

Best Practice Message

May 2025

Nicotine Replacement Therapy (NRT)

Practice changing moments

- NRT is an effective strategy for reducing smoking.
- There are no long-term studies on the use of NRT.
- Patients who are using NRT for long periods of time or excessive quantities may require review and assessment of their intention to quit.
- Varenicline (Champix) offers similar efficacy to combination NRT treatment.

Background

Smoking is a significant cause of health inequities. Rates of smoking are higher among Māori (29%) and Pacific peoples (18%) compared to the overall rate of 12% in Aotearoa. Around 4,500 people die every year in Aotearoa due to smoking.¹

Nicotine Replacement Therapy (NRT) is a strategy that aims to reduce withdrawal symptoms for those wishing to permanently or temporarily quit or reduce smoking. NRT increases the chances of stopping smoking by 50–70%.³ People should use NRT for at least eight weeks. Those who need NRT for longer than 12 weeks can continue to use it.

In recent years, the use of NRT has increased. It is an effective harm minimisation strategy contributing to the record decline in smoking rates.² However, there are some concerns about patients using NRT over very long periods of time. There are no studies on very long-term use of NRT, and isolated reports suggest that some patients seek excessive amounts of NRT. This raises concerns about the potential for NRT products to be used for intentional harm and speculation that NRT is being diverted to inmates in prisons.⁴

NRT funding

There are several different NRT formulations available over the counter in New Zealand: patches, gum, lozenges, and mouth spray. The patches, gum, and lozenges are subsidised if supplied on prescription, via the Quit Card programme, or by community pharmacists (without a prescription).⁵ NRT products are also available for free from stop-smoking services. It is therefore possible that patients may be receiving NRT products from multiple providers.

NRT is listed on the Pharmac schedule as a “treatment for substance dependence.” The only funding restriction on nicotine products is that they will not be funded for amounts of less than four weeks of treatment. Pharmac does not restrict NRT to cigarette smoking cessation; however, it is only licensed as an aid in smoking cessation, reduction, or temporary abstinence—that is, the licence does not cover vape use.³

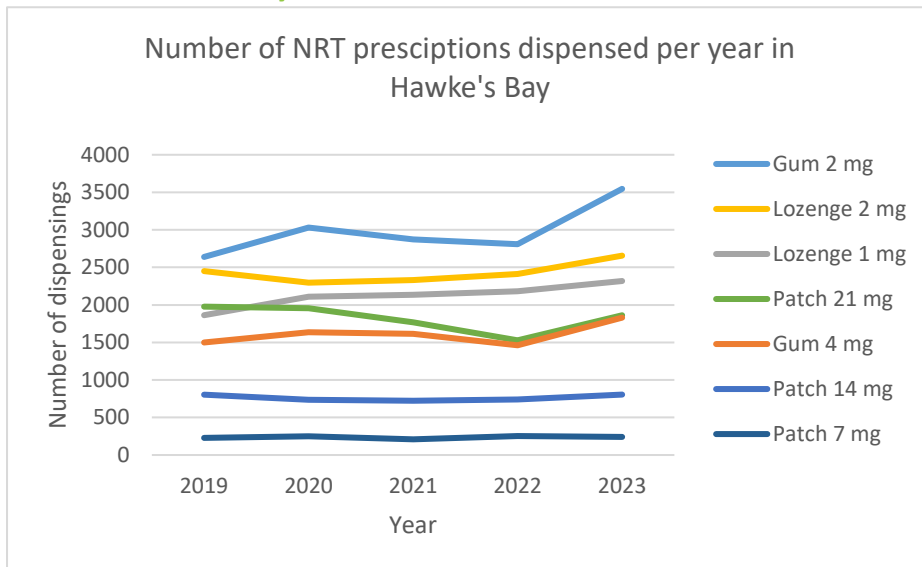
NRT cautions and risks

The use of NRT in an individual already accustomed to nicotine introduces few new risks. The risk of continued smoking outweighs any risks of using nicotine preparations.³ Potential risks and considerations include:

- **Dependency:** A UK study found more than 20% of NRT users used it for longer than the standard 12 weeks. 8% of patients still used NRT (including e-cigarettes) after 12 months.⁶
- **Adverse effects:** Patches can cause skin irritation. Gastrointestinal disturbances are common with gum or lozenges.³
- **Cardiovascular concerns:** NRT is associated with increased risk of insulin resistance, metabolic abnormalities associated with the insulin resistance syndrome, and poses potential cardiovascular risks.⁷

- **Cancer risk:** There is a conceptual increased cancer risk of NRT vs abstinence, however very long-term studies of NRT effects do not yet exist and there is no human data to corroborate this risk.⁸
- **Risk of toxicity and death:** Nicotine is a toxic and addictive drug which can be potentially fatal. Adult smokers can tolerate doses of up to 40-60mg⁹ - an average cigarette yields about 2mg of absorbed nicotine.¹⁰ However even small quantities of nicotine can be dangerous in children. Patients should be warned to keep NRT out of reach of children. Nicotine naive adults are also at risk.
- **Medication interactions:** There are no drug interactions with NRT. However, because of the effects of tobacco smoke on liver metabolism, the doses of some medicines (for example, some psychiatric medicines such as olanzapine and clozapine and insulin) may need to be reduced when people stop smoking.

NRT in Hawke's Bay



In Hawke's Bay, there has been an increase in lozenge and gum NRT prescriptions dispensed over the last few years, with a noticeable rise in 2 mg gum. However, patch NRT product prescriptions have remained relatively stable.

Stopping NRT

Patients on NRT who have ceased smoking should continue using NRT for 2 weeks before having the dose reassessed.¹¹ There is no evidence that tapering off NRT is more effective than abruptly stopping.^{12,13} The conversation to stop NRT should include:

- Discuss motivation and readiness to stop NRT.
- Identify any potential barriers or concerns.
- Set a target quit date for NRT.
- Choose a gradual reduction method if applicable.
- Provide behavioural support and counselling, this may include support from health coaches or Quitline.
- Consider close controlled dispensing of NRT.
- Consider other pharmacological options for cessation.

Patient will likely be on a combination of NRT; patches, gum and/or lozenges. Consider stopping patches and gradually reducing lozenges or gum or stepping down patches while maintaining lozenges or gum.

Nicotine patches

Patches are a prolonged release formulation, releasing 7, 14 or 21 mg of nicotine over 24 hours. An approach to weaning down patches means a 7 mg reduction at agreed upon intervals, as nicotine patches cannot be cut. The datasheet recommends three to four weeks between stepping down patches.¹⁴

Nicotine lozenges

Lozenges are available in 1 mg and 2 mg. The lozenge datasheet recommends, gradually reducing to one to two lozenges a day and then stopping completely. This may take 3 months.¹⁴

Nicotine gum

Gum is available in 2mg and 4mg. Strategies for reducing over weeks or months include:

- The number of gum pieces is reduced gradually per day until only one to two pieces of gum per day are required, at which time use of the gum could be further divided into small pieces or stopped.⁹
- Chewing time is decreased.
- Nicotine gum is replaced with sugar-free gum thereby stopping it completely.¹⁵

Varenicline

Varenicline (Champix®) is a selective nicotine-receptor partial agonist. Champix is now available in New Zealand again and funded via special authority. It is not funded when co-prescribed with NRT. Patient may benefit from stopping NRT and starting a 12-week course of Champix. See [NZF](#) for more information.

Nortriptyline and bupropion are other pharmacological options for nicotine dependence. More information is available on [NZF](#).

Tools:

- HealthPathways: [Nicotine Replacement Therapy \(NRT\)](#)
- HealthPathways: [Smoking Cessation Advice](#)
- Ministry of Health NZ: [Guide to Prescribing Nicotine Replacement Therapy \(NRT\)](#)
- Ministry of Health NZ: [New Zealand Guidelines for Helping People to Stop Smoking 2021 Update](#)
- Smokefree.org.nz: [Find a stop smoking service](#)

Patient resources:

- Healthify: [Quit smoking topics](#)

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Authored by: Riani Albertyn

Reviewed by: Brendan Duck

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