

## E-CIGARETTES

Electronic cigarettes (i.e. e-cigarettes, or e-cigs) look similar to cigarettes in shape and size but contain a battery-operated heating device that vaporizes a nicotine-containing solution, creating a mist that is then inhaled. The tips often have an indicator light, designed to emulate the burning ash of a traditional cigarette. They may be either disposable or refillable.

Using an e-cigarette is commonly referred to as “vaping.” Popular brands of e-cigarettes, sold at convenience stores and gas stations, include “blu” and “NJOY.” Products come in kid-friendly flavors, such as chocolate, strawberry, mint, and piña colada.



## HEALTH RISKS

The safety and efficacy of e-cigarettes has not been fully studied. Right now there is no way of knowing how much nicotine or other potentially harmful chemicals are being inhaled by users and/or bystanders. These products are not considered to be safe or effective replacements for other tobacco products.

Recent studies have found that e-cigarettes can contain as much nicotine as a regular cigarette – or more. The liquid nicotine solution is very toxic and can potentially be spilled or accidentally swallowed.

- Cartridges generally contain up to 20 mg of nicotine. The lethal dose of nicotine for children is approximately 10 mg.

Quality control in the manufacturing of e-cigarettes is a concern. Inconsistencies that could impact health have been found, including differing levels of nicotine from one cartridge to another in the same product.

- U.S. Food and Drug Administration (FDA) analysis of ingredients in a small sample of cartridges from two leading brands found that one contained diethylene glycol, a toxic chemical used in antifreeze, and several others contained carcinogens, including nitrosamines.
- Some electronic devices claim to be nicotine-free. In tests of several of them, however, all but one had low levels of nicotine present.
- Refillable e-cigarettes may make it possible to refill cartridges with liquid marijuana or other substances.

## LAWS & REGULATIONS

E-cigarettes are not currently regulated by the FDA. They do not contain any health warnings comparable to FDA-approved nicotine replacement products or conventional cigarettes. It is illegal for youth under 18 to buy or possess them in Colorado; it is also illegal for adults to sell or give them to anyone under 18.

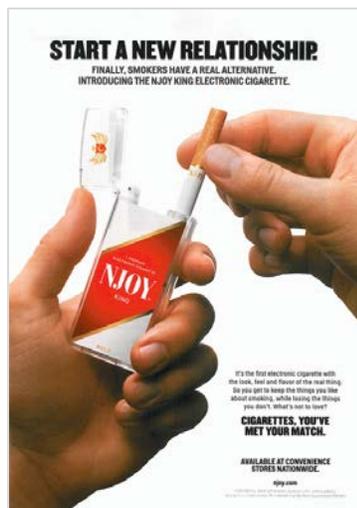
The 2008 Tobacco Free Schools Law prohibits the use of tobacco products on school grounds by students, staff, and visitors. Tobacco products are defined as, “**any product that contains nicotine or tobacco** or is derived from tobacco and is intended to be ingested, inhaled, or applied to the skin of an individual.”

## AS NICOTINE REPLACEMENT THERAPY

E-cigarettes sold in the U.S. cannot be marketed as therapeutic devices. Nicotine replacement therapy (NRT) is for temporary use as a smoking cessation aid, not as maintenance therapy. Hence, NRT is ideologically situated in opposition to other forms of nicotine delivery (i.e. e-cigarettes and smokeless tobacco products), which are intended to be used as potentially permanent replacements for or supplements to cigarettes.

## OTHER ELECTRONIC PRODUCTS

Retailers may also sell products like e-hookahs (pictured below) that contain nicotine but are not necessarily designed to look like cigarettes. They pose the same risks as e-cigarettes.



To learn more about e-cigarettes, e-hookahs, and other tobacco-related products and issues, please contact Boulder County Tobacco Education and Prevention Partnership (TEPP) staff at 303.413.7524.