



Vaping (Electronic cigarettes)

By Alice McEntee and Roger Nicholas

Introduction

E-cigarette use in Australia, or 'vaping', has recently increased, meaning many employers need to consider the implications for their workplaces. The exhaled product of e-cigarettes—an aerosol containing many chemicals—is best viewed as an environmental hazard, much like conventional tobacco smoke. Employers must ensure that tobacco smoking and vaping, in or around the workplace, does not create a risk to the health and safety of employees.

Workplaces offer various opportunities to give employees the information they may need to assist them in reducing or stopping their use of tobacco or vaping products, promoting both personal health and healthier working environments.

What are vapes?

Vapes are small battery-operated devices that heat a liquid into an aerosol so that it can be inhaled.

- Vapes come in many shapes, sizes, and colours, and can deliver nicotine or be nicotine-free.
- Nicotine-containing vaping products can only be purchased in Australia with a doctor's prescription, and sale or supply without a prescription is illegal.
- The Australian Government is working with states and territories on a range of new regulatory restrictions on e-cigarette products, regardless of their nicotine content. Further information is available at: https://www.health.gov.au/ministers/ the-hon-mark-butler-mp/media/taking-action-onsmoking-and-vaping.
- Research shows that some vape liquids advertised as 'nicotine-free' and sold without a prescription may contain nicotine.



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Vaping and workplaces

Workplaces have a duty to ensure the health and safety of workers, so far as is reasonably practicable. This includes a duty to prevent exposure to potentially hazardous chemicals at the workplace including cigarette smoke and vaping exposure.

In most states and territories, vaping products are not allowed to be used in places where cigarette smoking is also prohibited. This includes in enclosed areas, shopping centres, buses, trains, near children's play equipment, outdoor dining areas and sports grounds.

There are also bans on smoking in other public places, such as office buildings. Workplaces may also have additional policies which may restrict employees' use of vaping products.

Workplaces are a great setting to promote healthy attitudes towards smoking / vaping, especially through workplace education and awareness. By supporting employees to quit smoking / vaping, employers can benefit from a healthier and happier workforce and a safer workplace for everyone.

What's the problem with vaping?

The biggest misconception that people have is that vaping is harmless:

- Aerosol clouds produced by vaping are not primarily water—this is a common myth.
 Major ingredients in vape liquids include propylene glycol and vegetable glycerine or glycerol.
- The health consequences of repeatedly heating and inhaling these chemicals into the lungs is unclear.
- Vapes can often deliver some of the same harmful chemicals found in cleaning products, nail polish remover, weed killer and insect spray. These harmful chemicals include nicotine, formaldehyde, acetaldehyde and acrolein, and can damage lungs and airways.
- Some manufacturers include nicotine in vaping products, despite labelling them as nicotine-free, making them more addictive. [2,3,4]

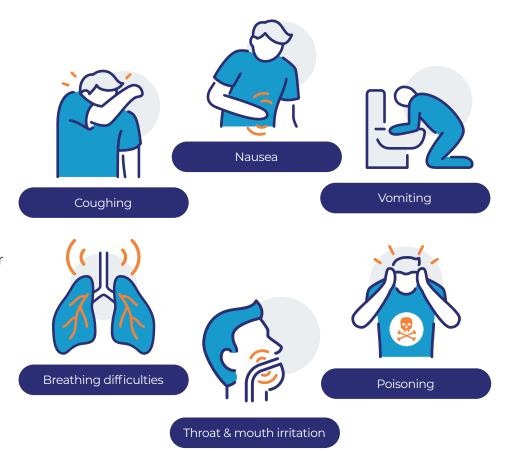
Vaping may be relatively less harmful than tobacco smoking although the long-term health effects remain unclear, and vapes are not considered safe to use.





Health effects of vaping

Remember, it took some time for the full extent of harms from tobacco smoking to become clear. The known long-term health effects of vaping include lung damage and heart disease. Experts believe other possible long-term effects may include lung, throat, and mouth cancers. [8] In the short-term, adverse effects of using any vaping product can include [5,6]:



Is the use of vaping products increasing?

Australian's lifetime and current use of e-cigarettes is increasing, and this is reflected in the workplace:

- In 2019, among employed Australians, 13% had used e-cigarettes in their lifetime and one in 9 currently (daily, weekly monthly or less than monthly) used e-cigarettes.
- In 2018, 1.4% of Australians aged 14 years and over were current vapers (vaped in the past month), and most recent national data indicates that by 2023 this had increased to 8.9%. [10]
- In 2018, fewer than 1% of 14-17-year-olds were current vapers (vaped in the past month), and most recent national data indicates that this increased to 14.5% in early 2023. [10]





Does vaping help people to quit smoking?

