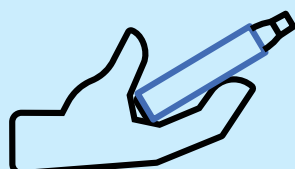
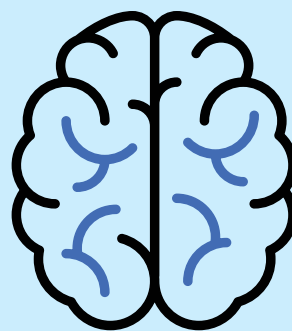
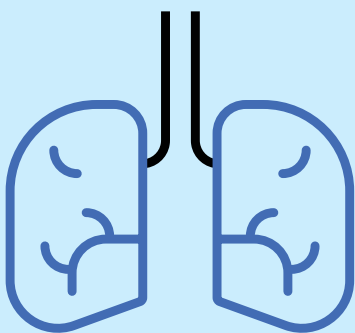
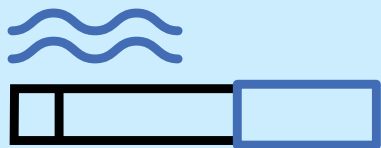
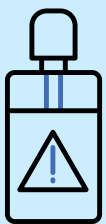


Guide to Support Young People to Quit E-Cigarettes



NSW Ministry of Health
1 Reserve Road
ST LEONARDS NSW 2065
Tel. (02) 9391 9000
Fax. (02) 9391 9101
TTY. (02) 9391 9900
www.health.nsw.gov.au

Produced by: NSW Ministry of Health

This work is copyright. It may be reproduced in whole or in part for study or training purposes subject to the inclusion of an acknowledgement of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above requires written permission from the NSW Ministry of Health.

The NSW Ministry for Health acknowledges the traditional custodians of the lands across NSW. We acknowledge that we live and work on Aboriginal lands. We pay our respects to Elders past and present and to all Aboriginal people.

Further copies of this document can be downloaded from the NSW Health webpage www.health.nsw.gov.au

For further information email MOH-Tobacco@health.nsw.gov.au

© NSW Ministry of Health 2023

SHPN (CPH) 230320
ISBN 978-1-76023-523-9

July 2023

Contents

Definitions	2
Purpose	3
Context	3
Using this guide	4
Supporting priority populations	5
Brief intervention model: Ask Advise Help	5
Screening tools	6
Behavioural strategies	7
Pharmacotherapy	9
Step 1 – Ask	12
Step 2 – Advise	13
Step 3 – Help	13
Additional training and resources	15
Appendices	16
Appendix 1 – Modified Hooked on Nicotine (M-HONC) (screening tool)	17
Appendix 2 – Penn State Electronic Cigarette Dependence Index (screening tool)	18
Appendix 3 – Recording your decision (worksheet)	19
Appendix 4 – My Quit Plan (worksheet)	20
Appendix 5 – Coping with high-risk situations (worksheet)	21
Appendix 6 – Barriers & Opportunities (information)	22
Acknowledgments	23
References	24

Definitions

'Ask, Advise, Help' Model (AAH)	The 'Ask, Advise, Help' brief advice model is a smoking and vaping cessation intervention.
CMI	Consumer Medicine Information is a leaflet or online document that contains information on the safe and effective use of a medicine.
Electronic cigarette (also known as E-cigarette or vape/s/vaping)	<p>An e-cigarette is a battery-operated device that heats a liquid (also known as e-liquid) to produce an aerosol or vapour that the user inhales. E-cigarettes are also called e-cigs, vapes, electronic nicotine delivery systems (ENDS), alternative nicotine delivery systems (ANDS). When prescribed e-cigarettes are called Nicotine Vaping Products (NVPs).</p> <p>Throughout this guide, e-cigarettes will be used as an umbrella term for any other commonly used terms relating to e-cigarettes. In the practical section of this guide providing conversational examples, the term 'vape' has been used because the authors recognise this term is more commonly used and recognised by young people.</p>
E-cigarette related terms	For a list of terms and phrases relevant to e-cigarette use, please see the 'Vaping Lingo Dictionary' (noting this is an American resource and will be replaced with an Australian document as this becomes available).
eMR	The Electronic Medical Record (eMR) system within NSW Health replaces many patient paper charts and forms used in hospital wards, outpatient clinics and community health facilities. This term can however be used more generically to describe any form of electronic medical record for a person.
M-HONC	Modified Hooked on Nicotine Checklist (see Section 'Screening Tools').
Nicotine replacement therapy (NRT)	Nicotine replacement therapy products are used to deliver nicotine and replace the nicotine from tobacco and e-cigarettes to reduce the severity of nicotine withdrawal symptoms. There are various forms of NRT available in Australia (see Section 'Nicotine Replacement Therapy').
Off-label	Off-label use generally refers to the use of a therapeutic good for an indication or intended purpose that is not specified in its Australian Register of Therapeutic Goods (ARTG) entry.
Penn State	Penn State E-Cigarette Dependence Index (see Section 'Screening Tools')
TGA	Therapeutic Goods Administration (TGA) is Australia's government authority responsible for evaluating, assessing, and monitoring products that are defined as therapeutic goods.
TTFV	Time to First Vape (see Section 'Screening Tools').
Young People	The NSW Government defines young people as people and children aged 12-24 years (NSW Youth Health Framework). In this guide, the term young people has been used more broadly to refer both young people and children.

Purpose

This guide has been developed to support health professionals and others who work with young people to effectively address e-cigarette use, support young people to manage nicotine withdrawals, and assist young people in quitting e-cigarettes. Throughout this guide the term e-cigarettes has been used rather than 'vape' except where to do so would be inappropriate (for example when providing examples of how a clinician would talk to young people). E-cigarette is the preferred term within NSW Health, as 'vaping' is a commonly used tobacco industry term.

NSW Health has developed this guide with the advice of a multidisciplinary working group, including experts from youth addiction, youth drug and alcohol, youth mental health, pharmacy, primary care, general practice, research, and policy. Other guidance available at the time of publication has been considered, including the Sydney Children's Hospital Network [Clinicians Guide to Supporting Adolescent and Young Adults Quit Vapes](#) (1) the Royal Australian College of General Practitioners (RACGP) [Supporting smoking cessation - A guide for health professionals](#), (2) Professor Renee Bittoun's [Monograph for counselling adult and adolescent vapers](#), (3) the Alcohol and Drug Foundation's guide [Helping young people to quit vaping](#). (4) NSW Health has developed this guide to provide a state-wide resource applicable to a broad range of settings, including NSW Health clinical services, primary care services, health practitioners working in schools, and other youth-oriented community services.

It is important to acknowledge that e-cigarettes are relatively new products and widespread population use, particularly among young people, is a recent phenomenon. As such, evidence on the most effective management of e-cigarette use among young people is lacking and a pragmatic approach has been used in the guide, based on interventions known to be effective for smoking cessation.

Content in this guide will be regularly updated as new evidence and consensus emerges on best practice of managing nicotine dependence among young people who use e-cigarettes.

Note: this guide is designed to address e-cigarette use in young people however, many of the same approaches may be adapted to address dual use of e-cigarettes and / or tobacco or other smoking behaviours.

