



Clinician's guide

Supporting adolescents and young adults to quit vapes

Focusing on screening, assessment and pharmacotherapy using the 5As brief intervention framework.



Contents

Introduction	page 3
Screening tools	page 4
5A brief intervention framework	page 4
Pharmacotherapy – nicotine replacement therapy	page 4
01. Ask	page 5
Ask-Screen for e-cigarette use	5
Ask about the type or brand of e-cigarette	5
02. Assess	page 6
Assess nicotine dependence	6
Assess readiness to change	7
03. Advise	page 8
Advise AYA to quit	8
Provide information about e-cigarettes and risks	8
04. Assist	page 9
Assist-not ready pre-contemplation	9
Assist-not sure contemplation	9
Assist-preparation	9
Assist-action and maintenance	9
05. Arrange	page 10
Arrange follow-up appointments	10
Table 1: Nicotine replacement therapy to assist with quitting vapes	11
Appendices	
1. Modified hooked on nicotine (M-HONC)	12
2. Penn State electronic cigarette dependence index (ECDI)	13
3. Readiness to change flowchart	14
4. Recording your decision	15
5. My quit plan (template)	16
6. My quit plan (example)	17
7. Coping with high-risk situations	18
8. NRT product information	19
References	page 20

Author

Mary Wahhab, Clinical Nurse Consultant, CICADA Adolescent AOD Service, SCHN

Co Authors

Dr Bronwyn Milne, Staff Specialist, Head of Department Adolescent Medicine Unit, SCHN

Acknowledgment

This document was developed in collaboration with Adolescent Medicine and CICADA Service at The Sydney Children's Hospitals Network (SCHN) We would like to thank the valuable input and contribution of the NSW Ministry of Health in reviewing this document.



This guide is to assist clinicians working with adolescents and young adults (AYA) to effectively address vaping and e-cigarette use with a specific focus on screening, assessment and pharmacotherapy using the 5As brief intervention framework. The term e-cigarettes or vapes is used interchangeably within this document and refers to the same product.

Introduction

Using e-cigarettes or vaping has become increasingly popular among young people in recent years. The 2021 NSW Population Health survey shows that 32.7% of 16 to 24 year olds had used an e-cigarette or vape at least once in 2020-2021. This was up from 21.4% in 2019-2020. Similarly, the proportion of 16 to 24 year olds who were current users of e-cigarettes or vapes increased from 4.5% to 11.1%.¹ The prevalence of e-cigarettes

and vapes threatens decades of progress in tackling tobacco use with its high nicotine content, appealing colours, low costs, wide availability and discreet designs. There is mounting evidence that exposure to nicotine during adolescence and young adulthood is not only associated with increased rates of other substance use, but also that such exposure has long term effects on the developing brain.²

Screening tools

Screening and assessment are critical to providing safe and effective care. Identifying substance use, its potential risks and impact on the AYA should form part of the assessment to reduce risk and provide interventions to promote good health and wellbeing.⁶

Although there are no validated screening tools that explicitly ask AYA about their use of e-cigarettes or other vaping products, there are well studied instruments that ask AYA about tobacco use. The following screening tools can be adapted to screen for e-cigarette or vape use for AYA:

The Screening to Brief Intervention (S2BI) asks the validated question, 'in the past year, how many times have you used tobacco?'. 3, 10

The Hooked On Nicotine Checklist (HONC) is a 10-item screening instrument to detect loss of autonomy or nicotine dependence. ^{4, 9, 10}

The Time To First Cigarette (TTFC) of the day has been identified as the best single item indicator of nicotine dependence which has been extensively used in various clinical settings. ^{5,9}

The Penn State Electronic Cigarette Dependence Index (ECDI) may be used to assess level of dependence. It is a 10-item questionnaire that includes time to first vape, nocturnal waking to use, cravings and nicotine withdrawals. The result of total scoring gives an indication of low to high dependence. ¹²

5A brief intervention framework

Brief interventions such as the 5As are commonly used to guide smoking cessation and can therefore be applied to AYA who use e-cigarettes or vapes. Clinicians should routinely ask about e-cigarette or vape use, assess their level of use and readiness to change, advise AYA to quit e-cigarettes or vapes, assist AYA with quitting and arrange for ongoing follow-up.^{3, 7, 10} The ASK, ADVISE and HELP tool is an alternative brief intervention tool, that is shorter than the 5As and may be appropriate depending on the clinical context.

