

Nicotine Replacement Therapy (NRT)

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This education has been developed in partnership with Aboriginal Health and Medical Research Council of NSW and NSW Health



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Acknowledgement of Country

We recognise the traditional custodians of the land and sea on which we live and work.

We pay our respects to Elders past and present.



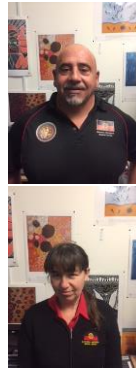
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Nicotine replacement therapies in ACCHS



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Learning Outcomes

By the end of this online QI & CPD activity you should be able to:

- Analyse management and intervention strategies when using use of Nicotine Replacement Therapy (NTR)
- Discuss the barriers to optimal smoking cessation strategies faced by Aboriginal and Torres Strait Islander people
- Identify specific advice and referral services that can assist Aboriginal and Torres Strait Islander people
- Recognise how the National guide can support best practice in prevention of lung cancer for Aboriginal and Torres Strait Islander people



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Who we are

IAMS is a Community Controlled Health Service governed by a Board of Directors who are annually elected from the Aboriginal Community. Membership boundaries extend from Helensburgh to Gerroa and eligibility is Aboriginal and Torres Strait Islander people over 18 years of age.



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NRT for ACCHS in NSW

- NSW Health initiative
- Direct grants to ACCHS in NSW
- For expenditure on NRT (including patches and other types of NRT)
- This webinar is to support AHW, drug and alcohol workers, nurses and GPs to encourage safe use of nicotine replacement products



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NRT

- Delivers the nicotine without the other harmful chemicals
- No damage to airways from inhalants
- ? Invented by Aboriginal people
- Pituri/ native tobaccos used in

Central Australia, stuck behind ear during travel or when not in use, enabling skin absorption

Some people use chewing tobacco, mixed with ash from local trees and store behind ear ('mubbudge' in Kriol)



Right – mubbudge – Wugular, NT, 2001



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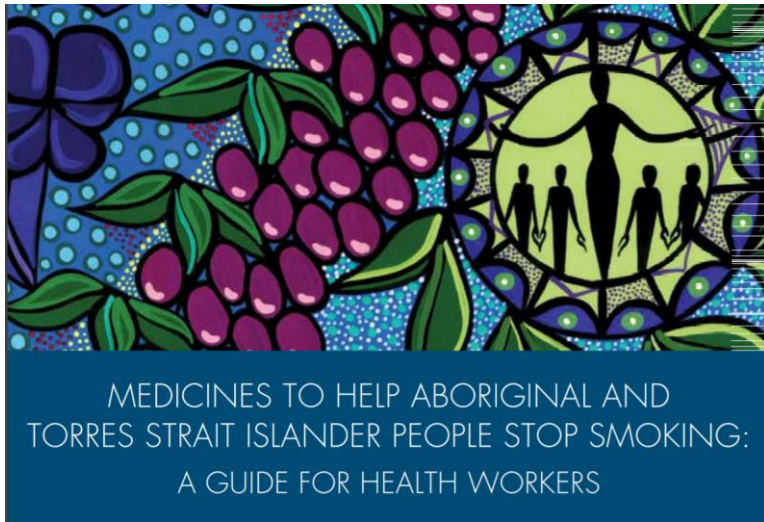
Brief intervention / advice

- Ask: Ask about tobacco use and record smoking status (this should be regarded as a vital observation, along with BP, pulse, temperature etc). Record as smoker, ex-smoker or never smoked in electronic medical record. Record number of cigarettes per day, previous quit attempts and their results and presence of smoking related disease.
- Advise smokers to quit: Advise smokers to quit in a way that is strong, personalized, supportive and non-judgmental. Linking the person's current illness to their tobacco use is a particularly useful way of emphasizing the need to quit. Discuss the health benefits of quitting.
- Assess willingness to quit: Assess whether the smoker is willing to make a quit attempt at this time.
- Assist in a quit attempt.
- Arrange follow-up: Arrange follow-up in the first week after cessation.