Context

It is illegal in NSW for retailers to sell e-cigarettes to people under the age of 18 years, and illegal for retailers (such as tobacconists, vape stores, service stations, and convenience stores) to sell e-cigarettes containing nicotine, including online sales. A valid medical prescription for people over the age of 18 is required to access nicotine e-cigarettes from a registered pharmacy or via the Personal Importation Scheme as unapproved therapeutic products for smoking cessation purposes. However, e-cigarettes containing nicotine, often mislabelled / unlabelled as not containing nicotine, are widely available from retailers, including online. (5)

E-cigarette use among young people has dramatically increased in recent years. The 2022 NSW Population Health Survey found 43.2% of 16 to 24-year-olds had tried an e-cigarette at least once in 2021-2022 (double the rate of two years earlier in 2019-2020) and 16.5% of 16-24 year olds were current (daily or occasional) users (triple the rate of two years earlier in 2019-2020). (6) These rates are likely an underrepresentation of true prevalence. (6) This is concerning as the known and potential harms of e-cigarettes, particularly for young people, are multiple (see Box 1 over page).

Legislative reforms under Australian government consideration may affect the supply of e-cigarette products and could limit access among young people, leading to increased nicotine withdrawal symptoms for those who are regular or frequent users.

BOX 1:

Key harms of e-cigarettes

- Over 200 chemicals have been associated with the liquid in e-cigarettes, including formaldehyde, heavy metals, solvents and volatile organic compounds. (7,8)
- While the full extent of the harms of inhaling these chemicals is not yet known, the adverse health effects of regular nicotine use are well established.
- Nicotine¹ can increase blood pressure and heart rate, cause narrowing of the arteries, and hardening of artery walls which can increase the risk of cardiovascular disease in the longer term.
- Nicotine is highly addictive and acts on the brain to release dopamine and other important neurotransmitters, causing a pleasure response and positively reinforcing nicotine use that leads to addiction. (9)
- Nicotine can also have harmful impacts on fetal and postnatal development with risk of sudden infant death syndrome, deficits in auditory processing and altered infant brain development. (10)
- Longer term harms of regular nicotine consumption, especially for young people, include changes to brain development leading to impaired attention, learning and memory, mood and/or behavioural changes, and the potential to worsen stress and increase depression and anxiety. (11)
- More immediate harms of e-cigarette use can include throat irritation, cough, dizziness, headaches, nausea, seizures, loss of consciousness, and serious lung injury including E-cigarette or Vaping Associated Lung Injury (EVALI, largely but not exclusively from vitamin-E contaminated THC containing e-liquids). (12-15) E-cigarettes can also explode causing serious burns. (12)
- Worryingly, there is evidence that people who have never smoked and who use e-cigarettes are three times more likely than non-users to start smoking – raising concerns about a ‘gateway’ effect of e-cigarettes. (12)

Using this guide

The guide provides tools for health professionals and others who work with young people to screen for e-cigarette use and nicotine dependence. It also outlines potential strategies to support young people to manage their nicotine withdrawal and quit e-cigarettes.

The evidence for interventions to address nicotine withdrawal and support e-cigarette cessation among young people is lacking. This guide takes a pragmatic approach, based on interventions used for smoking cessation. It is recommended that health professionals and those who work with young people consider the individual needs of young people when determining the most appropriate support. Some young people will be seeking help to manage e-cigarette cravings and symptoms of nicotine withdrawal in certain situations (such as during school or work), while others may be more motivated to quit entirely. Some youth may be dual users of e-cigarettes and tobacco or other products and should be offered support accordingly.

Other young people may require additional support from more specialised services where additional needs are identified, such as mental ill-health or co-existing substance use disorders. Assessing and addressing the individual needs of the young person should be the priority in supporting the person at whatever stage they are at in the quit process.

While this guide is intended to support health professionals and others who work with young people to effectively address e-cigarette use, the area is complex and may require more targeted or specialised support. For health professionals seeking additional information, resources or tools to assist e-cigarette cessation, please refer to the Sydney Children’s Hospital Network [Clinicians Guide to Supporting Adolescent and Young Adults Quit Vapes](#). (1)

Note: for guidance and procedures on obtaining consent to medical and healthcare treatment from young people refer to the [NSW Health Consent to Medical and Treatment Manual](#). (16)

¹Nicotine Replacement Therapy (NRT) is a different delivery mechanism to nicotine in e-cigarettes, the speed of delivery and safety of NRT is well established.



This Artwork by Mumbulla Creative is called Journey Together and represents the inherent strength, knowledge and capacity within Aboriginal communities to improve their health and the health of their communities embarking on a journey to quit smoking and vaping.

Supporting priority populations

Population groups at higher risk of adverse effects of e-cigarette use include:

- mental health consumers, including people living with underlying anxiety and depression, (17, 43)
- people from lower socio-economic backgrounds, (44, 45)
- Aboriginal², (46, 47)
- people who are sexual or gender minorities. (48, 49)

Tobacco use is also disproportionately higher in these communities.

A comprehensive, holistic and trauma informed approach is to be taken when addressing e-cigarette use with young people from priority populations. This includes the physical, spiritual, cultural, emotional, and social wellbeing of the young person. This is especially important for Aboriginal young people, who should be offered the opportunity to consult an Aboriginal Health Worker or Practitioner (where possible) that the person is comfortable with, or a culturally safe service, such as Aboriginal Quitline (accessed by calling Quitline and asking to speak to an Aboriginal Advisor). Support and interventions to quit e-cigarettes (and tobacco) are to be self-determined and adopt a strengths-based approach to ensure young people and their families feel supported in their progress to quit. A strengths-based approach acknowledges the strengths of Aboriginal people, their families, and their communities and the cultural determinants of health that support Aboriginal people's holistic

health and wellbeing, including self-determination, beliefs and knowledge and connection to culture, community and Country.

Young people who use e-cigarettes or tobacco may have complex needs associated with their nicotine / tobacco use, including psychosocial issues, trauma, mental health conditions, and drug and alcohol related health issues. Health professionals and others working with young people should provide e-cigarette and tobacco cessation support that is safe, respectful and trauma informed. Where appropriate, necessary referrals should be made to provide comprehensive care to young people with additional needs. When working with young people from a culturally and linguistically diverse ('CALD') background, support must be culturally responsive and linguistically suitable. This may include acknowledging differences in expectations about family involvement, recognition of the significant impact that stigma, discrimination, and trauma may have on their life, and using a professional interpreter where appropriate.

For further information on supporting priority populations please refer to relevant policy documents, including:

- [Integrated Trauma Informed Care Framework](#)
- [NSW Health Youth Health Framework](#)
- [NSW Aboriginal Health Plan](#)
- [NSW Plan for Healthy Culturally and Linguistically Diverse Communities](#)

²In this Guide, Aboriginal and Torres Strait Islander people are referred to as Aboriginal people in recognition that Aboriginal people are the original inhabitants of NSW.

Brief Intervention: Ask Advise Help

The use of the three-step Ask, Advise, Help (AAH) brief intervention model has been recommended to support smoking cessation by the RACGP and NSW Quitline (among others), and is the NSW Health preferred brief intervention model for smoking and e-cigarette cessation (see for example [PD2022_050](#)). (18)

When applied to the current context of supporting young people to quit e-cigarette use the Ask, Advise, Help model requires health professionals and others who work with young people to:

- **Ask** about e-cigarette use (and dual use of other products e.g., tobacco or cannabis) and nicotine dependence, record status, and identify the needs of the individual to tailor a support plan
- **Advise** the individual to quit e-cigarettes (and dual use of other products e.g., tobacco or cannabis), discuss harms of continued use, benefits of quitting, and provide information on the most effective methods to quit and manage nicotine withdrawals
- **Help** by making a referral to other services if appropriate (e.g., to Quitline), encouraging use of behavioural strategies if appropriate, organising pharmacotherapy if indicated, and providing follow-up.

