



Just the Facts: Surgeon General's Report on E-Cigarette Use Among Youth and Young Adults

2016 Report

Electronic cigarettes, or e-cigarettes, refer to a category of novel tobacco products that are typically battery-operated products designed to deliver a heated solution, or aerosol of nicotine and other chemicals, to the user. The Food and Drug Administration (FDA) has only recently deemed e-cigarettes under its authority as granted by Congress in the Family Smoking Prevention and Tobacco Control Act (TCA). States and localities have also taken action to regulate e-cigarettes by prohibiting youth access through retail sales, prohibiting their use in public places, and taxing the products.

In the last several years there has been a substantial increase in youth and young adult use of these products. In 2015, more than 3 million middle school and high school students used e-cigarettes in the past month. This is the first federal comprehensive review of e-cigarettes and their impact on youth and young adults. The report includes a call to action for individuals and families, public health professionals and clinicians, federal, state, local and tribal governments, public health agencies, and researchers to accelerate the reduction of youth and young adult initiation and continued use of e-cigarettes.

The report along with additional information can be [found here](#).

Major Conclusions

“E-cigarettes are a rapidly emerging and diversified product class. These devices typically deliver nicotine, flavorings, and other additives to users via an inhaled aerosol. These devices are referred to by a variety of names, including ‘e-cigs,’ ‘e-hookahs,’ ‘mods,’ ‘vape pens,’ ‘vapes,’ and ‘tank systems.’” The report states that the variety in design, appearance, and nomenclature of these products, and the rapidity in which they evolve, creates a challenge in surveillance of the products and their patterns of use.

“E-cigarette use among youth and young adults has become a public health concern. In 2014, current use of e-cigarettes by young adults 18-24 years of age surpassed that of adults 25 years of age and older.” Acknowledging the progress in reducing youth and young adult smoking rates, the report calls on actions to ensure initiation and use of e-cigarettes do not impede further progress. The most common reasons among youth for using e-cigarettes are curiosity, flavoring/taste, and lower perceived harm as compared to other tobacco products.

“E-cigarettes are now the most commonly used tobacco product among youth, surpassing conventional cigarettes in 2014. E-cigarette use is strongly associated with the use of other tobacco products among youth and young adults, including combustible tobacco products.” In 2015, 58.8 percent of high school students who currently used combustible tobacco products also currently used e-cigarettes.

“The use of products containing nicotine poses dangers to youth, pregnant women, and fetuses. The use of products containing nicotine in any form among youth, including e-cigarettes, is unsafe. Nicotine exposure during pregnancy could result in sudden infant death syndrome, and could result in the child experiencing altered corpus callosum, deficits in auditory processing and obesity. Furthermore, ingestion of e-liquids containing nicotine could result in acute toxicity or even death.

“E-cigarette aerosol is not harmless. It can contain harmful and potentially harmful constituents, including nicotine. Nicotine exposure during adolescence can cause addiction and can harm the developing adolescent brain.” Constituents in e-cigarette aerosol can include nicotine, ultrafine particles, flavorings (some linked to serious lung disease), volatile organic compounds, and heavy metals. More research is needed to understand how the characteristics of e-cigarettes, the constituents of the e-liquids (those intentionally added, unintentionally added, or produced through heating), and the behavior of the user relate to exposure to nicotine and other harmful or potentially harmful constituents and subsequent health effects.

“E-cigarettes are marketed by promoting flavors and using a wide variety of media channels and approaches that have been used in the past for marketing conventional tobacco products to youth and young adults.” Furthermore, youth and young adults report high levels of exposure to e-cigarette marketing. The 2012 Surgeon General’s Report concluded that there is a causal relationship between tobacco industry marketing and youth smoking and continued use into adulthood.

“Action can be taken at the national, state, local, tribal, and territorial levels to address e-cigarette use among youth and young adults. Actions could include incorporating e-cigarettes into smoke-free policies, preventing access to e-cigarettes by youth, price and tax policies, retail licensure, regulation of e-cigarette marketing likely to attract youth, and educational initiatives targeting youth and young adults.” Additionally, there is a critical need for the “expansion and enhancement” of surveillance of these products and their patterns of use given the diversity of the market. A better assessment of youth and young adult perception of these products and their marketing is necessary to ultimately create strategies that are most effective at reaching youth and young adults with messages and interventions to prevent initiation and continued use.
