



# Electronic Cigarettes

## What are Electronic Cigarettes?

Electronic cigarettes, or e-cigarettes, are battery-powered devices that vaporize a liquid solution to produce an aerosol. E-cigarettes typically contain nicotine, flavoring, and other chemicals. The “smoke” released from an e-cigarette is not water vapor but rather an aerosol that contains nicotine, toxins and other pollutants.<sup>1</sup> Using an e-cigarette is commonly called vaping and specialty e-cigarette shops are referred to as vape shops.

## Health and Safety

The full health and safety impact of e-cigarettes is not fully known due to a lack of research and regulation. Nonetheless, e-cigarettes contain nicotine, volatile organic chemicals and carcinogens<sup>1</sup>. Because they contain nicotine, e-cigarettes are addictive and can also lead to increased blood pressure, heart rate, and problems associated with diabetes.<sup>2</sup>

**Secondhand exposure to e-cigarette aerosol may also cause negative health effects due to the nicotine, ultrafine particles, and toxins that are released into the air.<sup>1</sup>** A recent study found that nicotine levels in non-smokers exposed to e-cigarette aerosol were similar to the nicotine levels in those exposed to conventional cigarette smoke.<sup>3</sup>

E-cigarettes are commonly marketed as a safer alternative to smoking and a tool to help people quit smoking but this has not been proven. Although e-cigarettes may help some smokers quit, others transfer their cigarette addiction to e-cigarettes or use both.<sup>4</sup>

## Regulations

**E-cigarettes are unregulated** so nicotine levels, content, and harmfulness vary across brands.<sup>1</sup>

**There are no current federal laws prohibiting the sale of e-cigarettes to minors.** Effective October 15, 2015, Texas will prohibit the sale, possession, or gift of e-cigarettes to minors.<sup>5</sup>

Because e-cigarettes are not federally regulated, they are not subject to federal tobacco taxes and can be sold at much lower prices than cigarettes. Also, promotion and advertising of e-cigarettes are not strictly regulated so companies are resorting to strategies previously used to market cigarettes, such as cartoon characters, celebrity endorsements, and flavors that appeal to children.<sup>6</sup>

Many states and cities have included e-cigarettes in their smoke-free laws in order to prohibit e-cigarette use in public. **Texas has no statewide regulations on e-cigarette use.** However, as of Jan. 1, 2015, the following 10 Texas cities include e-cigarettes in their smoke-free ordinances: Frisco, Harlingen, Joshua, Lufkin, San Angelo, San Marcos, Socorro, Waxahachie, Weatherford, and Wichita Falls.<sup>5</sup>

On April 25, 2014, the U.S. Food and Drug Administration proposed a rule that would define e-cigarettes as a tobacco product under the Federal Food, Drug and Cosmetic Act. If the rule goes into effect, e-cigarettes would be regulated similarly to tobacco, including banning sales to minors.<sup>7</sup>



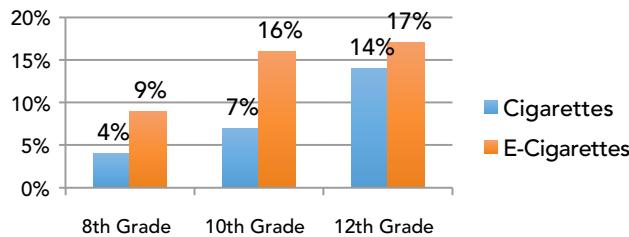
## Common Names for Electronic Cigarettes:

- Electronic Nicotine Delivery Systems or ENDS
- e-cigs
- e-cigars
- e-hookah
- hookah pens
- vape pens

## Use of E-Cigarettes by Youth

Given the lack of regulation, more teens in the U.S. now use e-cigarettes than traditional cigarettes, as shown in the graph below.<sup>8</sup> This is concerning in part because use of e-cigarettes by adolescents may lead to use of traditional cigarettes.<sup>9</sup> In addition, according to the U.S. Surgeon General, adolescents are more susceptible to nicotine addiction than adults, adolescents' brains are particularly vulnerable to the effects of nicotine, and prolonged exposure to nicotine could have lasting consequences for brain development.<sup>10</sup>

Past 30-Day Use among Students in the U.S.



Source: Monitoring the Future. National Survey Results on Drug Use: 1975-2014. (2015)

## Use of E-Cigarettes by Adults

In 2013, about 9% of adults in the U.S. reported they had used an e-cigarette at least once, compared to only 3% in 2010. In 2010, only 10% of cigarette smokers had used e-cigarettes, but this number more than tripled to 37% by 2013. Regular e-cigarette use (i.e. using e-cigarettes in the past month) more than doubled among adults in the U.S. from 1% in 2010 to nearly 3% in 2013.<sup>11</sup>

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