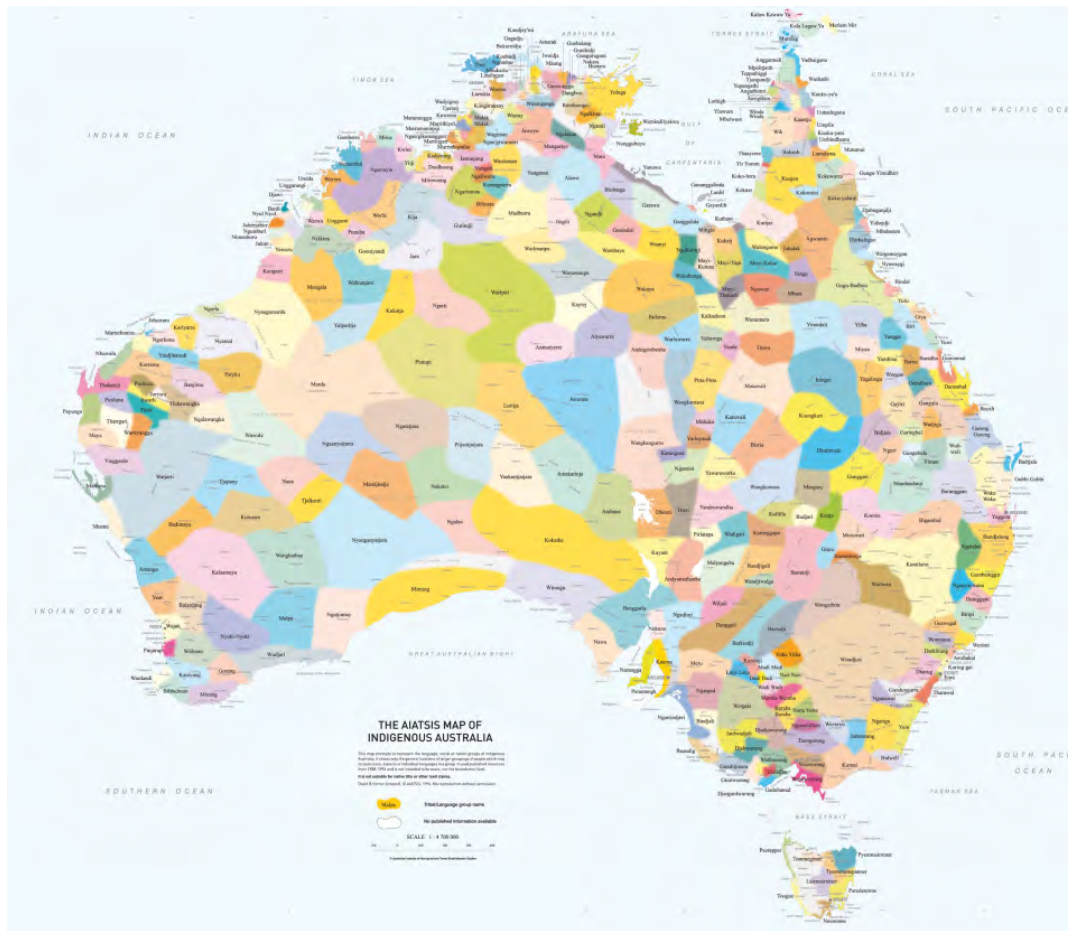


Welcome to today's Insight APSAD webinar.

- Use the chat icon for all questions and comments – *select All panelists and attendees.*
- If you are on a computer and Zoom enters full screen mode – you can press the escape button or visit “View Options” at the top of the screen to change the layout.
- If you are experiencing other problems or require further technical assistance call Zoom on **1800 768 027** – the webinar ID is **753-782-670**.
- A pdf version of today's presentation will be available soon in the chat window.
- A recording of this webinar will be available on our YouTube channel in the coming weeks.





**We acknowledge the
Traditional Owners of the land
on which this event takes
place and pay respect to
Elders past, present and
future.**

This map attempts to represent the language, social or nation groups of Aboriginal Australia. It shows only the general locations of larger groupings of people which may include clans, dialects or individual languages in a group. It used published resources from 1988-1994 and is not intended to be exact, nor the boundaries fixed. It is not suitable for native title or other land claims. David R Horton (creator), © AIATSIS, 1996. No reproduction without permission. To purchase a print version visit: www.aiatsis.ashop.com.au/

Helping women quit smoking during pregnancy

Health Contact Centre

Dr Hoiyan Karen Li

Advanced Clinical Educator/ Allied Health Team Leader
Clinical Psychologist & Tobacco Treatment Specialist

Jillian Bleazby

Allied Health Team Leader
Genetic Counsellor & Tobacco Treatment Specialist

Insight/APSAD webinar: 17 June 2020

Overview

- Prevalence of smoking
- Smoking cessation in pregnant women
- Assessing nicotine dependency
- Pharmacotherapy treatment options: How to talk about NRT
- Quitline services and referral options

