettes at their discretion. This means that local laws regarding e-cigarette use are inconsistent. Many communities, including Chicago, regulate e-cigarette use under their local smoke-free laws.\textsuperscript{22}

Reference list available at:
https://resphealth.org/reference-lists/