Pharmacotherapy – nicotine replacement therapy

Attempts to quit e-cigarettes or vapes can be hindered by cravings and withdrawals. Nicotine replacement therapy (NRT) should be considered to assist AYA in achieving their goal of quitting and enhance cessation outcomes. NRT has been recommended for adolescents aged <18 years seeking to quit smoking and therefore would be helpful for AYA who use e-cigarettes or vapes. A combination of long-acting patches (for maintenance of nicotine delivery) as well as short-acting gum or lozenges (for breakthrough cravings) should be used for optimum treatment effectiveness.^{3,9} Nicotine inhalators should be avoided as they mimic the act of vaping and addressing the physical aspect of dependency (hand to mouth) is crucial.3

01. Ask

Ask all young people about e-cigarette or vape use

All clinicians should ask all their patients whether they use e-cigarettes/vapes or any other tobacco products. This should prompt the clinician to ask further questions about e-cigarette or vape use, provide education about the risks and provide support to quit e-cigarettes or vapes.

Ask - screen for e-cigarette use

Clinicians can use the S2BI validated question to explicitly ask AYA about use of e-cigarettes and other vaping products

'In the last month, have you used e-cigarettes or vapes'

If no, ask if they have ever used vapes: 'have you ever used e-cigarettes or vapes?'

If AYA has not used e-cigarettes or vapes, affirm their choice not to vape.

If yes, the following questions can be asked to determine vaping-related behaviours 'When did you first use e-cigarettes or vapes?'

'How many times have you used e-cigarettes or vapes in the last month?'

Ask about the type or brand of e-cigarette or vape the young person uses

Including quantity (units/day and number of puffs) and nicotine percentage

Ask about type and brand of vaping device the AYA is currently using

'What type of e-cigarettes or vapes are you using?' 'Disposable, rechargeable or refillable?'

'What brand of e-cigarettes or vapes are you using?' Some of the products AYA report using include IGET, HQD, Gunnpods. All come in varying number of puffs and nicotine concentration.

'Where do you get your e-cigarettes or vapes from?' This will help understand what might be in the vape liquid such as nicotine, other toxins or chemicals.

Ask about tetrahydrocannabinol (THC) use, flavours, nicotine concentration and quantity used

'What flavours do you usually use?'

'Do you use THC in your vaping device?'

'What is the concentration of nicotine?'

'How often do you vape in the day?'

'How many puffs do you use per day?', 'How many times per day do you use your e-cigarette or vape?' or 'How long does your vape last? or 'How many vapes (units) do you go through in one week?'

Vaping nicotine and cannabis places AYA at risk of dual dependency. Vaping THC may be associated with E-cigarette or Vaping-Associated Lung Injury (EVALI). Higher concentration cartridges may be associated with greater risk.²

Exposure to nicotine via e-cigarettes is difficult to quantify. Nicotine exposure may be significantly higher or lower than traditional cigarettes. Caution must be taken in estimating the dose of NRT.

02. Assess

Assess nicotine dependence and readiness to change

Clinicians should assess for nicotine dependence and the AYA's readiness to change to tailor intervention to the AYA's readiness to quit.

The HONC used to assess loss of autonomy or dependency on tobacco can be modified to reflect e-cigarette use. Similarly, the TTFC can be modified to Time To First Vape (TTFV) as a single item question to determine nicotine dependence. Alternatively, ECDI can be used to assess dependency which also includes the TTFV question.

Assess nicotine dependence

Use the **Modified Hooked On Nicotine Checklist (M-HONC)** to assess nicotine dependency and loss of autonomy (Appendix 1).

Use Time To First Vape - TTFV

Vaping within 30 minutes of waking, experiencing withdrawals and cravings are markers of nicotine dependence. The single item question is as follows:

'How soon after you wake do you have your first e-cigarette or vape?'

Alternatively, use ECDI to assess dependence, and include TTFV question **(Appendix 2)**.

Note: Attempts to quit vapes can be hindered by cravings and withdrawals.

Assess for Cravings

'Has there been a time when you had such strong urges to use e-cigarettes or vapes that you could not think of anything else?'

'Do you experience cravings?'

