

e-cigarettes

Electronic or e-cigarettes are battery-powered devices which heat liquid (called ‘e-liquid’) into an aerosol (or ‘vapour’) which is inhaled into a person’s lungs. Some e-liquids contain nicotine, while others do not. Most are flavoured, with over 7000 flavours being identified, ranging from fruit through to chocolate.

Two of the major concerns raised by health professionals about e-cigarettes, particularly in relation to young people, include the following:

- **They are promoted as a ‘safe alternative’ to smoking** – because users are inhaling a vapour instead of smoke they are marketed as a healthier option than cigarettes and other tobacco products
- **Aggressive marketing challenges many of our key anti-smoking messages** – with advertising similar to that for tobacco in the 1950s and 60s, e-cigarettes are marketed as glamorous and a safe and social activity

As the use of e-cigarettes increases and vaping becomes more visible, whether it be via advertising, use on television programs or movies, or through personal contact, it is important that young people have access to accurate and up-to-date information on these devices.

Two questions that health teachers are likely to be asked by students in this area are as follows:

- **Is vaping safe?** –
Some of the concerns about their safety include the following:
 - Nicotine is addictive and toxic in all forms

- Products contained in e-cigarettes are not regulated
- E-cigarette use is likely to lead to eventual smoking of traditional cigarettes
- E-cigarettes do not simply produce ‘harmless water vapour’

■ **Are e-cigarettes legal in Australia?**

There are no Australian laws that address these devices specifically. States and territories have different laws around the sale and use of these products and it is important for teachers to try to keep up-to-date with developments in this area

Teachers need to consider the following points around e-cigarettes should they be conducting any tobacco or smoking prevention activities in their classroom:

- **E-cigarettes and the marketing around these products challenge some of our key tobacco prevention message, i.e., the anti-social nature of smoking and smoking is not glamorous**
- **Vaping may be ‘safer’ than smoking, but that does not mean it is ‘safe’**
- **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 pose a potential health hazard not only to the user but to others around them**

As such, teachers should consider raising the issue of e-cigarettes and their related harms when delivering tobacco prevention messages

Background

Electronic nicotine delivery systems (ENDs), or as they are better known, electronic cigarettes or e-cigarettes are battery-powered devices that deliver an aerosol (‘vapour’) that may or may not contain nicotine, thus removing the risk of users coming into contact with tobacco smoke, i.e., instead of smoking, they are ‘vaping’. As a result, e-cigarettes have been heavily promoted as a healthier alternative to tobacco smoking, as well as a way to circumvent

smoking restrictions by enabling users to smoke (or ‘vape’) anywhere. In addition, there is much debate in the tobacco prevention field about the role these devices may play in helping smokers to quit or reduce their cigarette use.

The vapour comes from an ‘e-liquid’ cartridge. E-liquids are often flavoured, with over 7,000 flavours available ranging from fruit through to chocolate. Some contain nicotine, thus providing the user with a nicotine ‘hit’, while others contain only a flavouring.

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E-cigarettes are usually shaped and coloured to make them look like cigarettes or other tobacco products so that when they are used they simulate the act of tobacco smoking. They can be either disposable or re-usable and in addition to the cartridge, most devices contain a battery, a sensor to activate the power from the battery, and an aerosol generator that turns the e-liquid into an aerosol.

E-cigarettes have been aggressively marketed across the world (online and through television, radio and print), with advertising similar to that rolled out by tobacco companies in the 1950s and 60s. Unlike tobacco there are currently no restrictions on the advertising messaging for e-cigarettes, causing concern amongst health professionals. Some of the issues raised around this marketing include the following:

- Adverts promote vaping as glamorous and sexy
- Vaping is often compared to smoking and marketed as less harmful, not only for the user but the people around them
- Celebrities are used to endorse the products
- Promoted as a way to circumvent smoking restrictions because users are now ‘vaping’ and not smoking

Over 450 brands of e-cigarettes have been identified and US\$3 billion was spent on ENDS products globally in 2013. It is believed that ENDS sales may surpass those of traditional cigarettes in 25 years, but some experts believe this could happen as early as 2024.

As the use of e-cigarettes increases and vaping becomes more visible, whether it be via advertising, use on television programs or movies, or through personal contact, it is important that young people have access to accurate and up-to-date information on these devices.

Two questions that health teachers are likely to be asked by students in this area are as follows:

- **Is vaping safe?**
- **Are e-cigarettes legal in Australia?**

Is vaping safe?

