Stop smoking aids: quick reference guide

Nicotine replacement therapy (NRT)

- NRT is both effective in increasing success with stopping smoking and safe.
- Most common side effects are mild.
- Combining the NRT patch with faster-acting NRT products (e.g. gum, inhalator, mouth spray) has been shown to increase success with quitting.
- NRT products are typically used for 8 – 12 weeks. It is important to use the full course of the medications to increase success with quitting long-term. The amount of NRT can be reduced over this time period or full dose can be maintained. Some clients will benefit from using NRT for extended periods of time, and this is safe practice.

Guidelines for individualised dosing of NRT:

- It is important for clients to use enough NRT.
- The initial dose of NRT can determined based on the **Heaviness of Smoking Index** (number of cigarettes and time to first cigarette in the morning).
- In people who are highly dependent on tobacco, higher doses of NRT (>42 mg) have been shown to be more effective than standard doses (21 mg) in reducing withdrawal symptoms and urges to smoke.
- Client experience with withdrawal symptoms and urges to smoke can be used to guide the need to adjust the initial dose. Both the dose of the NRT patch and the frequency of faster-acting NRT use can be increased as needed.

Patch

16-hour skin patch:

- 25 mg, 15 mg and 10 mg

24-hour skin patch:

- 21 mg, 14 mg and 7 mg

Products:

- Nicorette Invisi 25 mg, 15 mg and 10 mg
- Nicotinell 21 mg, 14 mg and 7 mg
- NiQuitin CQ 21 mg, 14 mg and 7 mg (Original and Clear)
- Boots NicAssist 25 mg, 15 mg and 10 mg



How it works

- Delivers a steady dose of nicotine to the bloodstream via skin.
- Peak levels reached in 2 – 6 hours.
- Nicotine absorption: 0.6 to 1.6 mg per hour (depends on strength selected).

Prescribing guidelines

- Initial dose of nicotine based on the Heaviness of Smoking Index (number of cigarettes and time to first cigarette).
- Combining a patch with faster-acting NRT increases success with quitting.
- Use for 10 – 12 weeks or longer based on client need.
- Step down approach: Step 1 (21 mg/25 mg) for 8 weeks; Step 2 (14 mg/15 mg) for 2 weeks; Step 3 (7 mg/10 mg) 2 weeks OR, full dose can be used for 12 weeks and then stopped.

Instructions

- Apply the patch to a clean, dry, non-hairy area.
- Replace the patch with a new one every 24 hours.
- Rotate site daily. Rash from adhesive is common; topical creams may be applied.

Pregnant women

- 16-hour patch is recommended in pregnancy (remove patch at night).
- Pregnant women may experience increased skin sensitivity/rash.

Possible side effects: headache, dizziness, nausea, flushing, stomach upset, skin irritation, trouble sleeping (if client has difficulty sleeping, use 16-hour patch or remove the 24-hour patch at bedtime).

Faster-acting products (oral and nasal)

Gum

Products:

- Various flavours, including fruit, mint and plain
- Nicorette 2 mg and 4 mg
- Nicotinell 2 mg and 4 mg
- NiQuitin CQ 2 mg and 4 mg

2 mg (smokes their first cigarette 30 or more minutes after waking up)

4 mg (smokes their first cigarette within 30 minutes of waking up)



How it works

- Delivers nicotine to bloodstream through buccal mucosa (lining of mouth and throat).
- Peak levels reached in about 30 minutes.
- Nicotine absorption: approx. 0.9 mg per 2 mg piece and 1.2 mg per 4 mg piece.
- The flavouring in Nicorette original contains negligible amounts of medicinal alcohol and will not have any noticeable effects.*

Instructions

- Use approx. one piece per hour, every hour.
- Use up to 15 pieces per day; using more than 20 pieces per day may cause nausea. Consider increasing dose of NRT patch if client requires >20 pieces.
- Special chewing technique: chew and park.**
- Chew-park-chew for about 20 – 30 minutes. After 30 minutes gum is exhausted.
- Avoid acidic drinks (like fruit juice) for 15 minutes before or during use.
- Sticks to dentures; not appropriate for people with complicated dental work.
- Can be combined with NRT patch.
- Duration of treatment: 8 – 12 weeks; can be extended as required.

Possible side effects: nausea, headache, heartburn, coughing, hiccups, throat irritation.

* Although negligible, the presence of alcohol may be an issue for some people because of their cultural and religious beliefs, or because of issues with alcohol.

** ***Chew and park:*** Chew slowly until nicotine can be tasted or there is a slight tingling in the mouth, then stop chewing. Place the gum between the cheek and gums. After one minute, repeat the process until the urge to smoke has passed or weakened.