The following information on screening for nicotine dependence, managing withdrawal symptoms and supporting cessation can be used in each step of the AAH model.

Screening tools

An essential first step when working with young people is to screen for e-cigarette use (and dual use of tobacco or other products) and assess the level of nicotine dependence the individual is experiencing. This will equip health professionals with the requisite knowledge to determine the most appropriate approach to supporting the young person. Always begin by asking young people about their e-cigarette use in a non-judgmental and empathetic way.

Short form: Time to First Vape (TTFV)

The Time to First Vape ('TTFV') (19) brief screening tool enables a rapid assessment of the level of nicotine dependence an individual is experiencing. This simple question is recommended as the first screening step when supporting young people who use e-cigarettes.

To use TTFV ask:

- *How long after waking do you vape?*

E-cigarette use within 30 minutes of waking (in the morning), experiencing withdrawals and cravings are all markers of nicotine dependence. (19)

Long form: M-HONC & Penn State

Other longer format screening tools may provide a more comprehensive measure of nicotine dependence (if required and / or time permits).

The **Modified-Hooked on Nicotine (M-HONC) checklist** (1) (Appendix 1) is a series of simple questions used to determine nicotine dependence and related loss of autonomy in young people. The M-HONC is scored by counting the number of YES responses. A young person who has a score above zero may be considered nicotine dependent and may have lost full autonomy or control over their e-cigarette use. (1)

The **Penn State E-Cigarette Dependence Index** (20) (Appendix 2) may also be used as a longer form screening tool. The Penn State measure asks about a variety of aspects of nicotine dependence, including length of e-cigarette use sessions, night-time and morning use, cravings, and withdrawal symptoms. The results provide an estimation of the young person's nicotine dependence, ranging from 'not dependent' through to 'high dependence'.

BOX 1:

Nicotine Withdrawal Symptoms

- Young people who are nicotine dependent are likely to experience nicotine withdrawal symptoms when they are not using their e-cigarettes (either during intentional abstinent periods ('quit attempts') or when they do not have access to e-cigarettes e.g., during school).
- People experience nicotine withdrawal differently. Common symptoms of nicotine withdrawal include:
 - Irritability, frustration, anger
 - Cravings
 - Anxiety
 - Mood changes (including low mood)
 - Difficulty concentrating or sleeping
 - Restlessness
 - Appetite changes
- Most withdrawal symptoms will have gone or be more manageable within the first few (2-4) weeks of quitting. (21,22) The psychological urge to use e-cigarettes can last longer.
- Young people should be reminded that nicotine withdrawal symptoms can be challenging, especially in the first few days or weeks of quitting, but they are a sign their body is recovering.
- The long-term benefits of quitting nicotine outweigh the short-term discomfort of withdrawal symptoms.

Behavioural strategies

Cognitive and behavioural strategies have been used as effective tools in supporting cessation and managing nicotine dependence for people who smoke, and these strategies have been adapted for e-cigarette use in young people. They are not meant to be implemented as standalone interventions and should be used as one part of an e-cigarette cessation plan. It is also important to note the benefits of obtaining support from a qualified professional where possible, noting that people are generally more successful at quitting if they access qualified support to help manage withdrawal symptoms and prevent and manage relapse.

Health professionals and others who work with young people should discuss behavioural strategies with the young person to determine what is most feasible for the individual, and what is likely to support them to meet their goals.

The following suggestions (Table 1) should be considered as a list of options to consider when supporting young people – use what is relevant and leave the rest.

While there is no single behavioural strategy that effectively supports cessation, a combination of behavioural strategies may be best practice to support the young person to manage their cravings and quit. These strategies require frequent practice to be effective.

The strategies provided are practical examples of changing behaviours to manage cravings and support e-cigarette cessation that are embedded in evidence-based science. Health professionals and others who work with young people should communicate the behavioural strategy to the young person, then explain with an example of how to do this strategy.

The behavioural strategies listed in Table 1 of this guide have been used with permission from the St. Vincent's Health Network NSW State-Wide Smoking Cessation Training team.

Table 1 – Behavioural strategies to support the young person to achieve their goal:

Strategy 1: Alternative dopamine reward with	<p>This strategy is based on the dopamine release as the reward. Dopamine is a ‘feel-good’ chemical released in the brain. Research has shown that nicotine increases the level of dopamine in the brain.</p> <p>Suggest: Instead of using an e-cigarette, the young person should carry a snack with them (nuts, flavoured sugar free gum) for a dopamine release.</p>
Strategy 2: Think of yourself as someone who does not use e-cigarettes	<p>This strategy is based on motivational interviewing so the young person can imagine themselves as someone who does not use e-cigarettes.</p> <p>To exercise this strategy, the young person can say to themselves: “I am not a vaper” “I don’t vape/smoke”</p> <p>This can include asking the young person to imagine an example of being offered an e-cigarette and role playing what their response would be.</p> <p>Example scenario 1: Imagine your friend / a group of friends, have asked you to go for a vape / take a hit of a vape. What is your response? “I don’t vape” “I don’t want a hit”</p> <p>Example scenario 2: Role play a scenario offering an e-cigarette to the young person. Think of other relevant scenarios with the young person so they can continue practising this strategy.</p>
Strategy 3: Use the “stray cat” metaphor	<p>This strategy uses the metaphor that the craving is like a stray cat. If you feed the cat, it will keep coming back. If you don’t feed it, the cat will eventually go away.</p> <p>Practise: ask the young person to mindfully rehearse the metaphor when they have no cravings. Use the image of the cat when the craving begins.</p>
Strategy 4: Distraction	<p>Suggest the young person distract themselves by doing something else e.g., Play a video game, go for a walk, look at Instagram / Snapchat (if all dealers / vape material has been deleted or blocked), listen to music.</p> <p>Advanced technique: distraction with imagery. When experiencing a craving the young person learns to visualise something completely different like being on a beach, or cows grazing in a paddock. If stuck, it may help for them focus on an aversive image e.g., vomiting.</p> <p>Practise: Mindfully rehearse a simple distracting visualisation when there is no craving.</p>
Strategy 5: Rewards or incentives (contingency management)	<p>Suggest the young person set measurable goals to reduce or cease their e-cigarette use including positive reinforcement (rewards or incentives) for periods of abstinence.</p> <p>Example scenario 1: Involve a parent / caregiver who agrees to provide a reward to the young person for not using e-cigarettes for one week (or other agreed time).</p> <p>Example scenario 2: Support the young person to identify a reward they can give themselves for an agreed period of abstinence.</p>
Strategy 6: Make a promise (either committing to one or more of the above behavioural strategies, or to not using e-cigarettes)	<p>Studies have shown that when people make a promise to do something they are more likely to comply.</p> <p>Example 1: Ask the young person to make a promise to commit to doing one or more of the behavioural strategies in this guide.</p> <p>This can also be used in a situation where the health professional/worker asks the young person to make a promise to not use e-cigarettes at specific times or number of days.</p> <p>Example 2: Do you promise me that you won’t use e-cigarettes (vape) during school hours? The young person may agree with a handshake (if appropriate).</p>

Other support tools and tips can be considered and used in combination with the behavioural strategies in Table 1. These may include supporting the young person to (see Appendices 3-6 for templates and further information):

- Preparing themselves and their environment to quit
 - decide on a quit date
 - develop a quit plan using the My Quit Plan in Appendix 4
 - consider planning to quit when temptation and stress will be lower, e.g., on a family holiday, in a period when not attending concerts or events that may be high vaping environments and encourage slip-ups
 - dispose of any e-cigarettes including used or 'dead' e-cigarettes
 - mute or block vaping friends, influences, contacts, or dealers from social media (Instagram, TikTok, Snapchat, etc.)
- Seek support from understanding family and friends
- Exercise (short high-intensity bursts e.g., 1-minute up and down stairs or push-ups (3))
- Behavioural counselling
 - This can be through a third party such as Quitline or an addiction specialist
 - Use of quit apps or online support forums (e.g., iCanQuit) where helpful

Quitline (13 7848) is a confidential telephone information and counselling service, helping people who smoke and/or vape to plan for quit attempts and prevent relapse. Quitline also provides tips and information to parents and family members of people who smoke and/or vape, and health professionals. Quitline offers a dedicated Aboriginal Quitline service with Aboriginal counsellors.

iCanQuit.com.au offers information and digital tools for people who smoke and vape, to help them quit and stay quit. There is an online community providing tips on quitting, finding motivations and getting support from other people also quitting.