RACGP, Supporting smoking cessation: A guide for health professionals. RACGP, 2011. Accessed 16.5.17 <http://www.racgp.org.au/your-practice/guidelines/smoking-cessation/>



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Zwar N, Appoo S, Atkin L, Coffin J, Gussy K, Shen D, Sarin J, Commonwealth of Australia, 2012. Access at: http://www.quitas.org.au/sites/default/files/media/medicines_to_help_aboriginal_and_torres_strait_islander_people_stop_smoking.pdf



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NRT - Patches

- Nicotine replacement therapy - available over the counter
- Better success rates when commence patch AND oral NRT

Patches

- Available as nicotine patches (21mg, 14 mg 7mg), gum, inhaler and lozenges
- Patches now on PBS, on Close the Gap Scheme for Aboriginal and Torres Strait Islander people
- GPs and nurse practitioners can prescribe, other health staff can dispense with training
- Always good to deliver brief intervention at the same time
- Contraindications
- Always record in notes type and amount given



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NRT - Patches

- Side effects bad dreams – take off before bed
- Reactions to glue (patch shaped red spot) – use different brand, can use weak steroid cream e.g. hydrocortisone 0.5% available over the counter to ease
- Not sticking – can use adhesive dressing or tape to hold on or Friar's balsam
- Nausea (might need lower dose) and dizziness
- Relatively safe to use, care in first 4 weeks after ischaemic heart disease
- Course of 6 – 10 weeks but can use longer- always safer than smoking! Longer courses are often appropriate.
- PBS allows two course of three months each per Aboriginal person per year but can use 'off the shelf' NRT with no limit



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Dosing of NRT

- If someone is craving a smoke, increase NRT, e.g. more oral as well as patch
- Being irritable or 'stressed' might mean someone needs more NRT
- Some people metabolise nicotine faster than others
- Time to first smoke – less than 30 min to first smoke and indication of dependence
- More than ten cigarettes a day may be indication of dependence
- Don't give up – most people need a number of attempts!



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How to use a patch

- Peel off backing paper
- Place on clean dry skin
- Press down for ten seconds
- Remove after 24 hours, fold over and dispose of safely
- Wash hands
- Rotate sites



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Myths about NRT

Wrong: myth	Right: fact
NRT is just as bad for you as smoke: they both have nicotine	Nicotine is the chemical in cigarettes that makes you addicted to tobacco. It does not cause the bad health problems. Once you are nicotine dependent, it's hard to give up smoking as you feel bad from the withdrawal symptoms.
You can get hooked on NRT just like smokes	There's much less of a chance that you can get addicted from any of the forms of NRT. The nicotine in NRT is less than in a cigarette and it reaches your blood stream much slower than smoke from a cigarette.
Nicotine causes cancer	Nicotine does not cause cancer. The harmful chemicals in tobacco smoke cause cancer.
Nicotine causes heart disease	Smoking is a major cause of heart disease and stroke (damage to the blood vessels in your brain). Nicotine makes your heart rate speed up and your blood pressure higher. Both are bad signs for heart health. But the nicotine in NRT is less than in a cigarette and reaches your blood stream slower. Smoking is far more dangerous for your heart and your blood vessels than NRT. Scientists have proven that people with heart disease can use NRT safely to help them give up smoking.
If you smoke while you are taking NRT, you can have a heart attack	Smoking while using NRT does not increase your chance of a heart attack or stroke. It is better to stop smoking when you use NRT because large amounts of nicotine can make you sick. It is better to stop smoking when you use NRT to give yourself a better chance of quitting smoking.

NRT - Gum

- Chew the gum slowly when you feel like a smoke, until you feel a tingly feeling or peppery taste, then park the gum in your cheek
- Every now and then move the gum around
- Don't eat or drink when you have gum in your mouth
- Don't swallow the gum, throw it out after 30 minutes
- Don't chew more than 20 of the 2mg pieces or 10 of the 4mg pieces in a day



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NRT - Lozenge

- Lozenges should be sucked, not chewed, over 30 minutes, move the lozenge around in your mouth from time to time
- Don't eat or drink when you suck lozenges
- Don't swallow the lozenge
- Don't use more than 15 lozenges in one day



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NRT - Tablet

- Place the tablet under your tongue until it melts
- Don't swallow, suck or chew the tablet
- You can drink while the tablet is under your tongue
- Don't use more than 40 tablets in one day
- Other feelings you can get from oral NRT (gum, inhaler, lozenge, strips and tablet):
 - Vomiting
 - gut problems
 - Heartburn
 - sore mouth and throat
 - mouth ulcers
 - hiccups (gum)
 - coughing