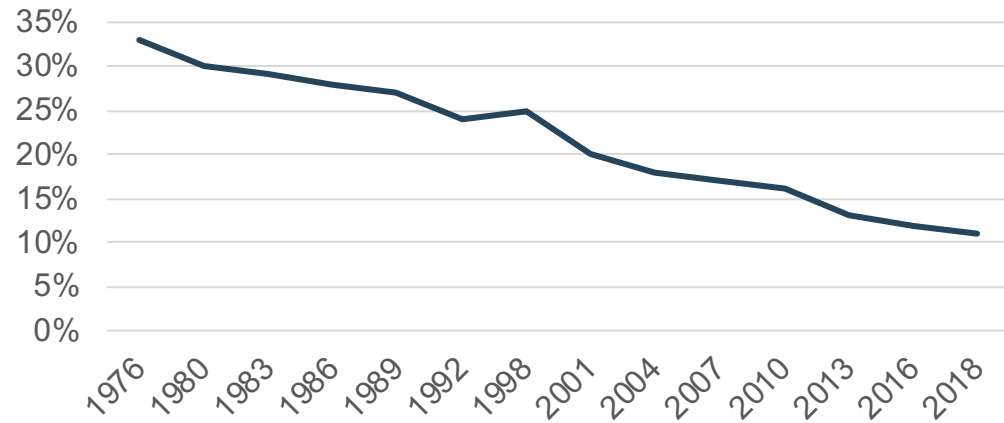


What is the prevalence of smoking?

Prevalence of smoking in Australia

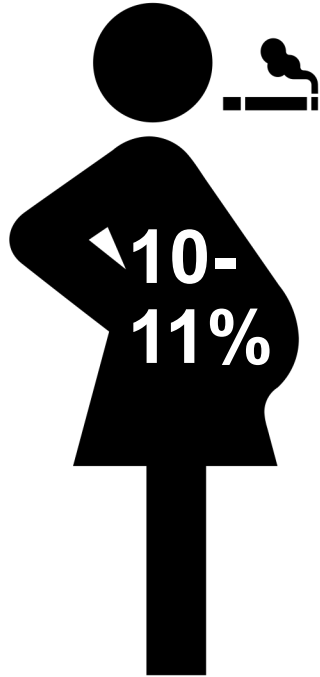


Regular female smokers 18+



Tobacco in Australia Chapter 1

Prevalence of smoking in pregnancy



- Pregnant women aware of research
- High rates of spontaneous quit rates (45-50%)
- 50% quitters will relapse within 6 months
- 80% relapse within 12 months

- Higher in indigenous women (45%)



What are the benefits of quitting?

Benefits of quitting

- Stigma
- Long term benefits for
 - The baby
 - Parenting (Nurturing, physical punishment, parental conflict)
 - Child development (Conduct disorders)



Quit smoking for baby   #quit4baby

What are the risks for my baby from my smoking?

- Miscarriage or stillbirth
- Your baby may be born premature (before 37 weeks' gestation)
- Sudden Unexplained Death of an Infant (SUDI or cot death)
- Low birthweight and breathing problems

What are the benefits of quitting smoking when pregnant?

- Improved health and wellbeing
- More money in your pocket
- Your baby will get better nourishment
- Less harmful chemicals in your bloodstream

Smoking in pregnancy is one of the main causes of stillbirth

Call Quitline on 13 7848 or visit quitline.org.au



Why is it difficult to quit?

Stress and Smoking

“Smoking helps me manage my stress”

- Smoking actually increases stress levels
- Smokers repeatedly fall into nicotine withdraws resulting in frequent episodes of anxiety and restlessness
- Cigarette relieves these withdrawal symptoms
- Greater well-being physically and mentally after quitting
- Alternative coping mechanisms

Weight Gain

“I’m worried if I stop smoking I’ll put on weight”

- Some people do gain weight approx. 2-3kg
- Smoking lowers appetite
- Eating can be a substitute for smoking – discuss alternative coping mechanism
- A person would have to put on over 42kg to outweigh the benefit of quitting


Social Environment

“It’s hard to avoid smoking when everyone smokes”

- No smoking rules in your house and car
- Having a conversation with friends, family on how they can support you
- Catch up with friends/family in smoke free areas

Why is it difficult to quit

- Difficulties of engagement with traditional services
- Nicotine dependence, 60% increase in nicotine clearance, 140% increase in cotinine clearance



