

## What you need to know about E-Cigarettes and other Electronic Nicotine Delivery Systems (ENDS)



### Risks

- Unknown health effects of long term use
- Studies show that the majority of e-cigarettes and other ENDS contain nicotine, even ones labelled “nicotine free”
- Nicotine negatively impacts adolescent brain development
- Linked to use of other tobacco products among youth

### The Basics

Electronic Nicotine Delivery Systems (ENDS) like e-cigarettes are battery-operated products designed to turn nicotine and other chemicals into aerosol, which is then inhaled. These products often look like cigarettes, cigars, pipes or pens. e-cigarettes/ENDS are sometimes called mods, vape pens, vapes, or e-cigs. Some devices resemble USB sticks and are referred to by the brand name, JUUL. Larger devices such as tank systems, or mods, do not resemble other tobacco products.

The aerosol produced by these products can contain harmful and potentially harmful substances, including:

- Nicotine
- Ultrafine particles that can be inhaled deep into the lungs
- Flavoring such as diacetyl, a chemical linked to a serious lung disease Volatile organic compounds
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- Cancer-causing chemicals
- Heavy metals such as nickel, tin, and lead

**Note:** E-cigarettes should never be used with other smoked tobacco products.

### E-Cigarettes/ENDS to Help Quit Smoking

The US Preventive Services Task Force has concluded that evidence is insufficient to recommend ENDS/e-cigarettes as a cessation aid at this time. Evidence shows that the use of nicotine replacement therapy (patches, lozenges, gum) in conjunction with counseling through the SC Tobacco Quitline (1-800-QUIT-NOW) increases success in quitting among tobacco users.

### E-Cigarettes/ENDS and Youth

- These products are not safe for youth or young adults
- Using nicotine in adolescence can harm the parts of the brain that control attention, learning, mood, and impulsivity
- Using nicotine in adolescence may also increase risk for future addiction to other drugs
- Adolescent brains build synapses faster than adult brains--nicotine changes the way synapses are formed
- Are the most popular among youth. All JUUL devices have a high level of nicotine. A single JUUL pod contains as much nicotine as a pack of 20 regular cigarettes.
- South Carolina is one of several states where it is illegal for minors to purchase or to be in the possession of e-cigarettes/ENDS