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NRT - Inhaler

- Puff on the inhaler just like a cigarette
- After about 20 minutes of puffs, all the nicotine in one cartridge is gone.
- You can use 6-12 cartridges a day for 12 weeks
- Don't drink anything at the same time



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NRT - Strips

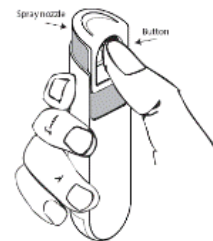
- Place strip on the tongue
- Close the mouth and press the tongue gently to the roof of the mouth until the strip dissolves (approximately 3 minutes)
- Do not chew or swallow
- Don't not eat or drink while using a strip
- Weeks 1 to 6 - 1 strip/ 1 – 2 hrs
- Weeks 7 to 9 - 1 strip/ 2-4 hrs
- Weeks 10 to 12 - 1 strip/ 4-8 hrs



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NRT - Spray

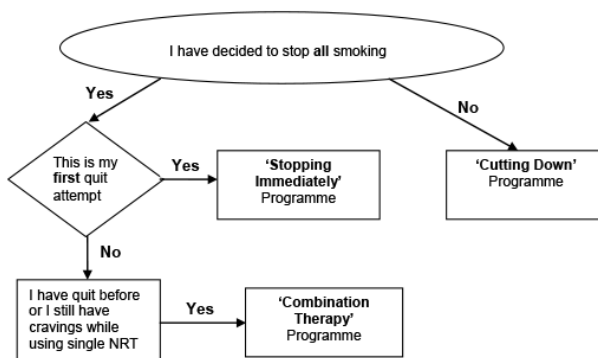
- Prime the spray
- Point the spray nozzle toward your open mouth and hold it as close to your mouth as possible
- Release 1 spray, avoiding lips
- Do not inhale, do not swallow for a few minutes afterwards



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Combination NRT

- Can use combination even from first quit attempt – better success rates eg Patch and 6 pieces of gum per day
- Use combination if cravings/ irritable/ stressed



NPS resources: <https://www.nps.org.au/medical-info/medicine-finder/nicorette-quickmist-oral-spray>



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	Client group	Dose	Duration (weeks)	Contraindications (adapted from MIMS online 2010)
Patch	>10 cigarettes per day and weight >45 kg	21 mg/24 h or 15 mg/16 h	>8	(Unscheduled) non smokers; children under 12 years; hypersensitivity to nicotine or any component of the patch; diseases of the skin that may complicate patch therapy
	<10 cigarettes per day or weight <45 kg or cardiovascular disease	14 mg/24 h or 10 mg/16 h	>8	
Gum	10-20 cigarettes per day	2 mg 8-12 per day	>8	(Unscheduled) Non-tobacco users; known hypersensitivity to nicotine or any component of the gum; children (<12 years)
	>20 cigarettes per day	4 mg 6-10 per day	>8	
Inhaler	>10 cigarettes per day	6-12 cartridges per day	>8	(S2) Non-tobacco users; hypersensitivity to nicotine or menthol; children (<12 years)

	Client group	Dose	Duration (weeks)	Contraindications (adapted from MIMS online 2010)
Lozenge	First cigarette >30 minutes after waking	1.5 or 2 mg 1 lozenge every 1-2 h	>8	(Unscheduled) Non-smokers, hypersensitivity to nicotine or any component of the lozenge; children (<12 years); phenylketonuria
	First cigarette <30 minutes after waking	4 mg 1 lozenge every 1-2 h	>8	
Sublingual tablet	Low dependence	2 mg every 1-2 h	>8	(Unscheduled) Non-tobacco users; known hypersensitivity to nicotine or any component of the tablet; children (<12 years)
	High dependence	two 2 mg every 1-2 h	>8	

Source: Tackling Tobacco. Action on Smoking and Disadvantage. Nicotine replacement. Frequently asked questions. Smoking Care Project by the Tobacco Control Unit, Cancer Council NSW, July 2010.¹⁸