Inhalator

Plastic holder containing cartridge with 15 mg of nicotine



How it works

- Puffing on inhalator draws nicotine vapour into the mouth: absorbed into bloodstream through buccal mucosa (lining of mouth and throat).
- Behavioural replacement for 'hand to mouth' action.
- Peak levels reached in 15 – 20 minutes.
- Nicotine absorption: 20 minutes puffing for 1 mg nicotine, depending upon technique.

Instructions

- Use every hour and puff for about 20 minutes or as needed to manage cravings.
- Use up to 6 cartridges per day.
- Line up ridges of plastic holder to open and insert cartridge (you will hear a click).
- Special puffing technique: take slow shallow puffs to avoid throat burn.
- Each cartridge lasts for about 40 minutes of intense use.
- Avoid acidic drinks (like fruit juice) for 15 minutes before or during use.
- Can be combined with NRT patch.
- Duration of treatment: 8 – 12 weeks; can be extended as required.

Possible side effects: nausea, mouth/throat irritation.

Faster-acting products (oral and nasal)

Mouth spray

A mouth spray containing 1 mg of nicotine

Products:

- Nicorette QuickMist 1 mg mouth spray
- Nicotinell Rapid Relief 1 mg mouth spray*

*Not for use by persons under 18 years of age



How it works

- Delivery through buccal mucosa (lining of mouth and throat); faster-acting (about 2 minutes to reach bloodstream).
- Peak levels reached within 16 minutes.
- Each spray contains 1 mg nicotine; bottle contains about 150 sprays.
- Contains negligible amounts of medicinal alcohol (7 mg / spray) and will not have any noticeable effects.*

Instructions

- 1 – 2 sprays every 30 minutes to an hour, as required throughout the day to minimise withdrawal symptoms and urges to smoke.
- Child-proof lock (push lever and slide up or down). First use: prime the pump (point away and spray).
- Open mouth wide; point inside mouth toward cheek and spray (press firmly); repeat on other side of mouth.
- Hold in mouth and refrain from swallowing for a few seconds immediately after spraying.
- Avoid acidic drinks (like fruit juice) for 15 minutes before or during use.
- Can be combined with NRT patch.
- Duration of treatment: 8 – 12 weeks; can be extended as required.

Possible side effects: headache, nausea, vomiting, changes in taste, tingling.

* Although negligible, the presence of alcohol in these products may be an issue for some people because of their cultural and religious beliefs, or because of issues with alcohol.

Nasal spray

Bottled solution containing 10 mg/ml nicotine

Products:

- Nicorette nasal spray
- Boots NicAssist nasal spray



How it works

- Delivers nicotine to bloodstream through nasal mucosa; faster acting (about 2 minutes to reach bloodstream).
- Peak levels reached in about 10 minutes.
- Nicotine absorption: approx. 0.5 mg nicotine per spray.
- Each bottle = 200 sprays = 6 days.

Instructions

- 1 – 2 shots of spray in each nostril every hour.
- Initially use at least 30 sprays per day.
- Remove the protective cap. Prime the spray by placing the nozzle between first and second finger with the thumb on the bottom of the bottle. Press firmly and quickly until a fine spray appears, this can take a few 'pumps'.
- Insert the spray tip into one nostril, pointing the top towards the side and back of the nose (45 degree angle). Press firmly and quickly. Give a spray into the other nostril.
- Warn clients that initial use may not be pleasant but that these adverse effects will pass with time (usually 2 days). Have a box of tissues on hand.
- Can be combined with NRT patch.
- Duration of treatment: 8 – 12 weeks; can be used longer as required.

Possible side effects: during the first 2 days of treatment, nasal irritation, sneezing, running nose, watering eyes, cough. Both the frequency and severity declines with continued use. Other possible side effects include nausea and headache.

Faster-acting products (oral and nasal)

Lozenge and mini lozenge

Sugar-free compressed tablet

Products:

- Nicotinell 1 mg and 2 mg (mint)
- NiQuitin CQ Original and Mini Lozenge 2 mg and 4 mg (mint, citrus)
- Nicorette Mini Lozenge 2 mg and 4 mg (mint, fruit)
- Boots NicAssist compressed 1 mg and 2 mg lozenge (mint)



How it works

- Delivers nicotine to bloodstream through buccal mucosa (lining of mouth and throat).
- Peak levels of 4 mg lozenge reached within 30 minutes.
- Nicotine absorption: approx. 1.5 mg per 4 mg lozenge.

