

# Quick guide to Nicotine Replacement Therapy (NRT)

NRT product	Directions for use
<b>Nicotine patch</b>	Apply 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 time a new patch is used to avoid skin rash. If client is given patch on admission they may need a quick acting oral form of NRT as well to cover the time lag before the patch kicks in.
<b>Nicotine gum</b>	Should be chewed until a strong peppery taste and/or a tingling sensation is noticed. Flatten and park the gum against the inside lining of the cheek or under the tongue for 1- 2 minutes or until the taste disappears (3-5 minutes). Chew again slowly until the taste returns. Repeat for 30 minutes and then throw the gum away. Gum should not be chewed like ordinary gum as it lowers its effectiveness.
<b>Nicotine lozenge</b>	Roll the lozenge around in the mouth for a few times to start releasing nicotine. Park between the cheek and the gum or under the tongue. Continue to move the lozenge around the mouth every 5 minutes or so to continue to the release of nicotine. Repeat the process for up to 30 minutes or until the lozenge is completely dissolved. Not suitable for people with phenylketonuria.
<b>Nicotine inhalator</b>	Puff gently - inhaling too deeply may cause coughing and sore throat. Puff on each new cartridge for up to 20 minutes for maximum effect. Use the inhalator as often or as little to assist with cravings up to a maximum of 40 minutes. After that time, throw away the cartridge as the active ingredient is lost. Note: After 12 hours the used cartridge needs to be thrown away (please dispose safely). The used cartridge will no longer be active even if it has not been puffed on for a total of 40 minutes during that 12 hour period.
<b>Mouth spray</b>	Shake the pump before using. 'Prime' the pump to ensure the spray comes out as a fine mist not a squirt when using the spray for the first time. Hold the breath while directing the spray to inside of the cheek or under the tongue. Refrain from swallowing for a few seconds after spraying. Do not spray on the lips or directly onto the throat as it may cause hiccups or a burning sensation on the lips or in the back of the throat. Seek advice if you suffer from asthma or chronic throat conditions. Not recommended for recovering alcoholics.

## Contraindications

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

## Precautions

- NRT should be used with caution for clients in hospital for acute cardiovascular events, but if the alternative is smoking, NRT can be used under medical supervision.

## Use in pregnancy and breastfeeding:

- NRT can be considered in pregnancy and breastfeeding if a woman is otherwise unable to quit smoking. In pregnancy, oral NRT is preferred to patches. However if a woman cannot tolerate oral forms of NRT, or requires combination therapy to control withdrawal symptoms, patches can be used but should be removed at night.
- The NSW Health **Quit for new life** program is a smoking cessation support initiative for women having an Aboriginal baby. A protocol for the provision of NRT to pregnant and postnatal women involved in the program is available on the NSW Health website:  
[www.health.nsw.gov.au/tobacco/Pages/quit-for-new-life.aspx](http://www.health.nsw.gov.au/tobacco/Pages/quit-for-new-life.aspx)

## NRT Dosage Chart

NRT product	Strength	Standard dosage range for single use therapy	Optimum dosage
Gum	2mg gum	8-12 per day	<ul style="list-style-type: none"> <li>• Client needs to be provided with sufficient amount of oral NRT to manage cravings and withdrawal symptoms.</li> <li>• Client should be encouraged to request additional oral NRT if withdrawal symptoms and/or cravings to smoke are not controlled.</li> <li>• Remember, it is always better to use more NRT to control the urge to smoke than return to smoking.</li> </ul>
	4mg gum	6-10 per day	
Inhalator	15mg cartridge	3-6 cartridges per day	
Mini lozenge	1.5 mg mini lozenge	1 lozenge every 1-2 hours Up to 20 per day	
Lozenge	2mg lozenge	1 lozenge every 1-2 hours Up to 15 per day	
	4mg lozenge	1 lozenge every 1-2 hours Up to 15 per day	
Oral spray	1mg	1-2 sprays every 30 minutes or up to 4 sprays per hour	

- This dosage chart is a guide only. Work closely with the client to determine an appropriate daily dosage of NRT that controls cravings and withdrawal symptoms. Some clients will require more than one patch or a combination of patch and oral NRT (See **Tool 4 'Flowchart for NRT use in hospital'**).
- Expired carbon monoxide (CO) monitoring is helpful to more accurately recommend an NRT strength and dosage. Check to see if a Smokerlyzer is available for use in your area.
- Most clients will need the higher strength gum and lozenge (4mg) unless they are a very mildly nicotine dependent (don't smoke within 30 minutes of waking and experience only mild cravings).
- Client should be monitored closely while in hospital for withdrawal symptoms. (See **NSW Health Monitoring chart for nicotine withdrawal**).
- For all forms of NRT, the recommended minimum usage = 12 weeks duration. Longer duration of use increases the likelihood of success.
- At least 3 days' supply of NRT used in hospital should be provided to clients on discharge. (See **Tool 10 'Discharge checklist for any client who was a smoker on or during admission'**).

### 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 assist clients are listed below.

Form of NRT	Possible side effect	Ways to deal with the side effect
Nicotine patches	Skin rashes where the patch is applied.	Rotate the patch site and use hydrocortisone 1% cream for skin irritation.
	Patch keeps falling off – doesn't stick	Use stretch adhesive tape over patch
	Sleep disturbance (can be due to caffeine toxicity, timing of the patch or nicotine withdrawal).	Apply the patch in the morning rather than at night. Remove patch before sleep. Decrease caffeine intake by half.
	Neuralgia (uncommon)	Change the patch location or reduce the strength of the patch.
Oral NRT products	Irritation of the mouth or throat, headaches, hiccups, indigestion, nausea, and coughing.	Check for correct use of the oral product or change to a different oral product.

**Note:** This is a guide only. Refer to Medical Officer if concerned about side effects.