Different ways to use NRT

- **Just quit:** you set a day you are going to stop smoking and on that day start NRT
- **Before you quit:** use a 21-mg/24 hour NRT patch while you are smoking for 2 weeks and then stop smoking and stay on the NRT patch. You can add oral NRT (such as gum) to the patch after you stop smoking if you still have cravings
- **Cut down to quit:** you can use oral NRT to gradually cut down. Start using oral NRT for 6 weeks at the same time as smoking. Each day, you cut down the number of cigarettes you smoke until you stop smoking cigarettes by 6 months. Continue NRT to help you get over the cravings and withdrawal symptoms.
- **Using NRT patches AND other intermittent NRT MORE effective**

NRT in pregnancy / breastfeeding

- Smoking cessation the most effective intervention in improving infant mortality out of all antenatal interventions
- Quitting at any stage of pregnancy beneficial but earlier is ideal
- Try 'cold turkey' first
- Try intermittent NRT (i.e. gum, inhaler, etc.)—similar peaks in nicotine in blood stream as smoking if have tried other methods and not worked
- Support partners/grandparents!



Above: image from Quit for New Life Campaign:
https://www.swhd.health.nsw.gov.au/populationhealth/PH_promotion/cisGap_quit.html

NRT for teenagers

- NRT can safely be used from 12 years of age
- Assess smoking from 10 years of age
- Product information says discuss with doctor

Varenicline

- Varenicline blocks nicotine receptor, 26% quit rate at one year, higher with NRT
- On PBS/ CTG, needs assessment by GP
- ? Can worsen mental health - monitor in unstable mental health clients e.g. severe depression – can worsen, however smoking cessation itself causes mental health issues
- Not fully evaluated in cardiac disease
- Nausea – GP can prescribed metoclopramide, normally settles, can continue low dose for longer
- Slightly more effective in women but cannot be used in pregnancy/lactation
- Cannot be used in pregnant women
- Combination with NRT more effective but cannot get both on PBS simultaneously



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Varenicline

- Starts with low dose once a day then twice a day
- First script lasts for 4 weeks, tell client to come back
- Next script for 8 weeks, can get more repeats
- Can smoke for the first 1-2 weeks while takes effect
- Users describe feeling of 'smoking ash' with no pleasure
- One course per year but can use bupropion in meantime



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Bupropion

- Bupropion antidepressant, 20% quit rate
- Available on PBS/ CTG, needs assessment by GP
- Need to take care when combining with other antidepressants
- Increased risk of seizure, especially in those who have had previous seizures or head injury, can occur in those who have never had seizures
- Cannot be used in pregnancy/ lactation
- Combination of NRT and bupropion effective



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Electronic cigarettes

- Electronic cigarettes mimic the physical mechanisms of smoking and receive a dose of nicotine without using combustible tobacco
- Look similar to traditional cigarettes and consist of a liquid nicotine cartridge, a vaporization chamber that heats and atomizes the nicotine, and a rechargeable battery
- Allow hand – mouth action, do not deliver other contaminants in tobacco, no passive smoking BUT not listed under TGA
- Made by independent companies, not as medicine ? Manufactured where? Not currently recommended
- In 2013, 1 in 7 (14.8%) smokers aged 14 or older had used battery-operated electronic cigarettes in the last 12 months

(Australian Institute of Health and Welfare 2014. National Drug Strategy Household Survey detailed report 2013. Drug statistics series no. 28. Cat. no. PHE 183. Canberra: AIHW. Available from www.aihw.gov.au Accessed 26 Oct 2015.)



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Quitline

- Quitline is a telephone information and advice or counselling service for people who want to quit smoking.
- Quitline ph 131 848 cost of a local call, 24 hour service - the number is on the pack!
- Also have fax back service – can support quit attempts
- Aboriginal counsellors
 - Can give advice, mail support, refer to local organisations
 - Can do active call back – effective
 - Can also provide resources e.g. Quit Books and no smoking stickers to support people when making quit attempts



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<http://www.quitnow.gov.au/internet/quitnow/publishingcp.nsf/content/home>



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Ordering NRT

- Can be ordered from a variety of sources e.g. private pharmacies/ wholesalers
- Varying prices
- Watch expiry dates – cheap product often means expires soon
- Might need to order several times through the year
- Good to purchase a range of products
- Remember smokers can get NRT patches on PBS/ CTG script
- However other staff eg RN and AHW can dispense patches without a GP seeing client so also good to keep a stock of patches
- Staff should be trained to use
- Ask GP for advice e.g. for people with medical problems, young people