Assess for nicotine withdrawals

'Some people experience physical and psychological discomfort when they stop vaping. They report feelings such as irritability, frustration, anger, cravings, anxiety and depressed mood. Have you ever experienced this when you stop vaping or if you were not able to source one for any reason?'

Nicotine withdrawal symptoms include:

- · irritability, frustration, anger
- cravings
- anxiety
- difficulty in concentration
- · increased appetite
- restlessness
- depressed mood
- insomnia

Assess readiness to change

'How do you feel about vaping?'

'Have you thought about quitting e-cigarettes or vapes?'

'Have you ever tried to quit vaping in the past?'

'On a scale from 1 to 10, how motivated are you to cut down or quit vaping?'

'On a scale from 1 to 10, how important is it for you to quit vapes?'

'On a scale from 1 to 10, how confident are you about quitting vapes?'

If AYA is not ready, engage in readiness counselling:

Explore motivations to quit-see ASSIST section

'What are some things that would be good about quitting?' or 'What are some things that would motivate you to quit?'

Explore barriers to quitting - see ASSIST section

'What's stopping you from quitting?'

'What are some of the barriers to quitting?'

03. Advise

Advise all AYA who vape to quit

Clinicians are in a good position to advise AYA to quit e-cigarettes or vapes. This should be done routinely. Establishing rapport, developing trust and asking permission to advise about e-cigarettes or vapes and the risks associated with use helps minimise the risk of hindering the therapeutic relationship. Personalising the advice and benefits of quitting can further support the discussion around quitting e-cigarettes or vapes.

Clinicians are well placed to provide information and raise awareness around the risk of nicotine poisoning. Calls to the NSW Poisons Information Centre for accidental vaping exposures in toddlers have increased. In 2021, children aged 1-4 years accounted for 48% of calls related to vaping exposures. This is a threefold increase over the number of calls made for this age group in 2020. Inhalation or ingestion of nicotine can result in poisoning or fatality. Some of the symptoms include nausea, vomiting, abdominal pain, palpitations, wheezing, agitation, seizures and shortness of breath. ¹¹ Education around keeping vapes and nicotine liquid out of the reach of children is important.

Advise AYA to quit

Provide brief, consistent and positive reminders to quit.

Use messages that are clear, personalised, supportive and non-confrontational.

Be clear-'One of the best things you can do for your health is to quit vaping, I can help you with this'.

Personalised advice—'I know you have been worried about your level of energy and feeling breathless when playing soccer. Quitting vapes will help you feel much better, improve your fitness and not become breathless when you play soccer'.

'I can support you and help you quit vapes'

Provide advice about the positive reasons to guit (such as health, cost)

Provide information about e-cigarettes and risks associated with use

With the AYA permission, ask:

'Would you like me to give you some information about vaping?'

Offer NSW health Factsheet from the NSW Health Campaign

'Do you know what you're vaping?'

www.health.nsw.gov.au/tobacco/factsheets/vaping-factsheet-young.pdf

04. Assist

Assist all AYA to quit vapes

Clinicians need to determine the AYA readiness to quit to effectively tailor an intervention specific to quitting vaping (Appendix 3).

Assist – not ready pre-contemplation

Discuss the benefits of quitting and risks of ongoing use.

Provide information about second hand e-cigarette or vape exposure.

Encourage re-engagement when ready.

Assist – not sure contemplation

Engage in motivational interviewing counselling (Appendix 4).

Explore motivations to quit:

'What are the good things and not so good things about e-cigarettes or vapes?'

'What are some of the not so good things about quitting?' 'What are some things that would be good about quitting?'

Explore barriers to quitting:

'What's stopping you from quitting?' or 'What are some of the barriers to quitting?'

Offer assistance when ready.

Arrange follow up appointment to re-assess their readiness to change and offer further motivational counselling.

Assist – preparation

Provide affirmation and encourage decision to quit e-cigarettes or vapes.

Assist AYA to develop their own quit plan (Appendix 5).

The Quit Plan should include behavioural approaches and strategies to support the AYA to increase the chance of quitting vapes – view **Appendix 6** as an example of a quit plan.

Recommend pharmacotherapy – combination nicotine replacement therapy is most effective when accompanied by behavioural support **(Table 1).**

Assist AYA in developing relapse prevention strategies (Appendix 7).

Provide AYA the number to Quitline – 13 7848.

Assist – action and maintenance

Congratulate them for taking the step to quit e-cigarettes or vapes.

