

Facts For Parents About E-Cigarettes & Electronic Nicotine Delivery Systems



E-cigarettes are exploding in popularity, and are being used by both adolescents and adults. These devices—also called electronic nicotine delivery systems (ENDS)—are not a safe alternative to cigarette smoking.

ENDS, e-cigarettes, personal vaporizers, vape pens, e-cigars, e-hookah, or vaping devices, are products that produce an aerosolized mixture containing flavored liquids and nicotine that is inhaled by the user. ENDS can resemble traditional tobacco products like cigarettes, cigars, pipes, or common gadgets like flashlights, flash drives, or pens.

The American Academy of Pediatrics (AAP) supports actions to prevent children and youth from using or being exposed to the vapor from ENDS.

Here are facts and tips to help parents and caregivers address ENDS use and exposure.

Are They Safe?

- The solution in ENDS devices and vapor contains harmful chemicals (i.e., anti-freeze, diethylene glycol, and carcinogens like nitrosamines which can cause cancer).
- The nicotine in ENDS is addictive and can harm brain development.
- ENDS are not recommended as a way to **quit smoking**.
- In some cases, ENDS devices have exploded, causing burns or fires.
- **Secondhand smoke**/vapor from ENDS is harmful to growing lungs.
- Long-term health effects on users and bystanders are still unknown.
- ENDS can be used to smoke or "vape" marijuana, herbs, waxes, and oils.

- ENDS are not yet regulated nor approved for smoking cessation by the US Food and Drug Administration (FDA), and the long-term health effects to users and bystanders are still unknown. Due to the lack of regulation, the chemical compounds in an ENDS device can vary between brands.
- The best way to protect your children is to never smoke or vape near them. Talk with your doctor about quitting all tobacco. Never smoke indoors, in your car, or in places that children spend time.

Dangers to Youth:

- ENDS are the most commonly-used tobacco product among teens: almost 1 in 4 high school students reported current ENDS use in 2015.
- ENDS contain a liquid solution that is usually flavored. Flavors, which are appealing to children, often are things like peach schnapps, java jolt, piña colada, peppermint, bubble gum, or chocolate.
- Youth who use ENDS are more likely to smoke traditional cigarettes in the future.
- Children are exposed to ENDS advertising on TV, social media, and in magazines and billboards.
- Although it is illegal for ENDS to be sold to youth under age 18, ENDS can be ordered online.



Risk of Poisoning

- ENDS solutions can poison children and adults through swallowing or skin contact.
- A child can be killed by very small amounts of nicotine: less than half a teaspoon. See *Liquid Nicotine Used in E-Cigarettes Can Kill Children*.
- As of 2016, liquid nicotine is required to be sold in childproof packaging.
- Symptoms of nicotine poisoning include sweating, dizziness, vomiting, increased heart rate lethargy, seizures, and difficulty breathing.
- Calls to poison control centers related to ENDS devices have skyrocketed in the last 5 years. In 2014, poison centers in the US reported 3,783 exposures to e-cigarette devices and nicotine liquid, compared to only 1,543 exposures in 2013. In 2015, 3,073 exposures were reported.

Recommendations for ENDS Users:

- Protect your skin if handling ENDS products.
- ENDS users should always keep e-cigarettes and liquid nicotine locked up and out of the reach of children and follow the specific disposal instructions on the label.

- If exposure to liquid nicotine occurs, call the local poison center at 1-800-222-1222.

Additional Information & Resources:

- [E-cigarettes: Dangerous, Available & Addicting](#)
- [For Teens: Straight Talk about Smoking](#)
- [Raise the Tobacco-Buying Age to 21: AAP Explains Why](#)
- [E-Cigarettes and Electronic Nicotine Delivery Systems: What Parents Need to Know \(PDF\)](#)
- [AAP Policy Statement: Electronic Nicotine Delivery Systems \(AAP Policy Statement\)](#)
- [E-Cigarettes and Young People: A Public Health Concern \(CDC.gov\)](#)
- [E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General\(SurgeonGeneral.gov\)](#) – This report concluded that youth should not use e-cigarettes due to the health effects on users and on others exposed to secondhand e-cigarette aerosol.