

E-cigarettes and vaping

Electronic or e-cigarettes are devices which heat liquid (called 'e-liquid') into an aerosol (or vapour) which is then inhaled into a person's lungs. Most e-liquids are flavoured, with some containing nicotine, and others not.

E-cigarettes were first developed as a 'safer' way to deliver nicotine to smokers and have been promoted as an effective way to quit smoking. Research is still being conducted to establish the harms related to e-cigarette use and health authorities are still divided on whether they offer an alternative nicotine replacement (NR) option for smokers. Vaping may be safer than smoking but not vaping at all is the safest option.

Vaping is now regulated in Australia under the same laws as tobacco and it is illegal to buy or sell nicotine for use in e-cigarettes. It is also illegal to use e-cigarettes anywhere that smoking is banned, to advertise, display or promote e-cigarettes in retail stores or to sell them to people under the age of 18.

It is illegal for someone under the age of 18 to buy e-cigarettes or e-cigarette accessories and for anyone to sell, market or promote e-cigarettes to people under the age of 18.

What is an e-cigarette?

In 2003, the first e-cigarette was developed by a Chinese pharmacist to vaporise a liquid containing nicotine, providing an alternative way to inhale the drug. At the time they were called 'electronic nicotine delivery systems' (ENDS) and were promoted as an effective way of quitting smoking. These devices not only simulated the cigarette smoking sensation but also circumvented smoke-free laws, enabling users to smoke ('vape') anywhere.

E-cigarettes (which are designed to look like traditional cigarettes) and other vaping devices (including vape pens and advanced personal vaporisers) generally consist of a mouthpiece, a cartridge containing the e-liquid, a heating component and a battery. When it is used, the battery heats up the heating component, turning the e-liquid into an aerosol (or vapour) which can then be inhaled into the lungs and exhaled.

What is vaping?

Vaping is the act of inhaling and exhaling an aerosol, often referred to as vapour, which is produced by an e-cigarette. The term vaping is used as e-cigarettes do not produce smoke, as in smoking, but rather an aerosol that actually consists of fine particles. These particles can contain toxic chemicals that are harmful to health.

How does it work?

Vaping involves inhaling the vapour into the lungs and then exhaling. Some people vape as they believe it exposes them to less chemicals than smoking whilst still getting a nicotine high. Others vape for entertainment reasons, particularly the performance of vape tricks with the exhaled vapour. Common tricks include the 'Ghost Inhale' (where vapour is held in the mouth for a few seconds prior to allowing it to come out in a ball shape) and 'The Dragon' (vapours are forcefully exhaled through the nose and corners of the mouth whilst the lips are closed in the middle, resulting in four streams of vapour going in four different directions, often called the 'Dragon's Tail').

What is in the e-liquid?

The e-liquid usually contains a propylene glycol or vegetable glycerine-based liquid with a flavouring added, as well as a range of other chemicals and metals. There are thousands of e-liquid flavours available, including fruit, sweet and chocolate varieties.

Some e-liquids contain nicotine. These are illegal to purchase in Australia without a medical prescription. There are also products that contain THC oil. THC is the main psychoactive component of cannabis.

Legal Disclaimer

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Is vaping 'safe'?

There is no evidence to support that vaping is 'safe', i.e., they are completely risk-free.

It is important to remember that e-cigarettes have not been around for very long and so we know little about the long-term harms associated with vaping, regardless of what product is being used. Recent studies have found that repeated exposure to e-cigarette vapour could pose a substantial risk of lung disease and damage. The inhaled vapour can inflame the lung tissue and expose users to formaldehyde and heavy metals, which are linked to cancer and other diseases.

Is vaping 'safer' than smoking?

We do not know enough about e-cigarettes to say that they are a safe alternative to cigarette smoking and there is evidence to indicate that they may pose a potential health hazard not only to the user but to others around them. Although e-cigarettes may expose users to fewer toxic chemicals than conventional tobacco cigarettes, the extent to which this reduces harm to the user is yet to be determined. It is also important to remember that the product contained in e-cigarettes are not regulated, so it is difficult to know what exactly is being inhaled.

Is vaping nicotine dangerous?

Nicotine is a dangerous and highly addictive chemical. It can negatively affect the heart by increasing blood pressure and heart rate and harden artery walls which can lead to heart attack. As it is addictive, once you begin using nicotine, it can be extremely difficult to stop. In addition to nicotine, regular tobacco cigarettes contain over 7000 chemicals, many of which are toxic. Whilst vaping may expose you to fewer chemicals than smoking, vaping nicotine is still harmful to health and is illegal in Australia.

Haven't some people died from vaping? What caused those deaths?

In the US there have been cases of a lung disease that has been associated with vaping. In 2019, thirty-nine people died and more than 2000 people developed serious lung damage due to a poisoning

outbreak that occurred that was linked to the use of vaping devices. This condition has been named EVALI (e-cigarette or vaping product use associated injury) and has been linked to vitamin E acetate, an ingredient which is added to illicit cannabis vaping liquids.

Does vaping help people quit smoking?

Research is still being conducted to establish the harms related to e-cigarette use and health authorities are still divided on whether they offer an alternative nicotine replacement (NR) option for smokers. Currently, vaping is not approved by the Therapeutic Goods Administration (TGA) as a smoking cessation tool but research is ongoing. There are many aids that have been approved by the TGA that are safe to use and are shown to improve long-term quitting rates such as patches, gum, lozenges and medications. Vaping may be safer than smoking but not vaping at all is the safest option.

What is 'juuling'? Is it different from vaping?

Juuling is a form of vaping which takes its name from Juul brand products, an American company. These vaping devices are small and are designed to look like a USB and they can even be charged in a laptop USB slot. Juul pods contain nicotine, making them illegal in Australia but they can be purchased online. They come in a large variety of flavours including fruit and chocolate. They emit very little smoke so many mistakenly believe they are harmless. All vaping devices generate potentially harmful chemicals and juul devices also contain nicotine that is addictive.

Is vaping legal?

In Australia, e-cigarettes are treated in the same way as tobacco. It is illegal to buy or sell nicotine for use in e-cigarettes and in all states and territories it is illegal to:

- use e-cigarettes in areas where smoking is banned
- advertise, promote or display e-cigarettes at retailer outlets
- sell e-cigarettes to people under 18 years

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E-cigarettes that do not contain nicotine are legal for use adults in all states and territories. The exception to this is WA, where although use is not illegal, the sale of anything that resembles a tobacco product is. This means whilst not illegal for an adult to use one, purchasing the products may be difficult.

What about young people and vaping?

It is illegal for someone under the age of 18 to buy e-cigarettes or e-cigarette accessories and for anyone to sell, market or promote e-cigarettes to people under the age of 18.