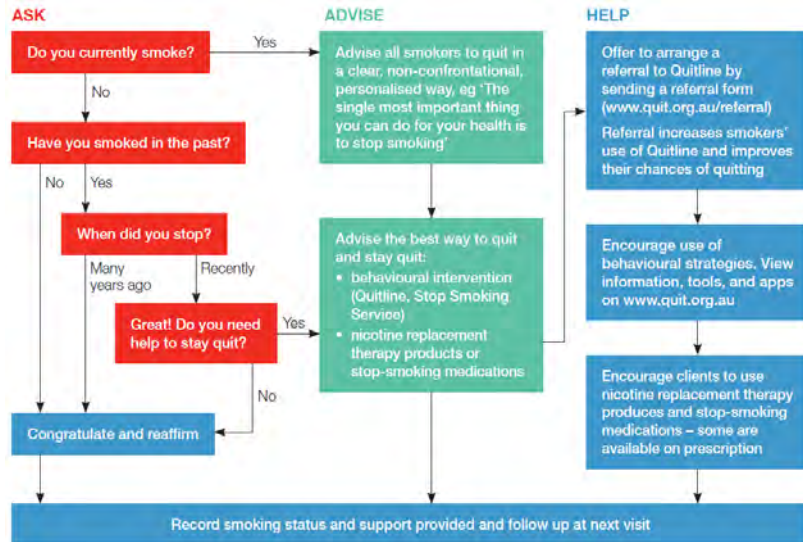
How do we identify women who are smoking?

ASK!



3 As model

- Ask and record smoking status
- Advise all people who smoke to quit and on the most effective methods
- Help by offering to arrange referral, encourage use of behavioural intervention and use of evidence-based smoking cessation pharmacotherapy



- Developed by Quit Victoria
- From RACGP 2019

Smokerlyzer



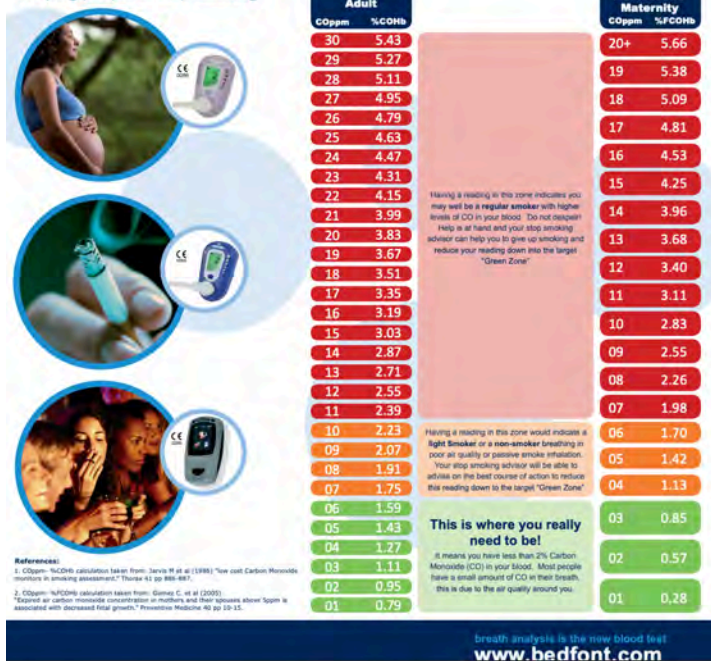
<https://www.youtube.com/watch?v=ak3W0Ng2Ciq>



<https://www.youtube.com/watch?v=DLN5xdTz1oA>



Breath Carbon Monoxide Monitors Helping people to stop smoking

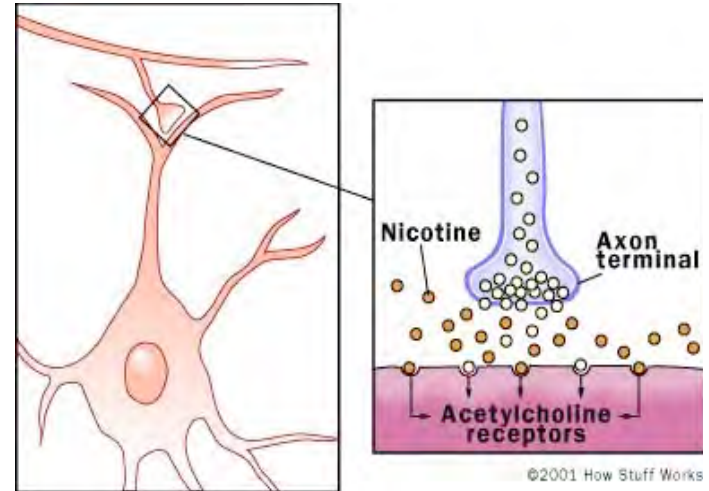




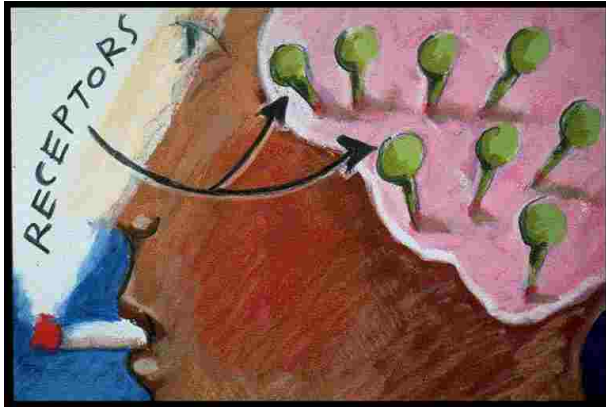
What is nicotine dependence?

