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ADA NSW Position Statement on E-Cigarettes

Background

Smoking has lasting effects on general health and oral health and the World Health Organisation (WHO) has continually reported the importance of smoking cessation.¹ E-Cigarettes have been marketed to be associated with smoking cessation and were believed to be a healthier and safer alternative to traditional cigarette smoking, reflected by increased sales of e-cigarettes along with reduction in use of licensed nicotine products and medications.^{2,4} Neither of these claims are supported by health practitioners. Conversely, e-cigarettes may pose a greater risk as a health hazard due to unsupervised manufacturing and marketing, and has become a delivery system for illicit drug use.³

The use of e-cigarettes

E-Cigarettes are the main form of Electronic Nicotine Delivery System (ENDS) which come in various forms like vape pens, e-hookah, e-cigars and e-pipes. They are battery operated devices where a cartridge is filled with e-liquid containing various compounds along with nicotine, tobacco extracts, sweeteners and flavouring agents.⁵ Although the nicotine content is low, a single e-cartridge delivers around 200 to 400 puffs which is equal to smoking two to three packs of conventional cigarettes.⁶ E-cigarettes appeal to many young adults as they are easy to use, affordable when compared to conventional cigarettes, come in different flavours, create a perception of fashion, and carry a misconception of being a healthier option than conventional cigarette smoking.²

Effects of e-cigarettes on general and oral health

E-liquid is a mixture of various chemicals which, when heated, release toxic compounds that increase the risk of pneumonia, tachycardia, seizures and chronic obstructive pulmonary disease.^{8,9} Compounds in e-liquid, such as vegetable glycerine, increase microbial adhesion to enamel which can lead to tooth decay.⁷ This is also related to the higher viscosity and flavouring agents of e-liquid that cause enamel breakdown, thereby increasing the risk of dental caries.² Propylene glycol, one of the main compounds of e-liquid, breaks down into various products when heated that result in xerostomia.⁶ The WHO identified heated propylene glycol as carcinogenic.² The effect on periodontium is similar to conventional cigarettes where periodontal pathogens are enriched causing periodontitis.¹⁰ E-cigarette users may also develop oral mucosal lesions, including candidiasis, hairy tongue and nicotine stomatitis.¹⁵ Lithium batteries, when overheated, can explode causing burn injuries, leaving the question of safety around the usage of the equipment.²

ADA NSW position on e-cigarettes

- ADA NSW believes that it is important to improve public awareness among young adults, high school children and other high-risk groups about the negative health effects of e-cigarettes.
- ADA NSW supports strict regulations for supply and marketing of e-cigarettes, and the restriction of vaping products, including e-cigarettes, unless for approved pharmacy supply or prescription usage.
- ADA NSW recommends that Australians discuss smoking and e-cigarette cessation therapies with their medical practitioner.
- ADA NSW encourages more research to understand the long-term health effects of e-cigarette use.

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Facts

- Within Australia, 8.8% of the population have used e-cigarettes once in their lifetime.¹⁶
- The majority of users in New South Wales are young adults aged 18-24 years,¹¹ and adults aged 55-64 years or more^{11,12} who are recent ex-smokers.¹¹
- Since October 2021, all nicotine vaping products are prescription only medications.
- The Therapeutic Goods administration (TGA) has not approved any nicotine vaping products for supply in Australia. Medical practitioners must hold specific approvals in order to prescribe nicotine vaping products in NSW.
- Many products are sold illegally and in retail stores with no labelling of ingredients.¹¹
- Under the NSW Public Health (Tobacco Act 2008), it is illegal to display, advertise or promote e- cigarettes. It is also illegal to sell vaping products to a person under the age of 18.¹³
- E-cigarettes may expose users and bystanders to harmful chemicals that may affect general health and oral health.¹³
- People are more likely to take up tobacco smoking if they use e-cigarettes.¹⁴

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