The research into the effects of e-cigarettes and vaping lags well behind their increasing popularity and so, at this time, we cannot really say what the

long-term effects of using these devices will be. That said, they are certainly not ‘risk-free’ and there are a number of key messages that should be provided to young people on the potential harms associated with vaping. These are as follows:

- **Nicotine is addictive and toxic** – whether it is ingested as smoke or a vapour it is still a dangerous substance and should be avoided if at all possible
- **Products contained in e-cigarettes are not regulated** and there is no way of knowing what you are actually inhaling in the vapour. One study found that the devices have more formaldehyde, a carcinogen, than traditional cigarettes
- **E-cigarette use is likely to lead to eventual smoking of traditional cigarettes.** A recent study found that even though they are often marketed as way to help people quit smoking, the devices are more likely to promote nicotine use and act as a ‘gateway’ to tobacco use
- **E-cigarettes do not produce ‘harmless water vapour’** and can be a source of indoor air pollution. In 2014 the World Health Organization (WHO) called for their use to be banned in public places and workplaces as there was evidence that they increased the levels of toxins and nicotine in the air adversely affecting those around them

So far, evidence suggests that e-cigarettes may be safer than regular cigarettes. One of the greatest risks associated with tobacco is the smoke, and e-cigarettes don’t burn. Tests show the levels of dangerous chemicals they give off are much less than those produced by traditional cigarettes. However, due to a lack of regulation in the industry, the contents of the e-liquid can vary greatly and the subsequent vapour produced.

Even though they are heavily promoted as a safe and effective way of quitting smoking, health authorities are divided on this issue. A recent scientific review of the evidence found that “health claims and claims of efficacy for quitting smoking are unsupported by the scientific evidence to date” (Grana, Benowitz & Glantz, 2014). They also suggested to medical practitioners that if a patient wants to use them to help quit, they should be informed that “the products are unregulated, contain toxic chemicals and have not been proven as cessation devices.”

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Are e-cigarettes legal in Australia?

No Australian laws specifically address e-cigarettes. Existing laws relating to poisons, therapeutic goods and tobacco control could apply but it is proving to be a complex area. One of the most confusing aspects of this issue is that some of these devices contain nicotine, whilst others do not.

The sale and personal possession or use of nicotine e-cigarettes is currently unlawful in every jurisdiction in Australia. Nicotine is classified as a 'Schedule 7- Dangerous Poison' under the Commonwealth Poisons Standard and any devices containing the drug are not able to be imported, sold or used. They are able to be imported, however, for personal therapeutic use with a prescription in some jurisdictions but this may be complicated as the products have not been approved by the Therapeutic Goods Administration (TGA).

Non-nicotine products (such as 'Shisha pens' and the like found in many convenience stores in some parts of the country) are not covered by any regulations and are able to be freely imported and sold, apart from SA, WA and Queensland (where they have laws that cover 'tobacco-like products'). It is important to note that these products are being closely examined by state and territory governments across the country and laws may change.

For the most up-to-date information on the legal status of these products in your jurisdiction, please go to the following link – [Legal status of electronic cigarettes in Australia. Information Sheet](#) or contact your local Cancer Council or Quit service.

Implications for health teachers

In an already crowded curriculum it can be difficult for a health teacher to cover all topics effectively and provide up-to-date, accurate and credible information. When it comes to tobacco prevention, novel ways of smoking such as shisha and the introduction of e-cigarettes set new challenges for health teachers. Ensuring that the issue of 'vaping' is discussed at the same time as traditional smoking, whether that be tobacco, cannabis or other products, will become increasingly important as the use of e-cigarettes becomes more popular and visible.

If this is to be done, teachers need to consider the following points around e-cigarettes and vaping should they be conducting any tobacco or smoking prevention activities in their classroom:

- **E-cigarettes and the marketing around these products challenge some of our key tobacco prevention message, i.e., the anti-social nature of smoking and smoking is not glamorous**
- **Vaping may be safer than smoking, but that does not mean it is 'safe'**
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Resources

What are we vaping?: An American resource that focuses on what chemicals can be found in e-cigarette vapour, i.e., it is not simply 'harmless water vapour'. It comes with a great downloadable brochure that summarises the contents of the site that could be really useful

E-cigarettes and Nicotine Containing Products (NCPs): This comes from the UK-based Alcohol and Drug Education and Prevention Information Service (ADEPIS) and provides a simple PPT presentation on the issue designed, as well as a [PDF bulletin](#) that examines how schools should deal with e-cigarettes, in terms of both the development of policies and procedures, as well as questions about how the topic should be dealt with in the curriculum

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