

# Use of E-Cigarettes and Vaping

**S**mokers who use combustible tobacco products, such as cigarettes, cigars, and pipes, have been turning to electronic cigarettes (e-cigarettes) or electronic nicotine delivery systems (ENDS) as an alternative to combustible tobacco products and as a smoking cessation tool. Use of e-cigarettes has been referred to as vaping, with numerous terms for these devices, such as vaporizers, vape pens, hookah pens, e-cigs, or e-pipes.

Although evidence is lacking, e-cigarettes for inhalation of nicotine may be beneficial in reducing adverse health effects related to the use of combustible tobacco products. However, e-cigarettes are not approved by the U.S. Food and Drug Administration (FDA) as a smoking cessation tool, and the amount of nicotine and other substances a person inhales from each nicotine cartridge is unclear.

E-cigarette users not only inhale, but also emit toxins in addition to harmful ultrafine particles. These emissions pose potential health risks similar to secondhand smoke. Many nicotine refill bottles or cartridges are not adequately packaged to prevent children's contact or accidental ingestion of toxic amounts of the vaping liquids. Studies also have shown that e-cigarettes may cause respiratory and cardiac changes much like those caused by regular cigarettes.

Increasingly, e-cigarettes are being used to aerosolize other substances for inhalation, including cannabinoid products. Flavorings and scents have also been added to the liquids for use in e-cigarettes. These additives have led to a dramatic increase in the use of e-cigarettes by adolescents and young adults, sparking national concerns. Most concerning is the increasing number of unexplained vaping-associated pulmonary illnesses and deaths, causing some states to ban vaping.

The Office of the Surgeon General of the United States has declared e-cigarette use among underage smokers as an ongoing national epidemic. The FDA regulates the manufacture, import, packaging, labeling,

advertising, promotion, sale, and distribution of ENDS that meet the definition of a tobacco product.

Nurses need to educate the public, particularly parents and children, about the adverse effects of e-cigarettes and vaping. Nurses should take action in their communities to address the growing epidemic of underage vaping, advocate for national policies to protect underage users of e-cigarettes, help patients who smoke tobacco products or vape to quit, promote an environment free of aerosols from vaping and tobacco smoke, and support effective e-cigarette, vaping fluid, and tobacco control policies to protect the public from the adverse effects of vaping, e-cigarette use, and nicotine addiction.

## It is the position of ONS that

- The FDA should regulate e-cigarettes and vaping liquids as soon as possible to protect underage users from adverse health effects and potential nicotine addiction. Specifically, the FDA's draft proposal should:
  - Deem products, including e-cigarettes and vaping, as meeting the statutory definition of a tobacco product and subject to the Federal Food, Drug, and Cosmetic Act.
  - Prohibit the sale of covered tobacco products to individuals aged younger than 21 years and require the display of health warnings on covered tobacco product packages, vaping liquid containers, and in advertisements.
  - Deem vaping liquids hazardous to health and prohibit sale to individuals aged younger than 21 years.
- The FDA and the Centers for Disease Control and Prevention (CDC) should continue collaborating to investigate respiratory illnesses and deaths reported after the use of e-cigarettes (CDC, 2019).
- Congress should pass legislation recognizing the danger that liquid nicotine poses to children and give the U.S. Consumer Product Safety Commission the authority to require the use of childproof packaging on liquid nicotine containers sold to consumers.
- The U.S. Department of Transportation should use its regulatory authority to explicitly ban

**KEYWORDS** electronic cigarettes; vaping; smoking cessation; adolescents and young adults; health warnings; regulation

**ONF, 46(6), 645-646.**

**DOI** 10.1188/19.ONF.645-646

e-cigarette and vaping use on aircraft, in public schools, and on public transportation.

- Nurses should advocate for e-cigarette regulation like other tobacco products until key questions are answered related to the adverse health effects of vaping and e-cigarette use, effectiveness of e-cigarettes for smoking cessation, and the health advantages of e-cigarettes over traditional combustible tobacco products.
- Nurses should be knowledgeable of and inform consumers about evidence-based tobacco cessation alternatives and inform consumers of the potential harm of e-cigarettes.

Approved by the ONS Board of Directors, June 2015. Reviewed January 2016. Revised and approved by the ONS Board of Directors, September 2019.

#### REFERENCE

Centers for Disease Control and Prevention. (2019). Statement from CDC Director Robert R. Redfield, M.D., and acting FDA Commissioner Ned Sharpless, M.D., on federal and state collaboration to investigate respiratory illnesses reported after use of e-cigarette products. Retrieved from <https://www.cdc.gov/media/releases/2019/s0830-statement-e-cigarette.html>