Assist AYA to develop relapse prevention strategies.

Review quit plan.

05. Arrange

Arrange follow up appointments and/or contact to review progress and strengthen their commitment to quitting vapes

Clinicians should arrange follow up appointments with AYA to review progress, offer further support, strengthen motivation to quit and review effectiveness of NRTs.

Arrange follow-up appointments

AYA - committed to quitting

Congratulate them and affirm their position

Review progress and challenges

Review pharmacotherapy and effectiveness (Table 1)

Encourage continuation of pharmacotherapy

Normalise lapses and relapses and support them to re-focus on achieving their goals

Help them reflect on triggers/situations that led to the lapse/relapse

Explore relapse prevention counselling and develop personalised strategies to maximise their quit journey (Appendix 7)

Encourage other supports through various modes of interventions (face to face, telehealth, SMS texts)

AYA - relapsed

Offer support and reframe this as a learning experience

Explore reasons for relapse

Offer ongoing support

Encourage future quit attempts and review plan

Health professionals can access the KidsQuit E-cigarette and Young people E-learning module.

https://www.schn.health.nsw.gov.au/clinical-hub/kidsquit-e-cigarettes-program

The KidsQuit e-learning module is an interactive and educational tool to provide professionals with simple strategies on vaping cessation advice for adolescents, parents and carers. KidsQuit has been developed by clinicians and experts at the Sydney Children's Hospitals Network.

This e-learning module is free and available to all professionals working with parents or young people who use e-cigarettes (vapes).

Table 1: Nicotine replacement therapy to assist with quitting vapes ⁷

Characteristics	Nicotine replacement product* (patch, gum, lozenge). Avoid use of nicotine inhalators as they mimic the use of e-cigarettes or vapes.
Clinical indicators	Daily e-cigarette use or vaping of products containing nicotine. Withdrawal symptoms and/or cravings. TTFV – within 30 minutes of waking.
NRT dosage guide	**Combination therapy – nicotine patch with a short-acting product to reduce breakthrough cravings is recommended.
	Refer to direction for use and possible side effects of NRTs to ensure safe and effective treatment and patient education (Appendix 8).
	NRTs can be used 2 weeks prior to quit date to optimise attempt to quit.
NRT patch	Nicotine patch (maintenance dose) – dosage should be titrated as needed. If TTFV is within 30 minutes of waking, withdrawal symptoms and cravings present – consider medium to high doses: Start with 14mg/24hr patch and titrate as needed. Add short acting NRTs (gum, mini lozenge, lozenge) for breakthrough cravings and use freely as per guide below. Use 16hr patch if AYA experiences nightmares with 24hr patch –10mg/16hr patch and titrate as needed. Individuals may need to start with a higher dose of 21mg/24hrs or 15mg/16hr nicotine patch if TTFV is within 5 minutes of waking, with withdrawals and intense craving. Dual use of smoking and e-cigarette or vape is likely to need a higher dose of NRT patch 21mg/24hr or 15mg/16hr. Use maintenance patch for 4–6 weeks, then switch to the next lowest dose patch for 2–4 weeks. Continue weaning until AYA is able to resist cravings using behavioural strategies alone.
NRT oral form (short acting)	Short acting nicotine (for breakthrough cravings) Gum: Use one piece (2mg or 4mg) every 1–2hrs 2mg: 8–20 pieces/day 4mg: 4–10 pieces/day Lozenge: Use one mini lozenge/lozenge (2mg or 4mg) every 1–2hrs (9–15 pieces) Mini lozenge: 1.5mg mini lozenge 9-20 pieces or 4mg 9–15 pieces/day

^{*} NRT is only indicated for >12 years. See www.mims.com.au for dosing and further information. Contraindications can also be people weighing less than 45kg; known hypersensitivity to nicotine; phenylketonuria; caution use after acute cardiovascular incidents. www.health.nsw.gov.au/tobacco/Publications/managing-nicotine-dependence.pdf **24-hour patch may affect sleep. Therefore can recommend using the 16-hour patch. 16-hour patch comes in 25mg, 15mg, and 7mg strength.