Some people see vaping as a safer alternative to smoking tobacco, or as a method of quitting smoking, but this is not fully supported.

- Vaping products have only been available since the early 2000s.
- Products that are inhaled need to go through extensive testing over time to prove they are safe and effective. These tests have not been conducted on e-cigarettes available in Australia, meaning their level of safety hasn't been established. [1]
- While some evidence suggests that replacing conventional tobacco smoking with nicotine-containing e-cigarettes is relatively less harmful due to reduced exposure to the chemicals and carcinogens in combustible tobacco, ^[5] the long-term health effects of vaping are unknown.

E-cigarettes are not currently recommended as a first line treatment for quitting smoking in Australia, but may be useful if other approaches have been unsuccessful. [11]



Recent evidence suggests that e-cigarettes may be more effective at helping people to quit smoking than traditional nicotine replacement therapies (NRTs), such as patches and chewing gums. [12]

- It's best for people to get professional advice about the best ways to quit smoking. Also, while some quit smoking aids are available over the counter, they may be cheaper on the Pharmaceutical Benefits Scheme with a prescription.
- For further advice on giving up smoking and about vaping, call Quitline on 13 78 48.

This Fact Sheet was reviewed by Professor Jacqueline Bowden and Dr Joshua Trigg, Flinders Health and Medical Research Institute, College of Medicine and Public Health, Flinders University.





Resources

For more information on vaping, visit: https://adf.org.au/drug-facts/vaping-e-cigarettes/ or consult some of the sources below:

- 1. HealthDirect. E-cigarettes (vaping). Cited 27 February 2023. Available from: https://www.healthdirect.gov.au/e-cigarettes-vaping#:~:text=In%20Australia%2C%20it%20is%20illegal,they%20do%20not%20burn%20tobacco.
- 2. Quit Victoria. E-cigarettes and vaping. Cited 27 February 2023. Available from: https://www.quit.org.au/resources/resources-communities-and-places/e-cigarettes-and-vaping/
- 3. Greenhalgh, EM, & Scollo, MM. InDepth 18B: Electronic cigarettes (e-cigarettes). In Scollo, MM and Winstanley, MH [editors]. Tobacco in Australia: Facts and issues. Melbourne: Cancer Council Victoria; 2021. Available from: http://www.tobaccoinaustralia.org.au/chapter-18-harm-reduction/indepth-18b-e-cigarettes
- 4. Larcombe, A, Allard, S, Pringle, P, Mead-Hunter, R, Anderson, N, Mullins, B. Chemical analysis of fresh and aged Australian e-cigarette liquids. Medical Journal of Australia. 2022 216, (1): 27-32.
- 5. Eaton DL, Kwan LY, Stratton K. Public Health Consequences of E-Cigarettes. Washington (DC): National Academies Press. 2018.
- 6. Alcohol and Drug Information Service, NSW Health. Cited 20 February 2023. Available from: https://yourroom.health.nsw.gov.au/a-z-of-drugs/Pages/e-cigarettes.aspx
- 7. Cancer Council SA. Electronic cigarettes and vaping. Cited 20 February 2023. Available from: https://www.cancersa.org.au/prevention/smoking/electronic-cigarettes-and-vaping/
- 8. Mravec B, Tibensky M, Horvathova L, Babal, P. E-Cigarettes and Cancer Risk. Cancer Prevention Research 2020: (13): 137–44.
- 9. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2019. Drug Statistics series no. 32. PHE 270. Canberra: AIHW.
- 10. Wakefield, M, Haynes, A, Tabbakh, T, Scollo, M, & Durkin, S. (2023). Current vaping and current smoking in the Australian population aged 14+ years: February 2018-March 2023. Melbourne: Centre for Behavioural Research in Cancer Council Victoria.
- 11. Royal Australian College of General Practitioners. Supporting smoking cessation: A guide for health professionals. East Melbourne. RACGP. 2021.
- 12. Hartmann-Boyce J, Lindson N, Butler AR, McRobbie H, Bullen C, Begh R, Theodoulou A, Notley C, Rigotti NA, Turner T, Fanshawe TR, Hajek P. Electronic cigarettes for smoking cessation. Cochrane Database of Systematic Reviews. 2022, Issue 11. Art. No.: CD010216.