Pharmacotherapy

Individuals who are nicotine dependent and cannot access nicotine products (including e-cigarettes or tobacco) may experience nicotine cravings and withdrawals that can be highly disruptive to school and work and can hinder attempts to quit e-cigarettes.

Pharmacotherapy (medicines) to manage nicotine withdrawals may be appropriate for some young people where behavioural strategies alone are not effective in controlling cravings or quitting, or where nicotine withdrawal symptoms are significantly disrupting the individual's quality of life. Best practice for smoking cessation, and applicable to e-cigarettes in lieu of specific evidence, indicates behavioural support should always accompany treatment with pharmacotherapies to have the highest success rate (noting more intense interventions improve success). Refer to pages 7-8 for information on behavioural strategies.

Pharmacotherapy options for young people include:

- Nicotine Replacement Therapy (NRT) – >12 years
- Varenicline –>18 years

Note: There is currently no evidence supporting the use of NRT for e-cigarette cessation among young people. There is emerging evidence on the effectiveness of varenicline to support over 18s to quit e-cigarettes, (23) however neither medication has proven effective in promoting long-term quitting in this population group. (24) The use of NRT and varenicline to manage nicotine withdrawals related to e-cigarette cessation is 'off-label'. This means that the use of these medications for the purpose of e-cigarette cessation is not listed in the Australian Register of Therapeutic Goods (ARTG). Off-label use of medications is not uncommon in clinical practice, but young people (and their guardians where appropriate) should be informed that their treatment is off-label and be engaged in a full and open discussion regarding benefits and risks depending on their own situation. (25) Young people should also be informed about the costs of medications provided off-label. Accordingly, health practitioners should use their professional judgement when considering pharmacotherapies for young people who use e-cigarettes, and seek advice from senior staff, pharmacy teams, or an addiction specialist, if unsure. For users of this Guide who are not health

professionals, decisions around pharmacotherapy use should be discussed with a GP or other suitably qualified health professional.

This document provides high level guidance on the use of pharmacotherapies, acknowledging specific guidance for dosage and titration has not yet been developed by NSW Health. For further information on dosage and titrating NRT, readers may refer to the Sydney Children's Hospital Network [Clinicians Guide to Supporting Adolescent and Young Adults Quit Vapes](#),⁽¹⁾ the RACGP [Supporting smoking cessation: A guide for health professionals](#),⁽²⁾ [American Academy of Paediatrics](#),⁽²⁶⁾ or local resources where available.

Nicotine Replacement Therapy (NRT)

NRT is a form of pharmacotherapy that releases a measured dose of nicotine to help reduce withdrawal symptoms and cravings, without individuals inhaling the other harmful chemicals present in tobacco, or e-cigarette vapour.^(2, 27, 28) NRT releases measured doses of nicotine and thereby has lower dependence risk.

NRT is safe for use in individuals aged 12 and over where no contraindications are present.³

It may be appropriate to start NRT if the young person is experiencing daily e-cigarette use, withdrawal symptoms or cravings, or TTFV is within 30 minutes of waking,⁽¹⁾ or where other factors are preventing the young person from successfully managing their nicotine dependence (such as underlying mental illness, other substance use, or other life stressors they are experiencing). Health professionals should assess the individual to determine their needs and decide together with the young person the most appropriate support plan.

NRT is available in a long-acting form (nicotine patch) and in a variety of short-acting oral forms (e.g., gum, lozenge, inhalator, mouth spray).⁽²⁸⁾ Combination NRT using a long-acting patch together with short-acting oral forms (to reduce breakthrough cravings) has been recommended to achieve optimum treatment effectiveness for smoking cessation when paired with behavioural support, and a similar regimen is

recommended to support e-cigarette cessation.^(1, 28)

It is important to advise young people on the correct use of the different forms of NRT to ensure an adequate dose is taken to relieve cravings and withdrawal symptoms, and to encourage sufficient length of treatment.^(28, 30) Young people should be encouraged to speak to their doctor or other health professional about whether NRT is appropriate for them, what doses they might need, and how to reduce over time. The Pharmaceutical Benefits Scheme subsidises the use of certain forms of NRT for the management of nicotine dependence, enabling eligible young patients access to NRT at a reduced price.

Varenicline

Varenicline was developed specifically for smoking cessation and acts as a partial agonist of nicotinic receptors in the central nervous system to relieve cravings and nicotine withdrawal symptoms, and a partial antagonist to block the rewarding effect of nicotine consumption.⁽³¹⁾

The RACGP recommends two options for using varenicline to quit smoking, both shown to be equally effective. These options may be used to support e-cigarette cessation in over 18s. The 'fixed option' involves the person who smokes setting a date to stop smoking (or using e-cigarettes when used for that purpose) – varenicline should start one to two weeks before this date. The alternative 'flexible approach' is when the person who smokes (/uses e-cigarettes) begins varenicline dosing, then quits between days 8 and 35 of treatment.⁽²⁾ Whilst a third option of "slow reduction" is included in the Consumer Medicine Information for Champix® (brand name for varenicline) this method of use is not endorsed by groups such as the RACGP. This approach suggests patients start taking varenicline and then gradually reduce the number of cigarettes with the aim to have stopped smoking on the last day of the 12-week treatment period.

There is emerging evidence varenicline may help to support individuals over 18 years to quit e-cigarettes.⁽²⁹⁾ For more information on varenicline, refer to the [Consumer Medicine Information](#) (CMI) for Champix® available through the TGA.⁽³²⁾

³ Contraindications for NRT include:

- Children under 12 years of age
- People with known hypersensitivity to nicotine or any other component of the NRT product
- People < 45 kg can use NRT but may require the lower dose such as a 14mg/24hr patch