Drug interactions with smoking cessation

There is preliminary evidence that, as with smoking, vaping may produce toxic effects that induce the generation of polycyclic aromatic hydrocarbons and other harmful substances. Caution is recommended for AYA who are dual users (cigarettes and e-cigarette use) and are receiving medications known to be metabolised by the CYP1A2 enzyme. Medication monitoring should be used even if considered a light smokers. Nicotine Replacement Therapy does not affect medication levels. www.health.nsw.gov.au/tobacco/Factsheets/tool-7-guide-dug-interactions.pdf

Appendix 1 Modified hooked on nicotine (M-HONC)

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 (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:		

Scoring:

The MHONC is scored by counting the number of YES responses. A score above zero would indicate the AYA has a level of dependence on nicotine and they have lost full autonomy or control of their use of e-cigarettes or vapes.

Appendix 2 Penn State electronic cigarette dependence index (ECDI)

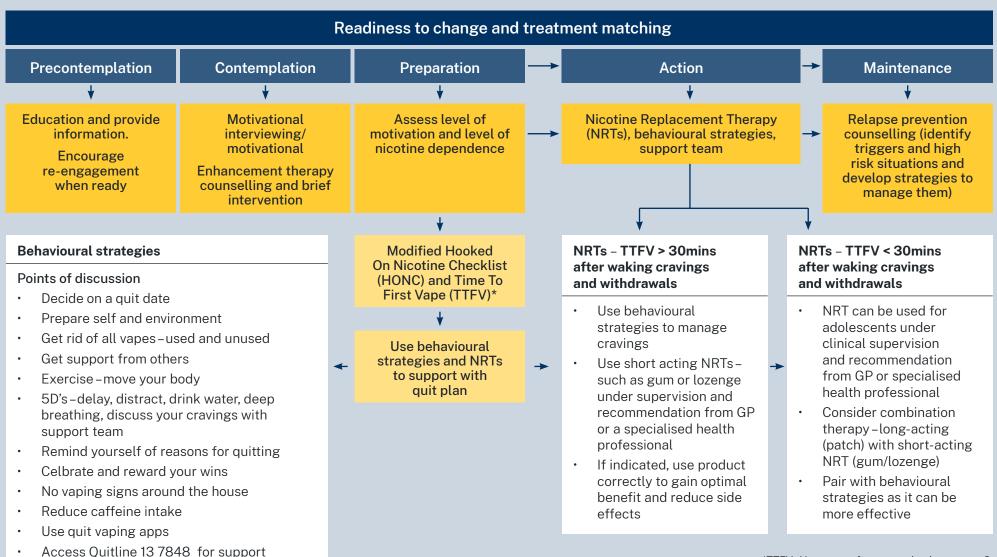
Client/patient name: Date:

	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 10minutes) 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, 31-60 = 2, 61-120 = 1, 121+ = 0		
3. Do you sometimes awaken at night to use your electronic cigarette? Scoring: yes = 1, no = 2		
4. If yes, how many nights per week do you typically awaken to use your electronic cigarette? Scoring: 0-1 nights = 0, 2-3 = 1, 4+ = 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		
9. When you haven't used an electronic cigarette for a while or when you tried to stop using did you feel more irritable because you couldn't use an electronic cigarette? Scoring: yes = 1, no = 0		
10. When you haven't used an electronic cigarette for a while or when you tried to stop using did you feel nervous, restless, or anxious because you couldn't use an electronic cigarette? Scoring: yes = 1, no = 0		
Total Score:		

Scoring:

0-3 = not dependent **4-8** = low dependence **9-12** = medium dependence **13+** = high dependence

Appendix 3 Readiness to change flowchart



*TTFV - How soon after you wake do you vape?

Appendix 4 Recording your decision

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 down your personal reasons for vaping and your thoughts about change using the table below.