Instructions

- 1 lozenge every 1 – 2 hours as required to minimise withdrawal symptoms and urges to smoke.
- Place in mouth, allow to dissolve (20 – 30 minutes) by moving around mouth periodically; avoid crushing or chewing.
- Avoid acidic drinks (like fruit juice) for 15 minutes before or during use.
- Can be combined with NRT patch.
- Duration of treatment: 8 – 12 weeks; can be extended as required.

Prescribing guidelines

- Greater tobacco dependence (smokes within 30 mins of waking): use 4 mg.

Possible side effects: sore mouth or throat, throat irritation, jaw pain, hiccups, nausea, headache.

Microtabs

Small white tablet containing 2 mg nicotine

Products:

- Nicorette 2 mg
- Boots NicAssist 2 mg



How it works

- Each tablet delivers nicotine to bloodstream via buccal mucosa (lining of mouth and throat).
- Peak levels reached in about 30 minutes.
- Nicotine absorption: approx. 0.9 mg per tablet.

Instructions

- Use 1 – 2 microtabs per hour; use between 16 and 40 tablets per day.
- Used sub-lingually: placed under the tongue until dissolved (30 minutes); should not be chewed or swallowed.
- Avoid acidic drinks (like fruit juice) for 15 minutes before or during use.
- Can be combined with NRT patch.
- Duration of treatment: 8 – 12 weeks; can be used longer as required.
- 1 week's supply = 2 boxes of 100 microtabs.

Possible side effects: throat irritation, hiccups, nausea, headache.

For more information

See the Summaries of Product Characteristics (SPCs), which contain all the information on effects, side effects and drug interactions: **www.ncsct.co.uk/publications/category/nrt** or **www.medicines.org.uk/emc**

Nicotine vapes (e-cigarettes, electronic cigarettes)

- Nicotine-containing vapes are effective stop smoking aids and are significantly less harmful than smoking.
- Nicotine vapes do not contain tobacco and there is no combustion, so they do not produce tar or carbon monoxide, two of the most damaging elements in tobacco smoke.
- Nicotine vapes are consumer products and currently none are licensed as a medicine. They are regulated for safety and quality by the Tobacco and Related Products Regulations 2016.

Guidelines for nicotine concentrations

- People attempting to stop smoking should use a vape with nicotine-containing e-liquid.
- E-liquid (juice) is typically available with nicotine concentrations of 0 mg/ml, 3 mg/ml, 6 mg/ml, 12 mg/ml and 18 mg/ml. The maximum legal nicotine concentration is 20 mg/ml.
- Most people making a quit attempt are likely to need 18 mg/ml, at least to begin with. Some people who are more dependent on tobacco may initially benefit from vaping 18 mg/ml nicotine e-liquid in combination with a nicotine patch (NRT), using the vape as their faster-acting nicotine product.
- Experience can guide how much nicotine is required; the aim should be to use sufficient nicotine to significantly reduce or eliminate withdrawal symptoms and urges to smoke.

How it works

- Vaping devices heat a solution to create an aerosol that is inhaled. The solution typically contains nicotine, propylene glycol, vegetable glycerine and flavourings.
- Like NRT, the nicotine in a vape reduces the urge to smoke and is an effective substitute for smoking, delivering nicotine without harmful tobacco smoke.

Instructions

- Use regularly throughout the day and when urges to smoke occur. Clients should be advised to use their nicotine vape as often as they need to, in order to manage urges to smoke.
- The action of vaping is different to smoking, which generally involves taking a deep lungful of smoke from a cigarette. Clients new to vaping should inhale gently, drawing the vapour into the mouth and then inhaling into the lungs. Practice is often needed and clients shouldn't be put off by this.
- More frequent and consistent vaping ('grazing on nicotine') is typically needed to get sufficient nicotine, compared to smoking a cigarette every couple of hours ('bingeing on nicotine').
- Clients should be advised to always take their fully-charged nicotine vape with them when they go out, to avoid the risk of smoking when they haven't got their vape to hand.
- Advise clients not to leave their nicotine vape to charge overnight, and to always use the charging equipment provided with the product.
- Clients should be told that the benefits of vaping are greatest when they stop smoking tobacco completely.

Possible side effects

- The most common side effects of vaping tend to be a dry mouth and tickly cough. These can generally be remedied by drinking more water, as the vapour can have a drying effect on the mouth and throat.