Nicotine and the Brain

- Mimics naturally occurring chemical messenger called Acetylcholine
- Attaches to nicotinic-acetylcholine receptors
- Activates the reward pathway in the brain releasing of dopamine
- Occurs **rapidly** – within 10 seconds



Neural Adaptation



Nicotine stimulates dopamine and serotonin



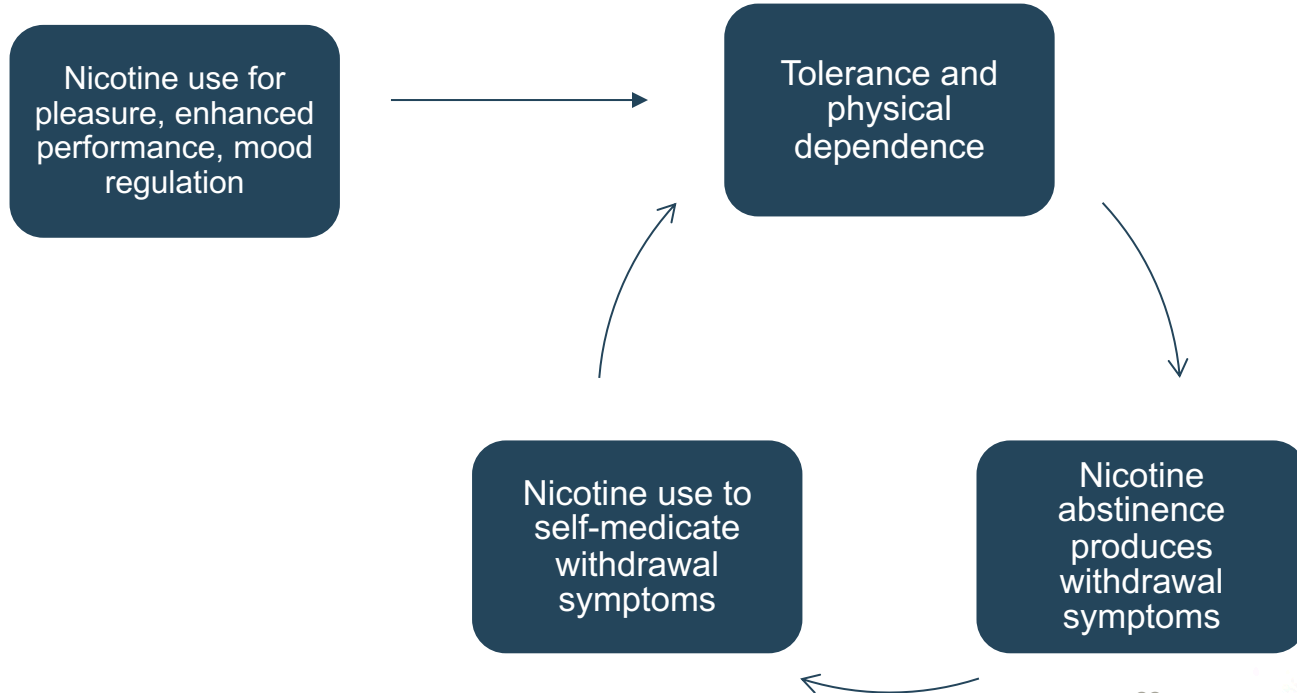
Nicotine receptors adapt and multiply



Increased receptors associated with tolerance and dependence

Understanding Nicotine Dependence

Negative Reinforcement



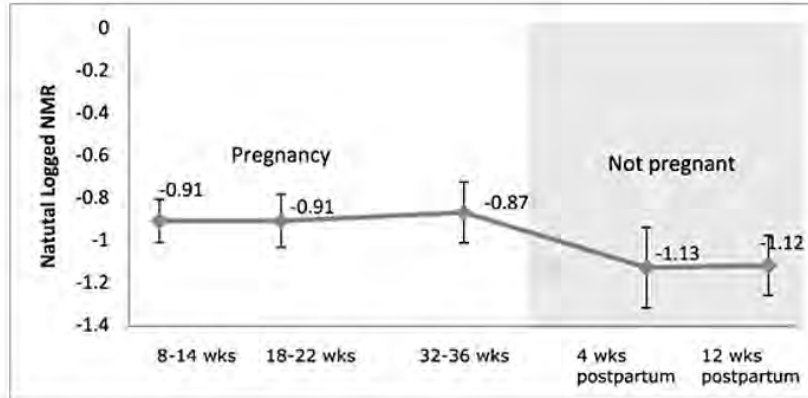
The Little Green Monster



Nicotine Metabolism in Pregnancy

- Nicotine metabolism is increased during pregnancy

Changes in the rate of nicotine metabolism across pregnancy: a longitudinal study



Mean log transformed NMR with 95% confidence intervals giving the precision of the estimate at each time point; the multilevel model showed a significant change over time ($p=0.0006$)



How can we help?

