

Experts warn that e-cigarettes can damage the lungs

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New research has shown that despite electronic cigarettes being marketed as a potentially safer alternative to normal cigarettes, they are still causing harm to the lungs.

A new study, presented today at the European Respiratory Society's Annual Congress in Vienna, has added new evidence to the debate over the safety of alternative [nicotine](#)-delivery products.

Electronic cigarettes are devices that deliver nicotine through a vapour, rather than smoke. There is no combustion involved but the nicotine in the device is still derived from tobacco. There has been much debate over the safety and efficiency of the products, but little scientific evidence to support either claim.

Researchers from the University of Athens in Greece aimed to investigate the short-term effects of using e-cigarettes on different people, including people without any known health problems and [smokers](#) with and without existing lung conditions.

The study included 8 people who had never smoked and 24 smokers, 11 with normal [lung function](#) and 13 people with either [chronic obstructive pulmonary disease](#) (COPD) or asthma.

Each person used an electronic cigarette for 10 minutes. The researchers then measured their airway resistance using a number of tests, including a spirometry test.

The results showed that for all people included in the study, the e-cigarette caused an immediate increase in airway resistance, lasting for 10 minutes. In healthy subjects (never smokers) there was a statistically significant increase in airway resistance from a mean average of 182% to 206%.

In smokers with normal spirometry there was a statistically significant increase from a mean average of 176% to 220%. In COPD and [asthma patients](#) the use of one e-cigarette seemed to have no immediate effect to airway resistance.

Professor Christina Gratziou, one of the authors and Chair of the ERS [Tobacco Control](#) Committee, said: "We do not yet know whether unapproved [nicotine delivery](#) products, such as e-cigarettes, are safer than normal cigarettes, despite marketing claims that they are less harmful. This research helps us to understand how these products could be potentially harmful.

"We found an immediate rise in airway resistance in our group of participants, which suggests e-cigarettes can cause immediate harm after smoking the device. More research is needed to understand whether this harm also has lasting effects in the long-term.

"The ERS recommends following effective smoking cessation treatment guidelines based on clinical evidence which do not advocate the use of such products."

Provided by European Lung Foundation

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