

Vaping, defined as inhaling and exhaling a heated aerosol produced by an e-cigarette or an electronic delivery system, is increasing globally. (1) Vaping liquid usually contains nicotine and comes in a variety of flavours. It is used as an adjunct treatment in smoking cessation with variable efficacy. (2, 3) Vaping by never smokers appears to be increasing. (4) with a study showing around 25% of young Australian women who had ever vaped were never smokers. (5) While vaping without nicotine has potential for harm (6), only vaping with nicotine is being considered in relation to medical eligibility for contraception.

Legal situation in Australia

Vaping with nicotine-free e-liquids is legal. Some states do not allow sales to those aged under 18 years and restrict places where vaping is permitted. Individuals can import nicotine, provided they have a prescription, using the TGA Personal Importation Scheme.

Cigarette smoking and medical risks

Cigarette smoking is associated with an increase in the risk of conditions that are also increased by oestrogen-containing contraception. These include breast cancer, ischaemic heart disease, stroke and other arterial vascular disease; smoking is also a weak risk factor for venous thromboembolism. Smoking increases the risk of and mortality from breast cancer. (7) (8)

Medical effects of nicotine vaping

Although the harms of electronic nicotine delivery systems are considered lower than smoking in the general population, (9) there are no long term studies in users of hormonal contraception. The small amount of data available suggests cardiovascular events are rare among e-cigarette users and that heart rate and blood pressure are less effected by e-cigarettes than by cigarettes. (10) There is no evidence on the risk of venous thromboembolism and cancer associated with e-cigarettes. The CDC, the U.S. Food and Drug Administration (FDA), state and local health departments, and other clinical and public health partners are currently investigating a multistate outbreak of lung injury associated with e-cigarette product use. (11) The significance of this outbreak in relation to hormonal contraceptive use is unknown.

Recommendations

Until further evidence is available, vaping with nicotine is considered equivalent to cigarette smoking in relation to the medical eligibility criteria (MEC) for contraceptive use. As it is not possible to determine equivalency of exposure between vaping and smoking, any vaping in those aged 35 years and older will be MEC 4 (i.e. absolutely contraindicated) for use of combined hormonal contraception.

State / Territory sexual health and family planning organisations



Western Australia
SHQ (Sexual Health Quarters)
shq.org.au



Northern Territory
Family Planning Welfare
Association of NT
fpwnt.com.au



South Australia
SHINE SA
shinesa.org.au



Queensland
True
true.org.au



ACT
Sexual Health and Family
Planning ACT
shfpact.org.au



New South Wales
Family Planning NSW
fpnsw.org.au



Victoria
Sexual Health Victoria
shvic.org.au



Tasmania
Family Planning Tasmania
fpt.asn.au

References

1. Glasser AM, Collins L, Pearson JL, Abudayyeh H, Niaura RS, Abrams DB, et al. Overview of Electronic Nicotine Delivery Systems: A Systematic Review. *Am J Prev Med.* 2017;52(2):e33-e66.
2. Kalkhoran S, Glantz SA. E-cigarettes and smoking cessation in real-world and clinical settings: a systematic review and meta-analysis. *Lancet Respir Med.* 2016;4(2):116-28.
3. Hajek P, Phillips-Waller A, Przulj D, Pesola F, Myers Smith K, Bisal N, et al. A Randomized Trial of E-Cigarettes versus Nicotine-Replacement Therapy. *N Engl J Med.* 2019;380(7):629-37.
4. Hammond D, Reid JL, Rynard VL, Fong GT, Cummings KM, McNeill A, et al. Prevalence of vaping and smoking among adolescents in Canada, England, and the United States: repeat national cross sectional surveys. *BMJ (Clinical research ed.)* 2019;365:l2219.
5. Melka AS, Chojenta CL, Holliday EG, Loxton DJ. Predictors of E-cigarette Use Among Young Australian Women. *Am J Prev Med.* 2019;56(2):293-9.
6. Muthumalage T, Prinz M, Ansah KO, Gerloff J, Sundar IK, Rahman I. Inflammatory and Oxidative Responses Induced by Exposure to Commonly Used e-Cigarette Flavoring Chemicals and Flavored e-Liquids without Nicotine. *Front Physiol.* 2017;8(1130):1130.



familyplanningallianceaustralia.org.au

The Medical Advisory Committee of Family Planning Alliance Australia is comprised of senior medical educators, senior medical officers and medical directors of the member family planning organisations. The Clinical Reference Group of the Medical Advisory Committee exists as a means to review current clinical practice and provide evidence based recommendations for use by sexual and reproductive health practitioners where clinical guidance is lacking.

© Family Planning Alliance Australia. March 2022

Family Planning Alliance Australia has taken every care to ensure that the information contained in this publication is accurate and up-to-date at the time of being published. As information and knowledge is constantly changing, readers are strongly advised to confirm that the information complies with present research, legislation and policy guidelines. FPAA accepts no responsibility for difficulties that may arise as a result of an individual acting on this information and any recommendations it contains.

State / Territory sexual health and family planning organisations



Western Australia
SHQ (Sexual Health Quarters)
shq.org.au



Northern Territory
Family Planning Welfare
Association of NT
fpwnt.com.au



South Australia
SHINE SA
shinesa.org.au



Queensland
True
true.org.au



ACT
Sexual Health and Family
Planning ACT
shfpact.org.au



New South Wales
Family Planning NSW
fpnsw.org.au



Victoria
Sexual Health Victoria
shvic.org.au



Tasmania
Family Planning Tasmania
fpt.asn.au