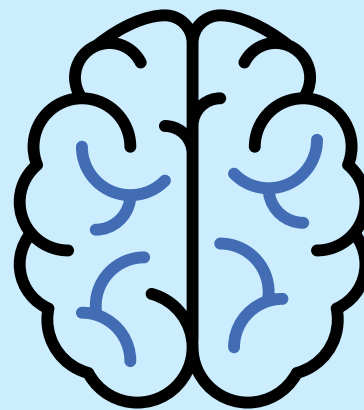
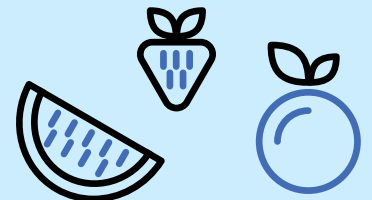
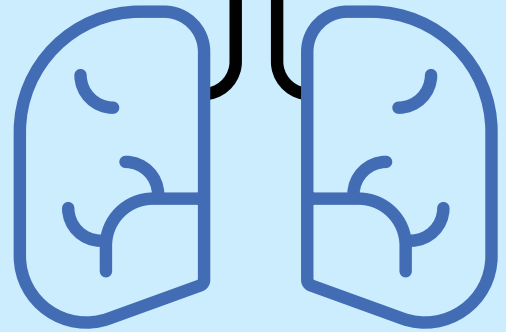
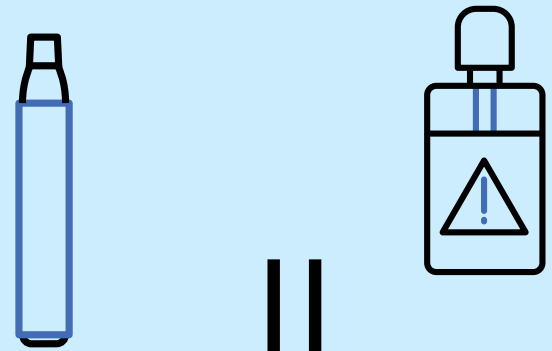
Prescription Nicotine Vaping products

In line with the TGA requirements, NSW Health does not recommend prescription nicotine vaping products to support e-cigarette cessation among young people. E-cigarettes are not proven safe and effective smoking cessation aids. (33) There are other proven safe and effective options to help smokers quit that can be used to support young people to quit e-cigarettes. Medical practitioners who decide to prescribe nicotine vaping products should follow current guidance provided by the [Therapeutics Goods Administration](#). (34)

As more information becomes available on prescription nicotine vaping products, this section will be updated.

Drug interactions with cessation

There is preliminary evidence that, as with smoking, e-cigarette use may produce toxic effects that induce the generation of polycyclic aromatic hydrocarbons and other harmful substances, that could alter the way in which some medications are metabolised by the body. (3) It is recommended health professionals monitor medication dosing for young people who are dual users (tobacco and e-cigarettes) and are receiving medications known to be metabolised by CYP1A2 and 2D6 enzymes (see the NSW Health [Drug Interactions guide](#) for further information (35)). Medication monitoring should be used even if considered “light” smokers. Please note, use of NRT does not affect medication levels.



Step 1 – Ask

<p>1. Ask screening questions to determine e-cigarette use</p>	<p>“Do you vape?”</p> <p>“Do you use any other products containing tobacco, like cigarettes, shisha, or cannabis?” (If the young person responds yes to the above question, ask subsequent questions for both vaping and other tobacco product/s they use)</p> <p>“In the last month, how many times have you vaped?”</p> <p>If struggling to initiate conversation, try an open-ended question: “Some people use vapes to manage their stress, what has your experience been?”</p> <p>If the young person says no to all the above, ask: “Have you ever used vapes or tobacco products (like smokes, shisha or cannabis)?”</p> <p>If young person has never used e-cigarettes or other tobacco products, affirm their choice.</p> <p>If young person answers yes to any of the above, continue.</p>
<p>2. Ask screening questions to determine dependence and understand nicotine withdrawal symptoms</p>	<p>Screen for nicotine dependence.</p> <p>Short form: <u>Time to First Vape (TTFV)</u>. Use TTFV by asking: “How long after waking do you vape?”</p> <p>Long form: Modified-Hooked on Nicotine Checklist (M-HONC) or PENN State E-Cigarette Dependence Index</p> <p>Refer to Appendix 1 for M-HONC and Appendix 2 for Penn State.</p> <p>Ask about nicotine withdrawal symptoms, such as:</p> <ul style="list-style-type: none"> • Irritability, frustration, anger • Cravings • Anxiety • Difficulty concentrating • Increased appetite • Restlessness • Depressed mood • Difficulty sleeping (insomnia) <p>Ask about what they are vaping:</p> <ul style="list-style-type: none"> • Brand • Type (e.g., disposable, rechargeable, refillable) • Flavour • With/without THC (tetrahydrocannabinol)
<p>3. Ask about the immediate needs of the individual</p>	<p>Determine and agree with the young person what their immediate priorities are, e.g.: Managing nicotine withdrawal symptoms</p> <ul style="list-style-type: none"> • Supporting long-term cessation

Step 2 – Advise

1. Advise young person to quit vaping	<p>Ask permission to advise about the harms and risks of vaping.</p> <p>In a non-judgmental way, advise the young person to quit vaping, and inform them of the most effective ways to do so.</p> <p>“One of the best things you can do for your health is to quit vaping, I can help you with this”</p>
2. Advise on harms and risks associated with e-cigarette use and benefits of quitting	<p>“Would you like me to give you some information about vaping?”</p> <p>If yes, some examples of harms to discuss include:</p> <p>“Most vapes contain nicotine, which is highly addictive and can harm your brain development.” (noting the brain continues to develop until the age of 25)</p> <p>“Vaping has been linked to serious lung disease, and many of the other long-term health effects are not yet known”</p> <p>“Vape aerosol is not water vapour. Vapes can contain the same harmful chemicals found in cleaning products, nail polish remover, weed killer and bug spray”</p>
3. Provide information and NSW Health factsheets to support AYA quit	<p>Provide the young person information about e-cigarettes and NSW Health factsheets about quitting:</p> <ul style="list-style-type: none"> • ‘Do you know what you’re vaping?’ (36)

Step 3 – Help

1. Discuss behavioural strategies	<p>Discuss barriers and opportunities for cessation that the young person may experience (see Appendix 6). Consider:</p> <p>“What are some challenges to quitting?”</p> <p>“What are some good reasons to quit?”</p> <p>Discuss suitable behavioural strategies to support the young person with cessation, e.g.:</p> <ul style="list-style-type: none"> • Using an alternative dopamine reward such as nuts or flavoured sugar-free gum • Thinking of yourself as someone who does not vape • Using the “stray cat” metaphor • Trying distraction • Establishing rewards or incentives • Making a promise (either committing to try one or more of the above behavioural strategies, or to not using vapes for a certain time) <p>Assist the young person to develop a plan to quit vapes (and tobacco if a dual user) and strategies for coping with high-risk situations (Appendices 3,4,5).</p> <p>Document in records / notes, the young person’s decision to quit.</p>
-----------------------------------	--

Step 3 – Help (cont.)

