



CREATIVE PROBLEM SOLVING

E-cigarette Use Among Youth and Young Adults: A Report of the Surgeon General, 2016

E-cigarette use among U.S. youth and young adults is now a major public health concern. E-cigarette use has increased considerably in recent years, growing an astounding 900% among high school students from 2011 to 2015. These products are now the most commonly used form of tobacco among youth in the United States, surpassing conventional tobacco products, including cigarettes, cigars, chewing tobacco, and hookahs. Most e-cigarettes contain nicotine, which can cause addiction and can harm the developing adolescent brain. Compared with older adults, the brain of youth and young adults is more vulnerable to the negative consequences of nicotine exposure. The effects include addiction, priming for use of other addictive substances, reduced impulse control, deficits in attention and cognition, and mood disorders. Furthermore, fetal exposure to nicotine during pregnancy can result in multiple adverse consequences, including sudden infant death syndrome, altered corpus callosum, auditory processing deficits, effects on behaviors and obesity, and deficits in attention and cognition. Ingestion of e-cigarette liquids containing nicotine can also cause acute toxicity and possibly death if the contents of refill cartridges or bottles containing nicotine are consumed. This report highlights what we know and do not know about e-cigarettes. Gaps in scientific evidence do exist, and this report is being issued while these products and their patterns of use continue to change quickly. For example, the health effects and potentially harmful doses of heated and aerosolized constituents of e-cigarette liquids—including solvents, flavorants, and toxicants—are not completely understood. However, although e-cigarettes generally emit fewer toxicants than combustible tobacco products, we know that aerosol from e-cigarettes is not harmless. Although we continue to learn more about e-cigarettes with each passing day, we currently know enough to take action to protect our nation's young people from being harmed by these products. Previous reports of the Surgeon General have established that nearly all habitual tobacco use begins during youth and young adulthood. To prevent and reduce the use of e-cigarettes by youth and young adults, we must work together as a society. We must implement proven prevention and education strategies. Health care providers, parents, teachers, and other caregivers should advise youth about the dangers of nicotine and discourage tobacco use in any form, including e-cigarettes. They can set a positive example by being tobacco-free and encouraging those who already use these products to quit. Free help is available at 1-800-QUIT-NOW or <http://www.smokefree.gov>. Preventing tobacco

use in any form among youth and young adults is critical to ending the tobacco epidemic in the United States.

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U.S. Surgeon General 2014-2017

U.S. Department of Health and Human Services. (2016). E-Cigarette use among youth and young adults: A report of the surgeon general—Executive summary. *U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Atlanta, GA*. Retrieved from https://e-cigarettes.surgeongeneral.gov/documents/2016_SGR_Exec_Summ_508.pdf.

Your team is a finalist for a \$20,000.00 grant requiring a plan for reducing e-cigarette use among youth and young adults in your area. Your grant proposal presentation is scheduled in front of the grant committee in 30 minutes. Prepare an eight minute presentation on the best ways to use this money to potentially reduce the use of e-cigarettes among youth and young adults.