For more information

NCSCT online course 'Vaping: a guide for healthcare professionals'
elearning.ncsct.co.uk/vaping-registration

NCSCT briefing: 'Vaping: a guide for health and social care professionals'
www.ncsct.co.uk/publications/vaping_briefing

NHS Live Well: Using e-cigarettes to stop smoking
www.nhs.uk/live-well/quit-smoking/using-e-cigarettes-to-stop-smoking

Making the Switch: Short films for people considering a move from smoking to vaping
nnalliance.org/nnaresources/switch-videos

Main types of vaping devices

- There are many types of vapes on the market which vary widely in appearance, battery size and effectiveness. All devices deliver a flavoured aerosol, usually containing nicotine.
- Rechargeable devices with a refillable tank will deliver nicotine more effectively and quickly than single-use (disposable) vapes.
- Since June 2025, it has been against the law to sell or supply single-use vapes in the UK.

Tanks 	■ Typically the size of a mascara or fountain pen, they have a 'tank' that the client fills with their choice of e-liquid. ■ These devices can often be used with an interchangeable range of atomisers, cartomisers or clearomisers, and the atomiser is typically activated upon a button press. ■ The client can choose their own flavour and strength of e-liquid. With repeated use, experienced users can obtain blood nicotine levels comparable to that achieved from cigarettes.
Regulated mods 	■ These contain a chip that controls the power being delivered to the atomiser which prevents the device from short-circuiting. ■ Many devices allow the client to adjust the voltage or wattage applied to the coil and some offer temperature control as well. ■ Some mods come with puff counters or downloadable software that allow clients to programme their own voltage and wattage level, and to monitor their patterns of use. ■ They come in a variety of shapes and sizes (from simple pen-style to larger box-shaped devices) and are designed to allow modifications and substitution of individual components according to client preference and allow for more control over nicotine delivery. ■ The devices are generally recommended for more experienced vapers.
Pods 	■ Pod systems are simple, discreet and compact. ■ They use pods (small refills of e-liquid) made specifically for the device, often using nicotine salts. Pods are replaced when empty. ■ Most of these pods come pre-filled with a chosen flavour, although some models have refillable pods that allow a choice of flavour. ■ Pods offer clients simplicity (you don't refill) and are more compact in size and appearance than tanks. They are also much less 'fiddly' for clients that may have mobility issues. ■ Due to their smaller battery and the limit on nicotine content, delivery of nicotine is currently not comparable to other more sophisticated devices with higher powered batteries, such as the tank systems and mod devices.
Single-use (disposables) 	■ Since June 2025, it has been against the law to sell or supply single-use vapes in the UK. ■ They are compact, single-use and prefilled with flavoured e-liquid or nicotine salts. ■ They are most commonly pre-loaded with one strength of 20mg/ml nicotine salts. ■ They are draw-activated and once the flavour/taste diminishes, they are designed to be disposed of and replaced with a new one.

Prescription-only stop smoking medications

Varenicline

How it works

Varenicline works directly at the level of the nicotine receptors in the brain. It partially alleviates withdrawal symptoms and urges to smoke by partially stimulating nicotine receptors, and blocks the rewarding effects of nicotine if the client smokes.

How it is used

- **Days 1 – 3:** 0.5 mg once daily
- **Day 4 – 7:** 0.5 mg twice daily (breakfast and dinner)
- **Weeks 2 – 12:** 1 mg twice daily (breakfast and dinner)

Instructions

- Set quit date and begin taking varenicline 7 – 14 days before quit date.
- Swallow tablet whole; take with water and after a meal.
- Take tablets at least 8 hours apart.
- May have minor or moderate influence on the ability to drive and use machines. Make sure medication does not affect mental alertness before commencing these activities.
- Clients unable or unwilling to stop smoking after target quit date (within 7 – 14 days of initiating varenicline use) may continue using the medication. It is recommended that they set a new quit date within 5 weeks of use.
- Varenicline is used for 12 weeks and clients should use the full course of treatment. An additional course of 12 weeks treatment may be prescribed for those clients who think that they need it.

Contraindications

- Pregnancy and breastfeeding.
- People under 18 years of age.
- End stage renal failure.

Cautions

- Severe renal impairment (creatinine clearance <30 ml/min): reduce dose to 0.5 mg twice daily.
- Severe psychiatric disorder.

Possible side effects

Side effects generally resolve over time, usually during the first 2 weeks of treatment.

- Nausea (30%): mostly mild to moderate (3% severe). Verify clients are taking medication with/after a meal. Clients can be advised to lie down if this helps (the nausea will generally pass) and anti-emetics can be taken if persists.
- Headaches (15%)
- Insomnia (18%)*
- Abnormal (vivid) dreams (13%)*

* Dose can be taken earlier in the evening if these side effects are problematic.

The dose may be reduced to 0.5 mg twice daily as required to address side effects.