<p>2. Consider whether pharmacotherapies are appropriate</p>	<p>Depending on nicotine dependence levels and whether the young person is a dual user of tobacco and vapes, NRT or Varenicline may be appropriate to help manage cravings and nicotine withdrawals.</p> <p>For more information, refer to the Pharmacotherapy section of this Guide or other resources (such as SCHN Guide, RACGP, NSW Health tools, etc.).</p> <p>Pharmacotherapies should always be combined with behaviour change support (e.g., Quitline).</p> <p>It is recommended young people discuss pharmacotherapy options with their doctor or other suitably qualified health professional.</p>
<p>3. Refer to other cessation services</p>	<p>Refer the young person to:</p> <ul style="list-style-type: none"> • iCanQuit website (www.iCanQuit.com.au) • Quitline 13 7848 • Aboriginal Quitline 13 7848 • Quit apps (iCanQuit, etc.) • Other e-cigarette cessation programs (where available)
<p>4. Refer to other services, if appropriate</p>	<p>Depending on the circumstances (for example if the young person is dual using vapes and other drugs), some young people may require referral to more specialised services, such as smoking/nicotine cessation clinical nurse consultants (CNCs), Mental Health services and Alcohol and other Drug services. These services can support the young person to quit vaping whilst addressing their other health needs.</p>
<p>5. Arrange follow up calls or appointments</p>	<p>Offer ongoing support to check in.</p> <p>Arrange follow up appointments to review progress and motivate the young person to continue quit attempts if possible or refer young person to their GP or other health professional.</p> <p>Review effectiveness of pharmacotherapy.</p> <p><i>If required:</i> acknowledge that slip-ups are expected and a young person should not be discouraged, support the young person to re-commit to their goals and try again.</p>

Additional training and resources

- Alcohol and Drug Foundation: [Helping young people to quit vaping](#) (14)
- American Academy of Pediatrics: [E-cigarettes and Vaping](#) (see AAP Resources section) (37)
- ANU: Review of global evidence on the health effects of electronic cigarettes (April 2022)) [Summary Brief / Infographic](#) (12)
- NSW Health: [The facts about vaping](#) (36)
- NSW Health: [Resources related to management of nicotine dependence in the health care settings](#) (39)
- Sydney Children's Hospital Network: [Clinicians Guide to Supporting Adolescent and Young Adults Quit Vapes](#) (1)
- Sydney Children's Hospital Network: [KidsQuit smoking cessation brief interventions](#) E-learning program (41)
- Royal Australian College of General Practitioners: [Supporting smoking cessation - A guide for health professionals](#) (2))
- Renee Bittoun: [A monograph for counselling adult and adolescent vapers](#) (3)

Appendices

Appendix 1 – Modified Hooked on Nicotine (M-HONC) (screening tool)

QUESTIONS	YES	NO
Have you ever tried to stop vaping, but couldn't?		
Do you vape now because it is really hard to quit?		
Have you ever felt like you were addicted to vaping?		
Do you ever have strong cravings to vape?		
Have you ever felt like you really needed to vape?		
Is it hard to keep from vaping in places where you are not supposed to, like school?		

When you tried to stop vaping questions (or when you haven't vaped for a while...)

Did you find it hard to concentrate because you couldn't vape?		
Did you feel more irritable because you couldn't vape?		
Did you feel a strong need or urge to vape?		
Did you feel nervous, restless or anxious because you couldn't vape?		

Total Score:

The M-HONC is scored by counting the number of "YES" responses. A score above zero indicates the young person has a level of nicotine dependence and they may have lost full autonomy or control of their use of e-cigarettes/vapes.

Appendix 2 – Penn State Electronic Cigarette Dependence Index (screening tool)

	Answer	Score
1. How many times per day do you usually use your electronic cigarette? (assume that one “time” consists of around 15 puffs or lasts around 10 minutes)		
Scoring: 0–4 times/day = 0, 5–9 = 1, 10–14 = 2, 15–19 = 3, 20–29 = 4, 30+ = 5		
2. On days that you can use your electronic cigarette freely, how soon after you wake up do you first use your electronic cigarette?		
Scoring: 0–5 mins = 5, 6–15 = 4, 16–30 = 3, 31–60 = 2, 61–120 = 1, 121+ = 0 = 5		
3. Do you sometimes awaken at night to use your electronic cigarette?		
Scoring: Yes = 1, No = 0		
4. If yes, how many nights per week do you typically awaken to use your electronic cigarette?		
Scoring: 0–1 nights = 0, 2–3 nights = 1, 4+ nights = 2		
5. Do you use an electronic cigarette now because it is really hard to quit (electronic cigarettes)?		
Scoring: Yes = 1, No = 0		
6. Do you ever have strong cravings to use an electronic cigarette?		
Scoring: Yes = 1, No = 0		
7. Over the past week, how strong have the urges to use an electronic cigarette been?		
Scoring: None/Slight = 0, Moderate/Strong = 1, Very Strong/Extremely Strong = 2		
8. Is it hard to keep from using an electronic cigarette in places where you are not supposed to?		
Scoring: Yes = 1, No = 0		

When you haven't used an electronic cigarette for a while or when you tried to stop using...

9. Did you feel more irritable because you couldn't use an electronic cigarette?		
Scoring: Yes = 1, No = 0		
10. Did you feel nervous, restless, or anxious because you couldn't use an electronic cigarette?		
Scoring: Yes = 1, No = 0		

Total

Appendix 3 – Recording your decision (worksheet)

Research shows that it helps to write down your reasons for making a change, looking at it from all angles. You might like to take a minute to write out your personal reasons for vaping and thoughts about change using the table below. Rate each item on a scale of one to ten to indicate how important these are to you, with one being not at all important and ten being extremely important.

Pros and Cons of Vaping

Good things about Vaping		Not so good things about Vaping	
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
Total		Total	

To get further perspective, it is useful to record the pros and cons of changing or quitting. You may find that your reasons for change are not just the opposite of the reasons for vaping. This added information may help reinforce your decision for change.

Pros and Cons of change/quitting

Not so good things about quitting vapes		Good things about quitting vapes	
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
	/10		/10
Total		Total	

Appendix 4 – My Quit Plan (worksheet)

The worksheet is organized into several interconnected sections:

- My Goals** (Green box): A vertical list of five numbered lines for writing goals.
- Quit Date** (Red rounded rectangle): A space to write the intended date for quitting.
- My Reasons to QUIT** (Yellow box): A vertical list of four numbered lines for writing reasons.
- My Triggers to Vape** (Green box): A vertical list of five numbered lines for identifying triggers.
- Behavioural Strategies** (Blue box): A vertical list of five numbered lines for writing strategies to manage goals.
- Strategies to Manage Triggers** (Blue box): A vertical list of five numbered lines for writing strategies to manage triggers.
- I'm most Proud of:** (White box): A space for reflecting on achievements.
- My Support Team** (White rounded rectangle): A section containing the Quitline logo (137848) and a green icon of a crossed-out cigarette.

Flow arrows indicate the following relationships:

- Arrows from **My Goals** and **My Reasons to QUIT** point to **Quit Date**.
- Arrows from **My Goals** and **My Reasons to QUIT** point to **Behavioural Strategies**.
- Arrows from **My Triggers to Vape** and **My Support Team** point to **Strategies to Manage Triggers**.
- A large arrow from **My Support Team** points to **Behavioural Strategies**.

Appendix 5 – Coping with high-risk situations (worksheet)

Make a list below of your personal high-risk situation and or triggers and a plan for dealing with them. Examples include, with friends, at a party, feeling down or anxious, relaxing at home, getting paid, celebrating, etc. Make sure your plan/strategy is realistic and something you can easily do. It should also be enjoyable if possible.

High Risk Situation/Triggers	Strategy or plan

Remember: If you have a slip up/lapse, don't beat yourself up. These are all experiences to learn from. Reflect on where the slip up was, maybe going into a situation and not anticipating other people's use, or maybe not being prepared about what to say if someone offers you something.

Appendix 6 – Barriers & Opportunities (information)

It is important to consider the barriers the young person may be experiencing before discussing cessation strategies. Understanding the barriers can inform which strategies will be effective for the young person to quit e-cigarettes. There are several barriers and opportunities to consider when providing advice to young people on how to approach e-cigarette cessation. The barriers and opportunities outlined below can assist you to select strategies that meet patient's individual needs.