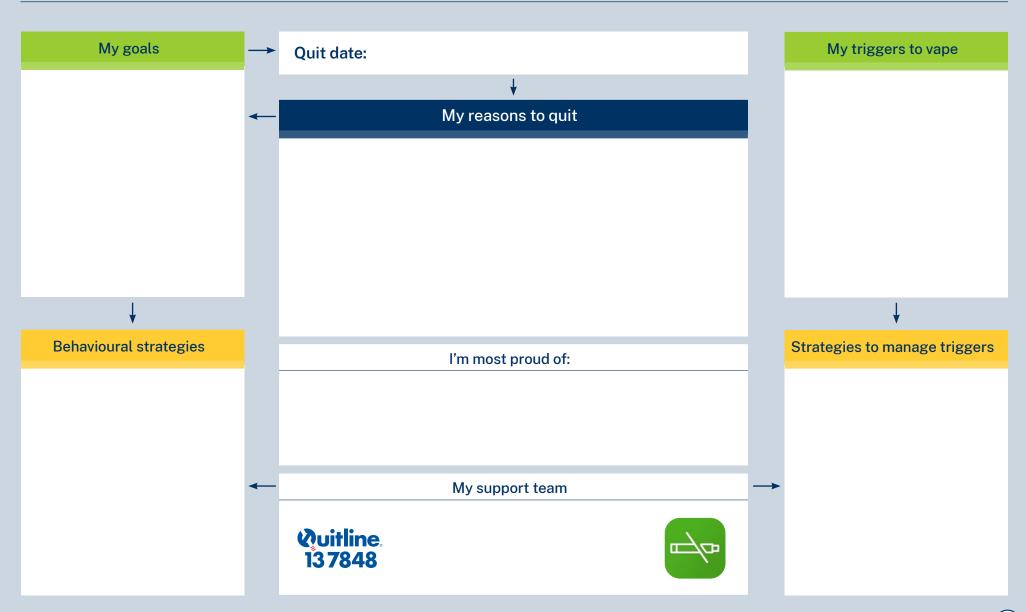
Rate each item on a scale of 1 to 10 to indicate how important these are to you, with 1 being not at all important and 10 being extremely important.

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
Total Score:		Total Score:	

To get a 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 changing/quitting vapes			
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
Total Score:		Total Score:	

Appendix 5 My quit plan (template)



Appendix 6 My quit plan (example)

My goals

- Get support from family and friends - talk about quit date, how they can support me, show them my plan and get them to help me through my triggers.
- 2. Talk to my GP to get support around cravings and discuss/purchase NRTs.
- 3. Get rid of all the used vapes.
- 4. Use vaping app to track days since last vape.

Behavioural strategies

- 1. Exercise will help me with withdrawals, cravings.
- 2. Cut down on my caffeine intake coffee.
- 3. Get rid of the vapes.
- Ask my friends to support me by not vaping around me, maybe they can quit too.
- 5. Reward myself clothes, shoes, games.
- 6. Use vaping app to monitor my progress.
- 7. Check in with my support group to stay on track.
- 8. Positive affirmations I can do it!"

Quit Date: 12/4/22 Start NRTs two weeks before

My reason to quit

- 1. Exercise without feeling out of breath.
- 2. Started netball rep and I don't want to let the team down.
- 3. Stay in control having difficulty not vaping at school.
- 4. Caught with vape at school don't want to get into more trouble.

I'm most proud of:

Taking the steps and preparing myself to quit, asking for help and be able to tell my friends that I want to stop.

My support team

Quitline. 137848

My family, friends, GP, vaping app.

If I need more help I'll call the

Quitline for more support.



My triggers to vape

- 1. Craving
- 2. Withdrawals anxious, irritable, agitated
- 3. Friends vaping around me
- 4. When I'm stressed school work
- 5. When I fight with mum
- 6. When I get anxious

Strategies to manage triggers

- Use short acting NRTs (gum) to manage the urges and cravings, titrate as needed and use combination - patch + gum/lozenge/inhaler/spray.
- Distract myself Using 5D's Delay thought, distract thought, deep breath, drink water, discuss my cravings with support person.
- Use my senses to manage my emotions, deep breathing, mindfulness techniques, talk to someone about my distress, go for a walk, paint/draw, watch a movie.
- 4. Tolerate discomfort self-talk/comfort "these emotions will pass", reduce stress, choose more appropriate time to quit.

Appendix 7 Coping with high-risk situations

Make a list below of your personal high-risk situations 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.