Most Effective Treatment

Pharmacological Intervention

+

Behavioural Change Support
from a HP

Pharmacotherapy during pregnancy

General population

- Varenicline (Champix)
- Bupropion (Zyban)
- Nicotine Replacement Therapy (NRT)

High
certainty
evidence

Pregnancy

- NRT + behavioural support might help
- NRT was more effective than placebo
- No evidence that NRT it is harmful

Low
certainty
evidence



Why does NRT seem to be
less effective for pregnant
women?

Underdosing

- Trials tended to use 15mg patches rather than higher dose or combination therapy

Treatment adherence

- Incorrect use
- Inadequate dose
- Inadequate treatment length

Clinical Guidelines

- Pharmacotherapy always needs to be considered in the context of smoking cessation
- Royal Australian College of General Practitioners (RACGP) recommends
 - Initiate NRT in pregnant women who have been unable to stop smoking unassisted
 - Discuss relative risks and benefits
 - Start with oral NRT first
 - Use patches if oral NRT unsuccessful

Nicotine Replacement Therapy

- Aim = reduce cravings and withdrawal symptoms by providing some of the nicotine normally obtained by smoking tobacco
 - Without the 7000+ harmful chemicals
 - Lower dose
 - Slower delivery

In general

- Monotherapy increase the rate of quitting by 50-60%
- Combination NRT more effective than monotherapy
- High dose forms more effective than lower dose forms

