

E-cigarettes

Electronic cigarettes, commonly referred to as e-cigarettes, are devices that enable a person to inhale nicotine. As the products are relatively new, there have been limited long-term studies assessing the benefits and risks. This factsheet explains what they are, how they are used and why there is current debate about their use.

Smoking is highly addictive and quitting the habit is not easy. In addition to becoming addicted to nicotine, a drug found naturally in tobacco, people also become dependent on the physical and social habit of smoking.

Healthcare professionals play a central role in helping people quit smoking and choosing the most appropriate method out of a range of products and various strategies. These include prescription medicines, nicotine replacement products, such as patches or lozenges and counselling.

E-cigarettes have become increasingly popular throughout the 2000s. Although e-cigarettes have the potential to reduce the harm caused by smoking tobacco, they have not been scientifically evaluated and therefore, their safety and usefulness as a smoking cessation aid is still unknown. Unlike the other products which are commonly available, health authorities in Europe have not yet approved e-cigarettes as an effective tool to help smokers quit.

► What are e-cigarettes?

E-cigarettes are designed to look and feel like cigarettes. They consist of three parts; a battery, a vaporiser and a cartridge. The device works by vaporising the liquid in the cartridge. This creates a mist that can be inhaled by the user and they appear to breathe out smoke.



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Unlike normal cigarettes these devices do not contain tobacco, but they contain nicotine in the liquid found in the cartridge. The liquid can have different flavours and different amounts of nicotine from which the user can select.

► Why do some people choose to use them?

It is believed that e-cigarettes cause less harm than a normal cigarette and some people choose to use them in order to maintain their habit more safely. Some research into the views of e-cigarette users suggest that a key benefit of the products is that they satisfy a need to smoke.

An e-cigarette user tells us why they chose to use the products:

"I started using e-cigarettes even though I had no intention of actually stopping smoking. One day I realised that I was exclusively using the e-cigarette, and haven't smoked a normal cigarette since. It may be difficult to get used to the experience at first but once your taste and smell senses return after smoking tobacco for a number of years, you begin to prefer the flavours available in an e-cigarette to the 'bonfire' flavour of a tobacco cigarette. I believe that I am using a safer alternative, although I still class myself as a smoker; if e-cigarettes were suddenly to become unavailable, I would go back to smoking tobacco cigarettes."

► Why are some healthcare professionals concerned about the use of e-cigarettes?

E-cigarettes have been the subject of intense debate in the media across Europe as some healthcare professionals are concerned about the promotion and use of the products.

* Tobacco Control Committee of the American Thoracic Society. American Thoracic Society Series on Tobacco [Internet]. New York: American Thoracic Society; [accessed 2013 April 24]. Available from: <http://patients.thoracic.org/information-series/en/resources/tobacco-mini-c.pdf>

The concerns include:

Products are regulated differently: E-cigarettes are currently regulated differently across Europe. This means that there are no restrictions on the chemicals that can be added to the cartridges. This also means that they are not subject to strict quality control, and products may be labelled the same but have different amounts of chemicals and nicotine in them.

Continuing addictive behaviour: As e-cigarettes look and feel like a cigarette, users are not encouraged to change their behaviour. Their addiction to the physical and emotional elements of smoking continues.

Visibility for others who have quit: There are no restrictions on e-cigarettes being used in offices and other public places where normal smoking is banned. Smoke-free legislation, which bans smoking in public places, has contributed to a change in the perception of smoking, de-normalising it and making it seem abnormal and unacceptable. Some experts believe that visibility to people smoking e-cigarettes could make smoking seem acceptable and could tempt people who have quit, or are trying to quit, to slip back into the habit.

Children's exposure to smoking: Children who are growing up in areas where smoke free legislation has been common since their childhood are exposed to smoking behaviour when they see e-cigarette users. Some experts feel this will undo the steps made by smoke free legislation in changing the perceptions of smoking. They are concerned that the behaviour of smoking, whether the product is an e-cigarette or a tobacco cigarette, is once more being promoted to children and young people.

Lack of evidence: A key concern for healthcare professionals at the moment is a lack of evidence on the potential harm to the user. Although the products are thought to be less harmful than smoking normal cigarettes, the devices contain various chemicals and long-term studies on the health effects of the products have not yet been carried out. More research is needed on the harm caused by the mist, vapour, flavours and additives delivering nicotine.

The European Lung Foundation and the European Respiratory Society have responded to the uncertainty around the products and will conduct research to find out the short- and long-term effects of the products.

► Why is regulation of the product needed?

Nicotine replacement products and devices that are used to help smokers quit are regulated as medicines. This means that the European Medicines Agency will ensure that medicines and medical devices work, and are safe to use.

If the product is regulated, the chemicals within e-cigarettes and the quantities of nicotine found within the devices would be controlled. Smokers could make a balanced choice between e-cigarettes and other nicotine replacement therapies to help them quit. It would also give users reassurance that the products are quality controlled and contain chemicals stated on the label.

► Current situation in Europe

The restrictions on and regulations of e-cigarettes varies around the world. Australia, Brazil, China, Singapore, Thailand and Uruguay have completely banned the use of e-cigarettes. In New Zealand, the products are regulated as medicines and can only be bought in pharmacies.

They are regulated differently in the EU Member States: as tobacco products or pharmaceutical products or as consumer products under the General Product Safety Directive. The European Commission proposed regulating them as medicinal products in its revision of the Tobacco Products Directive.