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Collecting data on use of NRT

- Why do we collect information?
- Helps us to plan programs
- Helps us to run programs and coordinate lists of clients
- Helps us to monitor programs and feed back to our community
- Feedback to funding bodies
- Evaluating programs to see if they worked
- Scripts for NRT will be recorded but need to work out system for recording different types used
- Could make clinical item in Communicare/ use paper based system (e.g. exercise book left at storage site)



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Preventative health guidelines

National Aboriginal Community Controlled Health Organisation and The Royal Australian College of General Practitioners, *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* (Third edition) 2018.

Recommendations: Smoking				
Preventive intervention type	Who is at risk?	What should be done?	How often?	Level/strength of evidence
Screening	People aged >10 years	Ask all patients if they smoke tobacco (refer to Box 1)	Opportunistic and as part of an annual health assessment	IA
	People who currently smoke	Assess willingness to quit and the level of nicotine dependence to guide intervention choice (Box 2)	Opportunistic	GPP
Behavioural	People who currently smoke	Advise all people who smoke to quit	Opportunistic, ideally at every visit, and as part of an annual health assessment	IA
		Assist smoking cessation with multiple individual, group, telephone (eg Quitline) sessions, or text messaging (eg QuitTxt) cessation support	Opportunistic	IA
		Arrange follow-up visits	Provide at least four sessions of cessation support	IA

Preventative health guidelines

National Aboriginal Community Controlled Health Organisation and The Royal Australian College of General Practitioners, *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* (Third edition) 2018.

Chemo-prophylaxis	People who smoke aged ≥18 years	Recommend smoking cessation pharmacotherapies to nicotine-dependent non-pregnant people who are interested in quitting. First-line pharmacotherapies are nicotine replacement therapy (NRT), varenicline and bupropion	Opportunistic	IA
	Pregnant and breastfeeding women who smoke	Do not use varenicline or bupropion. If counselling is not successful, consider intermittent oral NRT (eg inhaler or lozenges) after explanation of risks and benefits	At each antenatal visit	GPP
Environmental	People aged >10 years	Establish a system at the health service for documenting and routinely updating the smoking status of all patients	As part of a systematic health service approach	IIA
	All people	Complement the above individual-based strategies with support for comprehensive public health approaches to tobacco control – for example: <ul style="list-style-type: none"> posters and displays at the health service, community organisations and events smoke-free rules at the health service, community organisations and events, and smoke-free homes and cars 		IIIC

Lung cancer prevention

Recommendations: Prevention of lung cancer				
Preventive intervention type	Who is at risk?	What should be done?	How often?	Level/ strength of evidence
Screening	Asymptomatic adults, including people who smoke or who are ex-smokers	Population-based screening of either high-risk or low-risk people with either chest X-ray or low-dose computed tomography (CT) is not recommended at this time. Further evidence from screening studies in high-risk individuals may change this recommendation in the future		IID
Behavioural		Provide lifestyle risk factor counselling on the benefits of avoiding smoking and exposure to second-hand smoke (refer to Chapter 1: Lifestyle, 'Smoking')	At least during annual health assessment; refer to Chapter 1: Lifestyle, 'Smoking'	III–IIB

National Aboriginal Community Controlled Health Organisation and The Royal Australian College of General Practitioners, *National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people* (Third edition) 2018.



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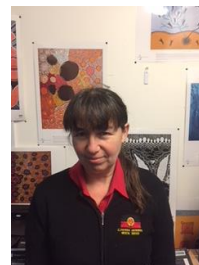
Q & A



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Resources

- **Quit Now - The National Tobacco Campaign**
Australian National Tobacco Campaign offers a one-stop-shop with all the information you need on the campaign and how to get information on quitting - www.quitnow.info.au
- **The Quit Coach**
www.thequitcoach.org.au
- **Cessation Guidelines for Australian General Practice**
http://www.quitsa.org.au/cms_resources/documents/AustralianGeneralPracticeGuidelineHandbook.pdf
- **NPS resources**
<https://www.nps.org.au/medical-info/medicine-finder>



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