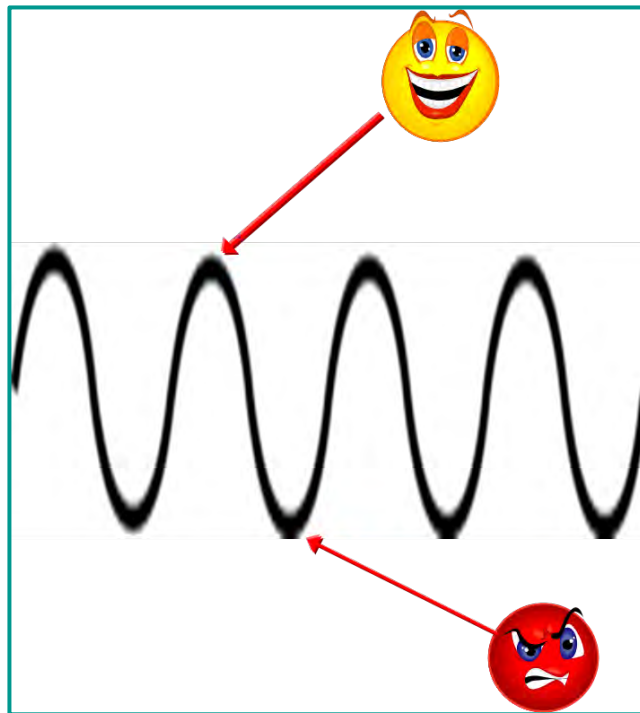
Pharmacotherapy options

- NRT Patch
- Oral NRT
 - Gum
 - Lozenge
 - Inhalator
 - Mouth spray*

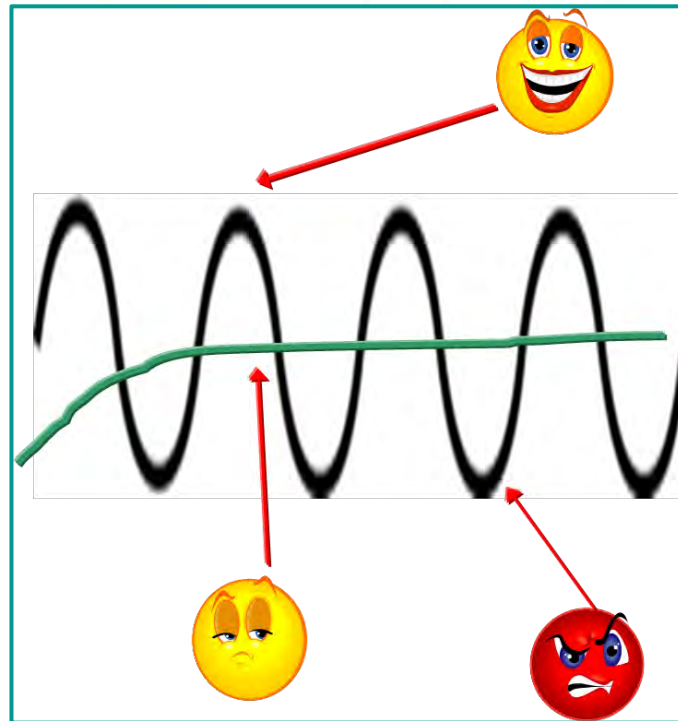
*contains small traces of alcohol



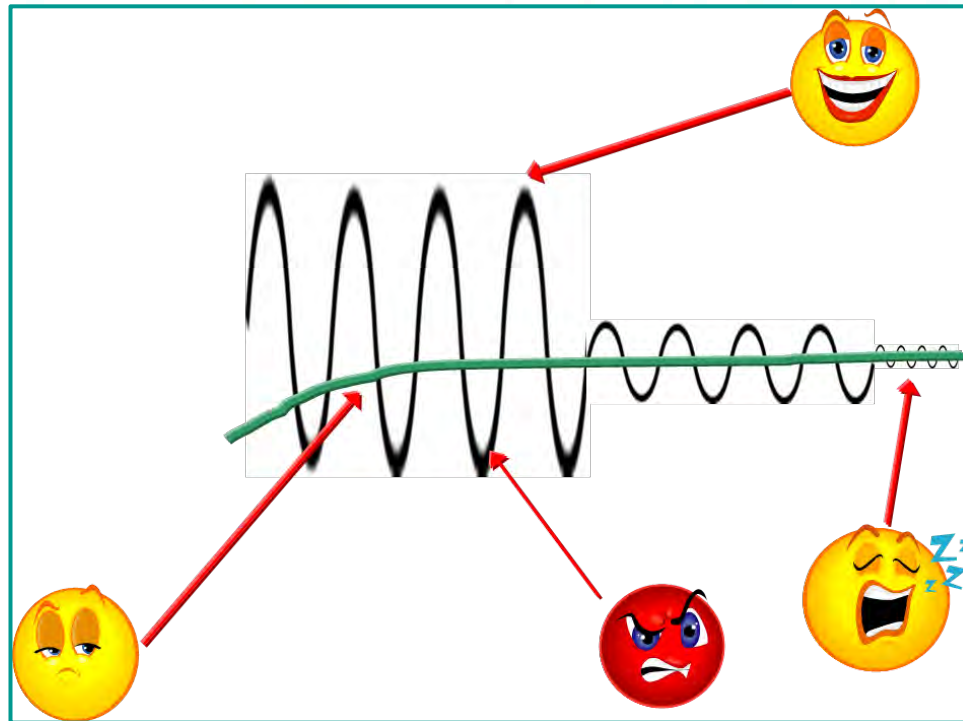
How Does NRT Work?



How Does NRT Work?



How Does NRT Work?





How do I explain NRT products to women?

Nicotine Patch

- Patches work by slowly releasing nicotine to the body, through the skin.
- Apply to a clean relatively hairless area of skin
- Skin irritation from adhesive – mild steroid cream
- Treatment duration 8-12 weeks
- Pregnancy – remove before bedtime*



Oral NRT

- Nicotine absorbed through lining of mouth
- No eating or drinking while using gum
- To address breakthrough cravings



Nicotine Gum

- Park and chew method



Nicotine Lozenge

- One lozenge should be placed in the mouth and moved from one side to the other until completely dissolved
- Not to be chewed or swallowed whole



Nicotine Inhalator


- Designed to combine pharmacological and behavioural substitution (hand to mouth ritual);
- Initial dose – 3-6 cartridges per day;
- Insert cartridge into the mouthpiece and twist to close securely
- Take shallow puff about every 4 seconds or take 2 deep puffs every minute.
- Cartridge lasts for approx. 40 mins



Nicotine Mouth Spray

- Spray inside of cheek or under tongue, do not spray directly into the throat
- 1-2 sprays when you normally smoke; max 4 sprays per hour





How do we have a conversation with women about using smoking cessation treatment?



Women expect and appreciate support

- No conversation = my behaviour is OK

Supportive, non-judgmental approach

- Reflective communication

Ask before providing information

- What do you know about the effects of smoking?
- What would be the good things for you about stopping smoking?

Behavioural counselling

- Identify triggers and alternatively coping mechanisms
- Understand barriers to change

Provide risk and benefit of using NRT treatments

Refer to smoking cessation specific clinics, Quitline, TTS

Risk versus Benefit

- Nicotine may not be completely safe for the pregnancy mother and fetus, **but it is always safer than smoking**

Bar-Zeev Y, Lim LL, Bonevski B, Gruppeta M, Gould GS (2018) Nicotine replacement therapy for smoking cessation during pregnancy. The Medical Journal of Australia 208, 46–51.