History of psychiatric disorder

- The use of varenicline in people with or without a history of psychiatric disorder has **NOT** been associated with an increased risk of serious neuropsychiatric adverse events compared with placebo.
- Practitioners should be aware of the possible emergence of serious neuropsychiatric symptoms in people attempting to quit smoking with or without treatment.
- Care should be taken with clients with a history of psychiatric illness and clients should be advised and monitored accordingly. The possible risks of taking this medication should be weighed against the benefits of stopping smoking.



For more information

NCSCT varenicline resources, including briefings and Summaries of Product Characteristics (SPCs):
www.ncsct.co.uk/publications/category/varenicline

Prescription-only stop smoking medications

Cytisinicline (cytisine)

Products

Two branded forms of cytisinicline, called Cytisinicline and Belnifrem, are available in the UK.

How it works

Cytisinicline is a naturally occurring plant-based substance that mimics the effect of nicotine in the brain. Like varenicline, cytisinicline acts to reduce withdrawal symptoms and urges to smoke. It also reduces the reward and satisfaction associated with smoking.

How it is used

- **Days 1 – 3:** 1 tablet every 2 hours (max. 6 tablets)
- **Days 4 – 12:** 1 tablet every 2.5 hours (max. 5 tablets)
- **Days 13 – 16:** 1 tablet every 3 hours (max. 4 tablets)
- **Days 17 – 20:** 1 tablet every 5 hours (max. 3 tablets)
- **Days 21 – 25:** 1 – 2 tablets per day (max. 2 tablets)

Instructions

- Set a quit date and begin taking cytisinicline 5 days before the quit date.
- Swallow tablet whole; take with water.
- Cytisinicline is used for 25 days and clients should use the full course of treatment.

Contraindications

- Pregnancy and breastfeeding.
- People under 18 years or over 65 years of age.
- People with renal or hepatic impairment
- People with unstable angina clinically significant arrythmias, recent stroke or myocardial infarction.
- Hypersensitivity to: mannitol, microcrystalline cellulose, magnesium stearate, glycerol dibehenate or hypromellose.

Possible side effects

Side effects generally resolve over time, usually during the first 2 weeks of treatment.

- Nausea
- Vomiting
- Insomnia
- Abnormal dreams
- Headache
- Dry mouth

History of psychiatric disorder

- Practitioners should be aware of the possible emergence of serious neuropsychiatric symptoms in people attempting to quit smoking with or without treatment.
- Care should be taken with clients with a history of psychiatric illness and clients should be advised and monitored accordingly. The possible risks of taking this medication should be weighed against the benefits of stopping smoking.

Cautions

Should be used with caution in case of ischemic heart disease, heart failure, hypertension, pheochromocytoma (a tumour of the adrenal gland), atherosclerosis (hardening of the arteries) and other peripheral vascular diseases, gastric and duodenal ulcer, gastroesophageal reflux disease, hyperthyroidism (overactive thyroid), diabetes, schizophrenia and phenylketonuria (Belnifrem formulation only).



For more information

NCSCT cytisinicline resources, including a briefing, dosing guide and Summaries of Product Characteristics (SPCs): **www.ncsct.co.uk/publications/category/cytisine**

Prescription-only stop smoking medications

Bupropion
(Zyban)

How it works

Mechanism not known; reduces withdrawal symptoms and desire to smoke, possibly by inhibiting neuronal reuptake of dopamine.

How it is used

- **Days 1 – 6:** 150 mg once daily
- **Day 7 onwards:** 150 mg twice daily, at least 8 hours apart.

Instructions

- Set quit date and begin taking bupropion 1 – 2 weeks before quit date.
- Bupropion is used for 9 weeks. Clients may continue to take it for up to 24 weeks, or as required.

Contraindications

- Pregnancy and breastfeeding
- People under 18 years of age
- History of seizure disorder
- Abrupt alcohol/sedative withdrawal
- Central nervous system tumour
- Use of irreversible monoamine oxidase inhibitors (MAOIs) – at least 14 days should elapse between discontinuation of MAOI use and bupropion treatment initiation
- History bulimia or anorexia nervosa
- History of bipolar disorder
- Severe hepatic cirrhosis

Cautions

- Use with caution in clients over the age of 65 and clients with renal insufficiency or hepatic impairment. The recommended dose in these clients is 150 mg once a day.

Possible side effects

- >1/10 patients experience insomnia.

Less common symptoms (>1/100)

- Rash/urticaria.
- Headache/dizziness.
- Fever.
- Gastrointestinal problems, e.g. dry mouth, nausea.

Low risk (<1/1000)

- Seizure.



For more information

See the Summary of Product Characteristics (SPC) for all the information on effects, side effects and drug interactions: **www.medicines.org.uk/emc/product/3827/smpcp**