

## Who uses them?

Almost all e-cigarettes are used by ex-smokers to quit smoking and stay quit, or by smokers using them to replace some of their cigarettes. Very few are used by people who would not otherwise be smoking. No one knows the exact numbers (and they are constantly changing), but all available evidence supports these observations.

## Why are flavors offered?

Many consumers start out wanting a unit that looks like and vapor that tastes like their brand of cigarette. As they move away from smoking tobacco cigarettes, some begin to find the tobacco flavors distasteful and others just like interesting flavors better. A large portion of experienced e-cigarettes users decide they prefer fruit or candy-like flavors. It appears that flavors that are very unlike cigarettes substantially reduce urges to go back to smoking.

## E-cigarettes, the basic facts

**Keeps most of the benefits of smoking.** Many smokers who do not want to give up the benefits of smoking (or feel that they cannot) find that switching to e-cigarettes is a satisfying alternative.

**Eliminates most of the costs of smoking.** The long-term health effects of e-cigarettes are estimated to be in the order of 99% less than smoking. There are no apparent short-term health impacts, and switching can quickly eliminate the cough and loss of stamina from smoking. There is no “second-hand smoke” (and no apparent hazard from

“second-hand vapor”), no odor or smoke residue, and no ashes and butts to dispose of. The high taxes on cigarettes make e-cigarettes cheaper in most places. Extensive research has not found hazardous levels of any chemical in e-cigarettes.

**Uniquely effective for quitting for many smokers.** Many switchers tried every recommended method for quitting, but switching was the only method that ever worked. Many smokers who tried e-cigarettes without actively intending to quit smoking find that they “accidentally” quit. Of course, this is not true for everyone, and we do not know what portion of smokers e-cigarettes appeal to, but we know it is a lot.

**Quitting smoking eventually is more hazardous than switching now.** For the average smoker, smoking for just a few more months poses a greater health risk than using a low-risk alternative like e-cigarettes for a lifetime. Switching is a lower risk option than struggling for months or years more to finally quit smoking cold turkey. For those who want to continue on to nicotine abstinence, most switchers find it much easier to quit e-cigarettes than it was to quit smoking.

## References

For sources of the facts presented in this document, please see:

<http://casaa.org/References.html>

# CASAA

## Electronic Cigarettes (E-Cigarettes): The Facts



The Consumer Advocates  
for Smoke-free  
Alternatives Association

<http://www.casaa.org>

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### What is an e-cigarette?

An electronic cigarette (e-cigarette), also known as a “personal vaporizer,” consists of a heater (“atomizer”), a battery, and a compartment that holds a liquid solution of propylene glycol (PG) and/or vegetable glycerin (VG), water, and small amounts of flavoring and nicotine (in varying concentrations). When the user activates the device, the battery powers the atomizer, which becomes warm and converts some of the liquid solution into a fog or “vapor.”

### Why are there different shapes and sizes?

Some models resemble a combustible cigarette, but many are larger and come in a variety of shapes and sizes that cannot be mistaken for a cigarette. Some models combine the atomizer and cartridge into a single piece, called a “cartomizer.” Cigarette-sized models are often disposable or have disposable cartomizers; larger models have a tank that is refilled with liquid. For smaller devices, atomizers are usually activated by inhaling, while larger

ones typically have a button. Larger devices, with their larger batteries and refillable tanks, deliver more vapor and more variety for less cost; smaller devices are more convenient and easier to start with.

### Are they a smoking cessation product?

That phrase sometimes refers to an official legal designation as a medicine approved by regulators, such as the FDA. E-cigarette manufacturers have never sought such approval, and therefore are not allowed to make that claim in their marketing or packaging. However, consumers use e-cigarettes almost exclusively as substitutes for smoking, and many quit smoking thanks to e-cigarettes. So in reality, as opposed to legal regulations, there is no question that e-cigarettes are an effective smoking cessation product for many smokers.

### Are they safe?

Nothing is ever 100% safe, so that is not quite the right question to ask. There is compelling evidence that they are low risk, perhaps as low as 99% less harmful than smoking. Because nothing is burned, e-cigarettes do not produce the chemicals that cause almost all the harm from smoking. E-cigarettes do not produce the particles (“tar”) that damage the lungs and heart, or carbon monoxide and the thousands of other chemicals that are created by combustion. Nicotine itself is no more dangerous to use than caffeine. It does not cause lung disease or cancer; it might temporarily raise your blood pressure a bit.

E-cigarettes have been used long enough that we know they do not cause the acute health effects like lung problems and loss of stamina that smoking does, and reports of adverse health effects are rare and consistently minor.

### What about the FDA’s tests and other reports of dangerous chemicals?

The FDA tested a few old-technology (2009) e-cigarettes and intentionally overstated their results. These results are frequently used to try to scare people. But what they actually found was that e-cigarettes had no more of the particular “carcinogens” they reported than FDA-approved nicotine products. The quantity of diethylene glycol was of no consequence.

In short, the FDA provided reassuring evidence that e-cigarettes are very low risk. Other alarmist claims about chemicals are usually based on finding a few molecules of a chemical that could be harmful in high doses, but pose no worries at the quantities found. These tests and all other available data was reviewed by Burstyn, who found that none of these chemicals occur at harmful levels.

