# E-cigarettes: dangerous?

E cigarettes are just that — cigarettes in another form. They are battery-powered devices containing cartridges, filled with a liquid composed of chemicals including nicotine, and a heating component, which converts the liquid into a vapor inhaled by the user.

Despite manufacturers' claims which market e-cigarettes as a safe tobacco quitting aid, they are far from safe and haven't been proven to help people quit. In fact, studies show they may increase nicotine addiction in teens; and in adults have not resulted in helping people reduce the number of cigarettes consumed nor have they increased quit rates. International and European organizations, such as WHO, CDC, EPS (European Respiratory Society) point out that the long term effects of e-cigarettes are not yet known, hence their safety has not been scientifically demonstrated.

Additionally, the amount of nicotine and other chemicals they deliver varies significantly from brand to brand. The concentration of nicotine in most cigarettes will not lead to sickness, however cigarettes sold on the internet have concentrations up to 10% nicotine. Unfortunately there is no way for the consumers to find out the exact amount of substances they inhale.

Although e-cigarettes do not burn tobacco, they contain nicotine and other toxic chemicals such as formaldehyde, acetaldehyde, acrolein, diethylene glycol, nickel chromium, lead and flavorings. Because e-cigarettes are not regulated yet, there are technical flaws that create accidental nicotine overdoses. An overdose may occur when a smoker inhales the vapor with too much force or liquid may spill on a smoker's skin when replacing the cartridge, or the chemicals may be absorbed through the skin and eyes. The danger of poisoning by exposure is especially great for children, young people, pregnant women, nursing mothers, people with heart conditions and the elderly.
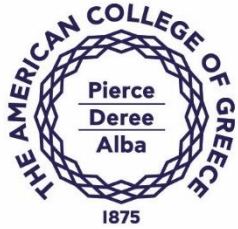
Furthermore, since e-cigarettes do not naturally extinguish, an e-cigarette smoker must consciously choose to stop smoking the e-cigarette, unlike a tobacco cigarette, which extinguishes naturally and thus limits the amount of toxic chemicals that enter a smokers lungs.

According to CDC there was a significant increase in e-cigarette poisonings at US poisoning centers between September 2010 and February 2014, with the most common adverse health effects reported being vomiting, nausea and eye irritation.

Nicotine is still delivered directly to the lungs and although it might be marketed as a tool to quit tobacco use, it actually qualifies you as an e-cigarette addict rather than a non-smoker.

Besides that, the chemicals contained in the vapor of an e-cigarette create a similar public health issue as tobacco cigarettes, that of second-hand smoking. Unfortunately, many tobacco-free policies exclude e-cigarettes and this leaves non-smokers widely exposed to its harmful vapors.

All the above have led to health organizations urging policy makers to establish strict regulations regarding the marketing, sales and promotion of e-cigarettes as well as the prohibition of their use in public places and workplaces.

But what if you want to quit tobacco?

There are safer ways to do so. There are other regulated cessation aids such as nicotine patches and gums, which are approved by EOF - The National Organization for Medicines in Greece and National Food and Drug Administration Organizations in other countries. And of course, there are cessation free helplines and clinics where you can consult a multidisciplinary team of qualified professionals and benefit from full support.

For more information please refer to the booklets and links under the Blackboard ACG Health & Wellness container.

Sources:
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