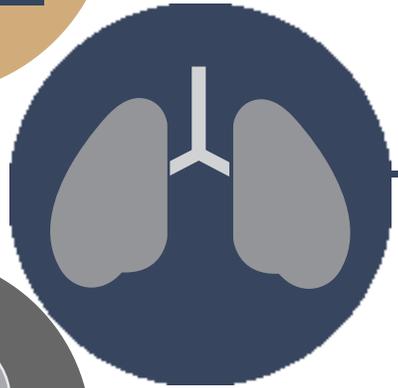


Electronic Smoking Devices

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 Larimer County 38% of high school students reported ever using ESDs and 20% are current users. Across the country, more than 2 million high school students and 620,000 middle school students use them. (Healthy Kids Colorado Survey, 2015)



They aerosolize nicotine, flavor, and chemicals into lungs. Studies have shown that use of these products is irritating and toxic to lungs.



They appeal to young people. They come in candy, fruit, and mint flavors that appeal to youth and other nonsmokers.



They can be used for other substances. ESD's make discrete use of marijuana and illicit drugs more possible.



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



Some 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 cell damage. There is little information about the long-term health effects of use or how chemicals in the solutions affect health.



Electronic Smoking Devices

The 2015 Report of the Surgeon General on E-Cigarettes supports the following facts:

Use among Youth

- In 2014 ESDs became the most commonly used tobacco product among youth under 18.
- Use is strongly associated with the use of other tobacco products among youth and young adults, including cigarettes and other burned tobacco products. In 2015, nearly 6 out of 10 high school cigarette smokers also used e-cigarettes.

Nicotine Use and Brain Development

- Most ESDs contain nicotine, which is highly addictive, and can prime young brains for addiction to other drugs, such as cocaine and methamphetamine.
- Nicotine exposure during periods of significant brain development can disrupt the growth of the brain circuits that control attention and learning, and affect impulse control and mood disorders.
- The brain is the last organ in the human body to develop fully, with brain development continuing until the early to mid-20s.

Dangers to Pregnant Women, Fetuses, and Children

- Nicotine can cross the placenta and affect fetal and postnatal development.
- Nicotine exposure during pregnancy can result in multiple adverse consequences, including sudden infant death syndrome (SIDS).
- Ingestion or skin absorption of ESDs liquids containing nicotine can cause acute toxicity and possible death.

E-cigarette Aerosol is Not Harmless

- The aerosol often includes nicotine, solvents, and ultrafine particles.
- Diacetyl (a chemical linked to serious lung disease), toxic compounds such as benzene (also found in car exhaust), and heavy metals, such as nickel, tin, and lead may also be present.

Source: e-cigarettes.surgeongeneral.gov, 2015
For more information contact Larimer County Tobacco Prevention program at 970-498-6735.