Make sure your strategy or plan 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 or 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 8 NRT product information

Direction for use

NRT Product	Direction for use
Nicotine patch	Apply the patch to clean, non-hairy, dry skin on the upper body (chest, rib cage, back, side of upper arm) and hold down for 10 seconds
	Rotate to different parts of the body each day to avoid skin irritation
Nicotine gum	Place one gum in your mouth and chew slowly until a strong peppery and/or tingling sensation is noticed
	'Park' the gum between your gum and cheeks or under the tongue for 1-2 minutes or until the taste disappears
	Chew again until the taste returns and repeat the process for around 30 minutes then discard
Nicotine lozenge	Place lozenge in mouth and roll around in the mouth for a few times to release the nicotine
	Park between the cheek and gum or under the tongue
	Continue to move every 5 minutes or so and repeat the process for up to 30 minutes or until the lozenge is completely dissolves

Possible side effects of NRT products

No serious side effects of either short or long term NRT use have been reported over the 30 years it has been in use. Side effects are relatively minor for most users; however individuals may experience some minor effects when using NRT. The most common ones and suggested ways to manage are listed below.

NRT Product	Side effect	How to manage
Patches	Skin irritation	Rotate the patch site and use hydrocortisone 1% cream for skin irritation
Sleep disturbance, vivid dreams	Apply the patch in the morning rather than at night. Remove the patch before sleep. Decrease caffeine intake by half	
	Use stretch adhesive tape over patch	
Patch doesn't stick, keeps falling off	Ensure skin is free from creams and lotions (including sunscreen or insect repellent)	
	When applying the patch, do not check if it has stuck by lifting the edge as this may make it loose	
Oral NRTs	Dyspepsia, nausea, hiccups, headache, cough, dry mouth, throat irritation	Check the product is being used correctly or change to a different oral product

References

- 1. NSW Health. (2021). NSW Population Health Survey. https://www.health.nsw.gov.au/news/ Pages/20220531_00.aspx
- 2. Chadi, N., Hadland, S. E., and Harris, S. K. (2019). Understanding the implications of the "vaping epidemic" among adolescents and young adults: a call for action. *Substance abuse*, 40(1), 7-10.
- 3. Hadland, S. E., and Chadi, N. (2020). Through the Haze: What Clinicians Can Do to Address Youth Vaping. The Journal of adolescent health: official publication of the Society for Adolescent Medicine, 66(1), 10–14. https://doi.org/10.1016/j.jadohealth.2019.10.009
- Chaffee, B. W., Halpern-Felsher, B., Jacob III, P., and Helen, G. S. (2022). Biomarkers of nicotine exposure correlate with the Hooked on Nicotine Checklist among adolescents in California, United States. Addictive Behaviors, 128, 107235.
- Branstetter, S. A., Muscat, J. E., and Mercincavage, M. (2020). Time to First Cigarette: A Potential Clinical Screening Tool for Nicotine Dependence. *Journal of addiction medicine*, 14(5), 409–414. https://doi.org/10.1097/ADM.0000000000000000010
- 6. NSW Health. (2021). Handbook for Nurses and Midwives: Responding effectively to people who use alcohol and other drugs. https://www.health.nsw.gov.au/aod/professionals/Publications/handbook-nurses-aod.pdf

- 7. Chadi, N., Vyver, E., and Bélanger, R. E. (2021). Protecting children and adolescents against the risks of vaping. Paediatrics & Child Health, 26(6), 358-365.
- 8. NSW Ministry of Health. (2016). Quick guide to Nicotine Replacement Therapy (NRT). https://www.health.nsw.gov.au/tobacco/Factsheets/tool-5-quick-guide-nrt.pdf
- Bittoun, R. (2021). Managing vaping cessation: A monograph for counselling adult and adolescent vapers. ResearchOnline@Avondale. https://research.avondale.edu.au/items/ bb195363-250d-4a98-b6ca-efb095c2fdb7
- Camenga, D. R., and Chadi, N. (2021).
 Recommendations for Prevention and Treatment of E-Cigarette Use Among Youth in the Clinical Setting. Electronic Cigarettes and Vape Devices, 75-90.
- 11. The Sydney Children's Hospital Network. (2022, July 8). Accidental vaping exposures in toddlers triple. https://www.schn.health.nsw.gov.au/articles/2024/02/accidental-vaping-exposures-toddlers-triple
- 12. Foulds, J., Veldheer, S., Yingst, J., Hrabovsky, S., Wilson, S. J., Nichols, T. T., and Eissenberg, T. (2015). Development of a questionnaire for assessing dependence on electronic cigarettes among a large sample of ex-smoking E-cigarette users. Nicotine & Tobacco Research, 17(2), 186-192.



Locked Bag 4001 Westmead NSW 2145 Australia Phone: (02) 7825 0000 Email: schn-mail@health.nsw.gov.au