3 Suggested approach to a risk v benefit discussion with a pregnant woman who smokes^{6,7}

Risks

Nicotine has been linked to harmful effects on the fetus in animal studies.¹⁹

- low birth weight;
- preterm birth;
- still birth;
- cognitive impairment; and
- impaired lung development

We do not know for sure how the data from animal studies can be transferred to humans²⁰

Studies with nicotine from NRT use in pregnant women (> 2000 women) have not shown NRT to cause any harm to the women or the baby^{6,2}

Benefits

NRT has only nicotine in it, and none of the other 7000 chemicals also found in a cigarette (300 known to be toxic and harmful, 52 known to cause cancer)^{5,4,2}

By using NRT, you and your baby are not exposed to all of these other chemicals^{4,2}

Nicotine from NRT is absorbed at a slower and lower rate compared with nicotine from a cigarette. This means that if you use NRT, you are actually receiving less nicotine than when you smoke⁵

NRT will increase your chances of quitting and remaining smoke free by 40%^{4,2}

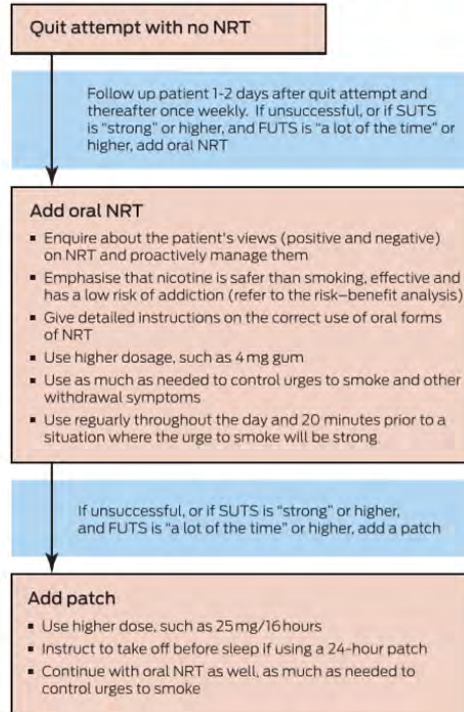
Every day that you do not smoke improves the health of you and your baby

There is nothing better for you and your baby's health than to quit smoking

Using NRT may help your baby's health, even if you do not quit smoking.^{4,3} This is probably because of less overall exposure to chemicals

Approach NRT During Pregnancy

2 Suggested approach to initiating and managing nicotine replacement therapy (NRT) during pregnancy⁴⁷



FUTS = frequency of urges to smoke. SUTS = strength of urges to smoke. ♦

Bar-Zeev Y, Lim LL, Bonevski B, Gruppeta M, Gould GS (2018) Nicotine replacement therapy for smoking cessation during pregnancy. The Medical Journal of Australia 208, 46–51.

