

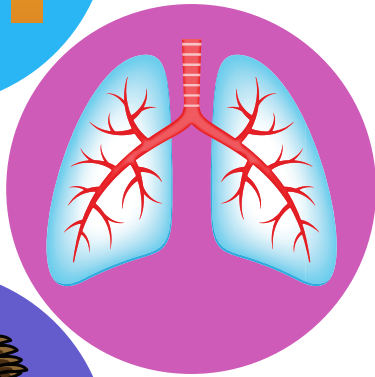
Electronic Smoking Devices

Electronic smoking devices (ESDs) are battery-powered devices designed to turn nicotine, flavor and other chemicals into an aerosol that is inhaled by the user. They are also known as vaporizers, vape pens, hookah pens, e-cigarettes, or electronic nicotine delivery systems (ENDS).



They are being used more and more.

In Colorado, nearly half of all high school students (46.2%) reported they had used an ESD, and one quarter (26.1%) reported they were currently using one. Across the country, more than 2 million high school students and 620,000 middle school students use them.



They aerosolize nicotine, flavor, and chemicals into lungs. Some studies have shown that flavorings of ESDs liquids are irritating and toxic.



They appeal to young people.

They come in candy, fruit, and mint flavors that appeal to young adults and other nonsmokers, especially due to the mistaken belief that they are harmless.



They can be used for other substances. ESDs can also be used to “vape” marijuana, herbs, waxes, and oils.



The nicotine concentrations are inconsistent.

They can be significantly higher or lower than marketed, even in products that are marketed as nicotine-free.



The health effects are unknown.

ESDs are likely harmful to the user and bystanders at levels lower than combustible cigarettes. Short-term health effects are most often associated with respiratory irritation and cytotoxicity. There is little information about the long-term health effects of use or how other chemicals in the solutions affect health.



Electronic Smoking Devices

Messages for Patients

- **They are not approved for cessation.**
Electronic smoking devices (ESDs) are not an FDA-approved cessation device. There are safe and effective FDA-approved tobacco cessation medications available.
- **They emit more than just water vapor.**
Although devices are marketed as only emitting water vapor, many studies have found that they also release nicotine and particulate matter into the air, which could be harmful to others.
- **There are many unknowns.**
There are still many unknowns about the health impacts of ESDs, including concerns of exploding batteries which can cause significant harm.
- **Secure the cartridges.**
The nicotine cartridges could be fatal if ingested - be sure to keep them away from children and pets.

Recommendations for Patient Care

- **Screen:** Ask about tobacco use and exposure to secondhand smoke and vapor, including the use of ESDs, as a part of routine clinical screening with every patient and family.
- **Ask the Right Questions:** Because ESDs are known by many different names, use a specific ESD screening question. For example: “Do you use any kind of tobacco, such as cigarettes? What about electronic smoking devices like e-cigarettes or vape pens?”
- **Talk with Teens Honestly:** Counsel them about the harms of ESD use, and stress the importance of avoiding these products.
- **Use Evidence-Based Interventions:** Although ESDs are relatively new to the market, there are many evidence-based tobacco cessation interventions that can be applied to ESD use. Consider adapting the *5As Tobacco Cessation Intervention* to guide your conversations:
 - **ASK** about e-cigarette use.
 - **ADVISE** against e-cigarette use and about avoiding secondhand vapor exposure.
 - **ASSESS** whether the patient is ready to quit using e-cigarettes.
 - **ASSIST** patients in quitting by setting a quit date together. Give them practical advice for a successful quit attempt. Educate patients about how to prevent exposing others to secondhand smoke and vapor.
 - **ARRANGE** a follow-up to check on the patient’s progress with quitting.

Information and Support

For more information, references, or training, contact the Boulder County Tobacco Education and Prevention Partnership (TEPP) at BoulderCountyTobacco.org or 303.413.7540.