Common barriers; (43, 1, 3)

- Perceived social acceptability of e-cigarette use
- Lack of information about health risks compared to quitting smoking
- Social benefits i.e., time spent with friends and new connections
- Stress reduction, sensory & behavioural gratification
- Enjoyment of flavours and convenience – lack of smell, ability to vape in more places

Key opportunities that may encourage e-cigarette cessation in young people; (43, 1, 3)

- Reduced accessibility of e-cigarettes due to legal changes
- Health risks
- Costs
- Addiction
- Appeal of, and willingness to use, technology-based interventions such as a quit app or text messaging programs

Acknowledgments

The NSW Ministry of Health would like to acknowledge the contribution of the Working Group who have provided advice on the development of this guide, including (in alphabetical order):

- Ms Amanda Fairjones, State Manager NSW & Professional Support Advisor, Pharmaceutical Society of Australia
- Dr Bronwyn Milne, Head of Department Adolescent Medicine, SCHN; Staff Specialist Paediatrician and Addiction Medicine Specialist, CICADA Adolescent Drug and Alcohol Service Sydney Children's Hospital Network
- Dr Caroline Sharpe, Senior Medical Advisor / Public Health Physician, Centre for Population Health | Office of the Chief Health Officer, Ministry of Health
- Dr Chris Timms, General Practitioner, Royal Australian College of General Practitioners
- Dr Deborah Zador, Chief Addiction Medicine Specialist, Centre for Alcohol and Other Drugs, Ministry of Health
- Dr Gemma Urch, General Practitioner, Royal Australian College of General Practitioners
- Mr James McLennan, State-wide Smoking Cessation Training Coordinator, St Vincent's Hospital, Sydney
- Mr Joel Hillman, Clinical and Research Pharmacist, Faculty of Medicine and Health, University of Sydney
- Dr Krista Monkhouse, Staff Specialist Paediatrician, Youth Drug and Alcohol Clinical Services, Hunter New England Local Health District
- Ms Louise Ross, Clinical Lead, Quitline, Prevention, Cancer Institute NSW and Member of the Australian Association of Smoking Cessation Professionals
- Ms Mary Wahhab, Clinical Nurse Consultant, Adolescent Medicine Unit CICADA Adolescent Drug & Alcohol, Sydney Children's Hospital Network
- Dr Michael Bowden, Senior Clinical Advisor, Child and Youth Mental Health, Mental Health Branch, Ministry of Health
- Dr Rachel Skinner, Senior Clinical Advisor, Youth Health and Wellbeing, Health and Social Policy Branch, Ministry of Health
- Professor Renee Bittoun, Adjunct Professor, Life-

style Medicine at Avondale University, Notre Dame University Medical School founder and Editor-in-Chief of Journal of Smoking Cessation

- Ms Tracey Greenberg, Smoking Cessation trainer, Alcohol and & Drug Service St Vincent's Hospital

The NSW Ministry of Health would also like to acknowledge the valuable advice and support of the Centre for Aboriginal Health, NSW Ministry of Health and the Advocate for Children and Young People.

References

1. Wahhab, M., Milne, B. Clinicians Guide to Supporting Adolescent and Young Adults Quit Vapes. The Sydney Children's Hospitals Network. Available from: https://www.schn.health.nsw.gov.au/files/attachments/clinicians_guide_to_supporting_aya_quit_vapes_final71.pdf. Accessed 23 May 2023.
2. Royal Australian College of General Practitioners. Supporting smoking cessation - A guide for health professionals. Available from: <https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/supporting-smoking-cessation>. Accessed 23 May 2023.
3. Bittoun, R. Managing vaping cessation: A monograph for counselling adult and adolescent vapers. 2021. Available from: https://research.avondale.edu.au/oer_materials/1/. Accessed 23 May 2023.
4. Alcohol and Drug Foundation. Helping young people to quit vaping. Available from: <https://adf.org.au/talking-about-drugs/vaping/helping-young-people-quit-vaping/>. Accessed 23 May 2023.
5. Tobin G. Street sales, online dealers and convenience stores: Inside the thriving black market for nicotine vapes 2022. Available from: <https://www.abc.net.au/news/2022-06-27/inside-the-thriving-black-market-for-nicotine-vapes/101176544>. Accessed 23 May 2023.
6. NSW Population Health Survey (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health. Available from: <https://www.health.nsw.gov.au/surveys/adult/Pages/default.aspx>. Accessed 23 May 2023.
7. NHMRC. Inhalation toxicity of non-nicotine e-cigarette constituents: risk assessments, scoping review and evidence map. February 2022. www.nhmrc.gov.au/sites/default/files/documents/attachments/ecigarettes/Scoping_review_on_the_inhalation_toxicity_of_non-nicotine_e-cigarette_constituents.pdf
8. Ko TJ, Kim SA. Effect of Heating on Physicochemical Property of Aerosols during Vaping. *Int J Environ Res Public Health*. 2022;19(3).
9. Sharon A. McGrath-Morrow, Julie Gorzkowski, Judith A. Groner, Ana M. Rule, Karen Wilson, Susanne E. Tanski, Joseph M. Collaco, Jonathan D. Klein; The Effects of Nicotine on Development. *Pediatrics*. March 2020;145(3): e20191346. 10.1542/peds.2019-1346.
10. US Department of Health and Human Services. E-cigarette use among youth and young adults: A report of the Surgeon General. Maryland: Office of the Surgeon General, 2016. https://www.cdc.gov/tobacco/data_statistics/sgr/e-cigarettes/pdfs/2016_sgr_entire_report_508.pdf
11. Javed S et al A Scoping Review of Vaping, E-cigarettes and Mental Health Impact: Depression and Suicidality. *J Comm Hosp Internal Med Perspectives* 2022;12(3):33-39
12. Banks E, Yazidjoglou A, Brown S, Nguyen M, Martin M, Beckwith K, Daluwatta A, Campbell S, Joshy G. Electronic cigarettes and health outcomes: systematic review of global evidence. Report for the Australian Department of Health. National Centre for Epidemiology and Population Health, Canberra: April 2022.
13. Centers for Disease Control and Prevention. Outbreak of lung injury associated with the use of e-cigarette, or vaping products. United States of America: CDC. 2020. Available from: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html.
14. Chan BS, Kiss A, McIntosh N, et al. E-cigarette or vaping product use-associated lung injury in an adolescent. *Medical Journal of Australia* 2021; 215(7):313-314. e311.
15. US Department of Health and Human Services. E-cigarette use among youth and young adults: A report of the Surgeon General. Maryland: Office of the Surgeon General. 2016.
16. NSW Health. Consent to Medical and Healthcare Treatment Manual. 020. Available from: <https://www.health.nsw.gov.au/policies/manuals/Publications/consent-manual.pdf>. Accessed on 23 June 2023.