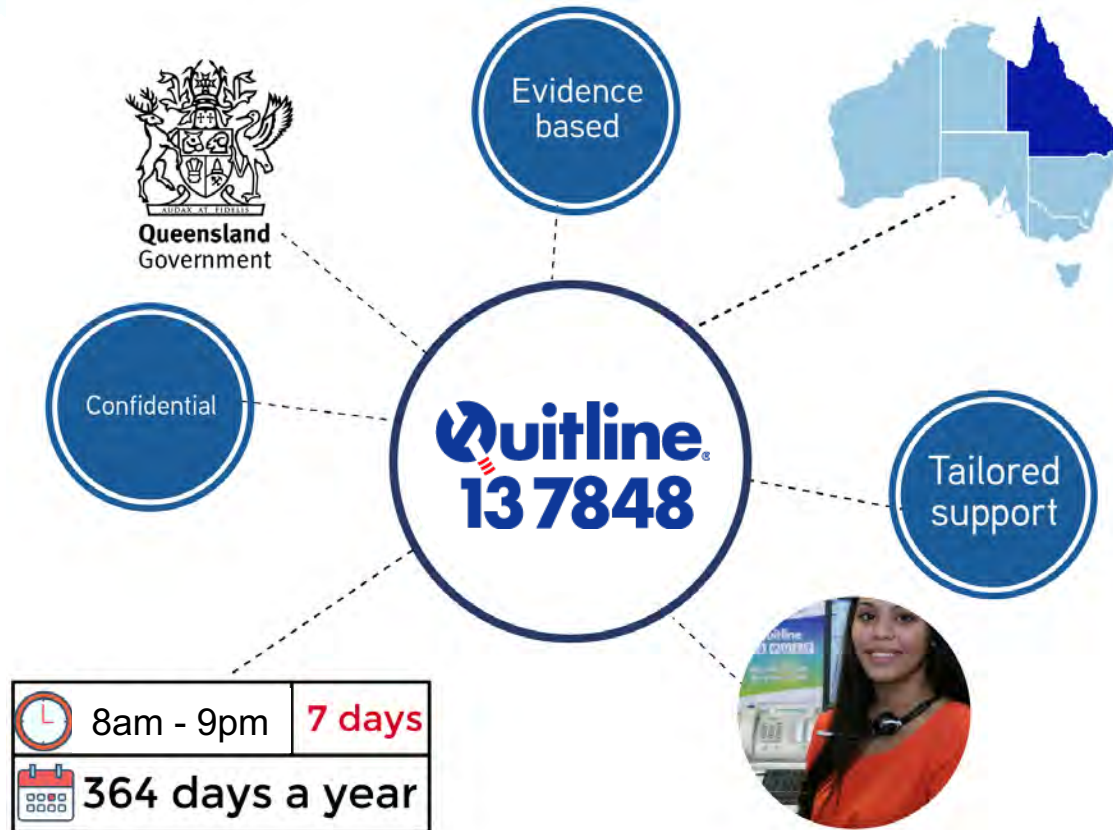


How will Quitline assist my
patient?

Evidence



Quitline - QLD



Counsellors



[Watch Video](#)

Quit support



**Nicotine Dependency
Assessment**



Pharmacotherapy



Motivations



Past attempts

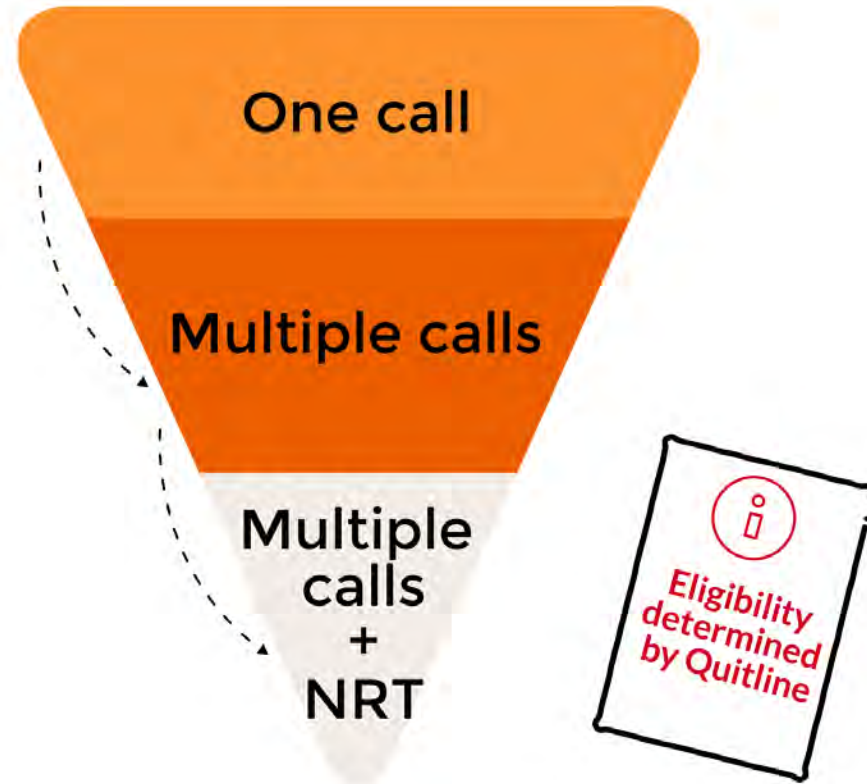


Health education

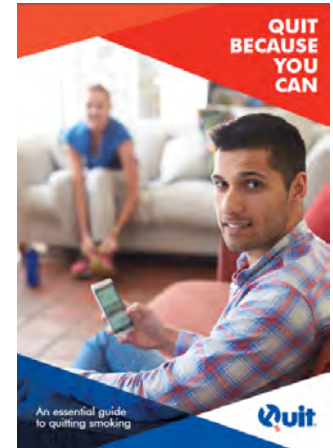
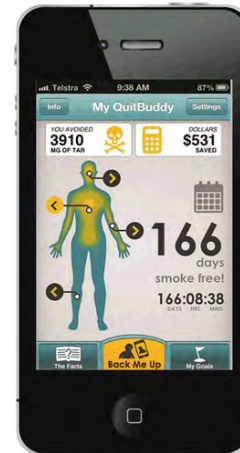


Quit Plan

Programs



Resources





Thank you!

Contact Details

13QUIT@health.qld.gov.au

13 78 48



Thanks for joining us today!

Join us next week for
***Treatment of stimulant use: What the
evidence says.***

Presented by Associate Professor
Rebecca McKetin.



Want to see previous webinars? Subscribe to our YouTube channel.
[youtube.com/c/InsightQueensland](https://www.youtube.com/c/InsightQueensland)