



Healthy Lifestyle

Quit smoking

E-cigarettes are popular alternatives to regular cigarettes, but are they safe?

By Mayo Clinic Staff

Electronic cigarettes, often called e-cigarettes, are battery-operated devices that heat a liquid (usually but not always containing nicotine), turning it into a vapor that can be inhaled. Using e-cigarettes is often referred to as vaping.

Electronic cigarettes come in a variety of designs. Some are sold with filled cartridges, while others are designed so that users can add a solution that's purchased separately. The solutions typically contain vegetable glycerin or propylene glycol as the main ingredients, varying amounts of nicotine, flavorings and other additives.

There's no scientific evidence that using e-cigarettes is safe.

Because e-cigarettes don't burn tobacco, most experts agree that they're likely to cause fewer harmful effects than traditional cigarettes. Most e-cigarette manufacturers claim that their products are a safe alternative to conventional cigarettes. However, the Food and Drug Administration (FDA) has questioned the safety of these products.

Researchers have found that some e-cigarettes have nicotine amounts that are very different from what's on the label. In addition, some flavoring agents and other additives have been shown to be toxic.

The long-term health effects of inhaling vegetable glycerin, propylene glycol and other additives are not known. The FDA and many health care organizations, including the American Heart Association, have issued warnings about the health risks of e-cigarettes.

Studies to test whether e-cigarettes can help people stop using tobacco have had inconsistent results. At best, e-cigarettes are no more effective than nicotine replacement medications in helping people quit.

The U.S. Preventive Services Task Force has concluded that the current evidence is insufficient to recommend electronic nicotine delivery systems for tobacco cessation in adults.

If you're looking for help to stop smoking, there are seven FDA-approved medications that have been shown to be safe and effective for this purpose. A combination of medication and counseling has been shown to work best.

Because of the unresolved safety concerns and because the research on e-cigarettes as a stop-smoking aid is inconclusive, Mayo Clinic does not recommend e-cigarettes as a way to quit smoking.

If you want to stop smoking, call 800-QUIT-NOW (800-784-8669) to connect to your state's quit line or call the Mayo Clinic Nicotine Dependence Center at 800-344-5984.

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