

September 2018 Post – Electronic cigarette use in teenagers (by Pat Purcell, MD & Kendall Purcell, MD)

A parent of a teenager at a well check recently read a [NYT article](#) about the rise of e-cigarettes, vaping, and the JUUL in adolescents and wants to know more information on how to prevent this behavior in his or her teen.

Epidemiology

- Tobacco use is the leading cause of preventable death in the United States.
- Tobacco use should be considered a pediatric disease: nicotine addiction begins in most tobacco users as teens and 95% of adult smokers start before age 21.
- If a person makes it to age 21 without ever using tobacco products, it is unlikely he or she will ever become a smoker so prevention in youth is very important.
- Because of the above facts, the tobacco industry targets youths, specifically using e-cigarettes. While cigarette use in teens has decreased, the number of teens using e-cigarettes has increased.

What are e-cigarettes?

- E-cigarettes are vaping devices comprised of a battery, an atomizer that heats the solution to create vapor and a way to activate the atomizer (vacuum sensor or push button).
- There are many different variations or “generations” of e-cigarettes with many different names.
- The most popular e-cigarette though used by teens is JUUL; teens say “juuling” vs. vaping.

What is a JUUL?

- JUUL has a higher nicotine content (one pod equals one pack of cigarettes!) and is sold with youth friendly flavors such as mango, mint, crème brulee and cherry.
- JUUL is small and easy to stealth vape with reports of vaping in classrooms and school bathrooms.
- While JUUL claims to restrict sales to consumers over 21, youth can purchase these over the internet and in various stores.

How can we educate our parents as well as our patients?

- Be clear that vaping IS smoking!
- E-cigarettes vs. smoked tobacco: E-cigarettes are less harmful due to no inhaled tar BUT more harmful due to variability of nicotine, chemicals from flavorings and various debris from heating devices inhaled in lungs with increasing concern of affected lung function due to the aldehydes contained in e-cigarettes.
- There is lack of [e-cigarette oversight](#) (consists of what? Amounts?) and the safety profile of the flavors when heated is unknown.
- E-cigarettes normalize smoking and aim to hook teens when they are most vulnerable to addiction.
- Give parents [resources](#) to identify what e-cigarettes look like, what they are called, advise them to visit stores in their area to see what is most prevalent in the community.
- Parents should foster [open dialogue](#) regarding tobacco use and e-cigarettes with teens to help decrease risk.