17. Becker, T. D., Arnold, M. K., Ro, V., Martin, L., & Rice, T. R. (2021). Systematic Review of Electronic Cigarette Use (Vaping) and Mental Health Comorbidity Among Adolescents and Young Adults. *Nicotine & Tobacco Research*, 23(3), 415-425. doi:10.1093/ntr/ntaa171.
18. NSW Health. Policy Directive: Reducing the effects of smoking and vaping on pregnancy and newborn outcomes. 2022. Available from: https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2022_050 . Accessed on 23 June 2023.
19. Park, E., Kwon, M., Chacko, T. et al. Instruments to measure e-cigarette related constructs: a systematic review. *BMC Public Health* 2022;22: 1135. <https://doi.org/10.1186/s12889-022-13510-4>
20. Foulds J, Veldheer S, Yingst J, et al. Development of a questionnaire for assessing dependence on electronic cigarettes among a large sample of ex-smoking e-cigarette users. *Nicotine Tob Res*. 2015;17(2):186–92. <https://doi.org/10.1093/ntr/ntu204>.
21. NSW Health. Nicotine dependence and withdrawal. Available from: <://www.health.nsw.gov.au/tobacco/Pages/nicotine-withdrawal.aspx>. Accessed on 20 June 2023.
22. Better Health. What to expect when you quit smoking. Available from: <https://www.betterhealth.vic.gov.au/health/healthyliving/What-to-expect-when-you-quit-smoking>. Accessed on 23 June 2023.
23. P Caponnetto, D Campagna, J S. Ahluwalia, C Russell, M Maglia, P M Riela, C F Longo, B Busa, R Polosa. A Double-Blind, Randomized, Controlled Phase III Trial Investigating Efficacy and Safety of Varenicline for Vaping Cessation in Adult Users. Pre-print. December 2022. Available from: <https://www.medrxiv.org/content/10.1101/2022.12.20.22283715v1>. Accessed on May 23 2023.
24. Clinical Information Access Portal. Available from: <https://www.ciap.health.nsw.gov.au/>. Accessed 23 May 2023.
25. Bell, J., Richards, G. Off-label medicine use: Ethics, practice, and future direction. *Australian Journal of General Practice*. 2021;50(5).
26. American Academy of Pediatrics. Nicotine Replacement Therapy and Adolescent Patients: Information for Pediatricians. 2019. Available from: https://downloads.aap.org/RCE/NRT_and_Adolescents_Pediatrician_Guidance_factsheet.pdf. Accessed on 23 June 2023.
27. iCanQuit. Quitting Methods: Nicotine Replacement Therapy. Available from: [https://www.iCanQuit.com.au/quitting-methods/nicotine-replacement-therapy-\(nrt\)](https://www.iCanQuit.com.au/quitting-methods/nicotine-replacement-therapy-(nrt)). Accessed on 23 May 2023.
28. Zwar, N. Smoking Cessation. *Australian Journal of General Practice*. 2020. 49(8). Available from: <https://www1.racgp.org.au/ajgp/2020/august/smoking-cessation-1>. Accessed 23 May 2023.
29. P Caponnetto, D Campagna, J S. Ahluwalia, C Russell, M Maglia, P M Riela, C F Longo, B Busa, R Polosa. A Double-Blind, Randomized, Controlled Phase III Trial Investigating Efficacy and Safety of Varenicline for Vaping Cessation in Adult Users. Pre-print. 2022. Available from: <https://www.medrxiv.org/content/10.1101/2022.12.20.22283715v1>. Accessed on May 23 2023.
30. NSW Health. Tool 5: Quick guide to nicotine replacement therapy (NRT). Available from: <https://www.health.nsw.gov.au/tobacco/Pages/tools-for-health-professionals.aspx>. Accessed 23 May 2023.
31. NSW Health. Nicotine dependence and withdrawal. Available from: <://www.health.nsw.gov.au/tobacco/Pages/nicotine-withdrawal.aspx>. Accessed on 20 June 2023.
32. Australian Government Department of Health and Aged Care. Therapeutic Goods Administration. Available from: <https://www.ebs.tga.gov.au/>. Accessed on 23 June 2023.
33. Therapeutic Goods Administration. Nicotine vaping products and vaping devices: guidance for the Therapeutic Goods (Standard for Nicotine Vaping Products) (TGO 110) Order 2021 and related matters. Canberra: TGA, 2021.

https://www.tga.gov.au/sites/default/files/nicotine-vaping-products-and-vaping-devices_0.pdf

34. Therapeutic Goods Administration. Nicotine vaping products hub. Available from: <https://www.tga.gov.au/products/medicines/prescription-medicines/nicotine-vaping-products-hub>. Accessed on 23 June 2023.
35. NSW Health. Tool 7: Quick guide to drug interactions with smoking cessation. Available from: <https://www.health.nsw.gov.au/tobacco/Pages/tools-for-health-professionals.aspx>. Accessed 23 May 2023.
36. NSW Health. The facts about vaping. Available from: <https://www.health.nsw.gov.au/vaping>. Accessed on 23 May 2023.
37. American Academy of Pediatrics. E-Cigarettes and Vaping. Available from: <https://www.aap.org/en/patient-care/tobacco-control-and-prevention/e-cigarettes-and-vaping/>. Accessed on 23 June 2023.
39. NSW Health. Tools for Professionals. Available from: <https://www.health.nsw.gov.au/tobacco/Pages/tools-for-health-professionals.aspx>. Accessed on 23 June 2023.
40. Pharmaceutical Society of Australia. Guidelines for pharmacists providing smoking cessation support. 2021. Available from: <https://my.psa.org.au/s/article/Guidelines-for-pharmacists-providing-smoking-cessation-support>. Accessed on 23 June 2023.
41. Sydney Children's Hospital Network. KidsQuit smoking cessation brief interventions E-learning program. Available from: <https://kidshealth.schn.health.nsw.gov.au/kidsquit-brief-interventions-smoking-cessation-e-learning>. Accessed on 23 June 2023.
42. Moxham-Hall V, du Toit A, Rawlings D. Clinical interventions for e-cigarette cessation in young people: an Evidence Snapshot brokered by the Sax Institute for the NSW Ministry of Health. 2022.
43. Taylor, E., Brose, L. S., McNeill, A., Brown, J., Kock, L., & Robson, D. (2023). Associations between smoking and vaping prevalence, product use characteristics, and mental health diagnoses in Great Britain: a population survey. *BMC Medicine*, 21(1), 211. doi:10.1186/s12916-023-02890-y.
44. Han, G., & Son, H. (2022). A systematic review of socio-ecological factors influencing current e-cigarette use among adolescents and young adults. *Addict Behav*, 135, 107425. doi:10.1016/j.addbeh.2022.107425.
45. Vallata, A., O'Loughlin, J., Cengelli, S., & Alla, F. (2021). Predictors of Cigarette Smoking Cessation in Adolescents: A Systematic Review. *Journal of Adolescent Health*, 68(4), 649-657. doi:https://doi.org/10.1016/j.jadohealth.2020.09.025.
46. Heris, C., Scully, M., Chamberlain, C., & White, V. (2022). E-cigarette use and the relationship to smoking among Aboriginal and Torres Strait Islander and non-Indigenous Australian Secondary Students, 2017. *Aust N Z J Public Health*, 46(6), 807-813. doi:https://doi.org/10.1111/1753-6405.13299.
47. Seo, Y. S., & Chang, Y. P. (2022). Racial and Ethnic Differences in E-Cigarette and Cigarette Use Among Adolescents. *J Immigr Minor Health*, 24(3), 713-720. doi:10.1007/s10903-021-01229-0.
48. Hoffman, L., Delahanty, J., Johnson, S. E., & Zhao, X. (2018). Sexual and gender minority cigarette smoking disparities: An analysis of 2016 Behavioral Risk Factor Surveillance System data. *Preventive Medicine*, 113, 109-115. doi:https://doi.org/10.1016/j.ypmed.2018.05.014.
49. Krueger, E. A., Hong, C., Cunningham, N. J., Berteau, L. K., Cordero, L., Wu, E. S. C., & Holloway, I. W. (2023). Prevalence of Nicotine and Tobacco Product Use by Sexual Identity, Gender Identity, and Sex Assigned at Birth Among Emerging Adult Tobacco Users in California, United States. *Nicotine Tob Res*, 25(7), 1378-1385. doi:10.1093/ntr/ntad048.

