

Smoking and the risk of stroke

Stroke Support Helpline: **0303 3033 100**
or email: helpline@stroke.org.uk



Read this online

This guide looks at how stopping smoking can reduce your risk of a stroke and offers tips on quitting.

If you have been advised to give up smoking after a stroke, you might be unsure where to start. You may be dealing with quite a few things at the same time, like new medication, rehabilitation therapy and adjusting to life after a stroke. It can feel like a lot to cope with.

Giving up smoking is never an easy thing to do. But it's one of the best things you can do to help you stay healthy and reduce your risk of another stroke. As soon as you quit, your risk of a stroke starts to go down. Within a few years, your risk is similar to a non-smoker.

You do not have to do it alone. Free help and advice are available to all smokers in the UK.

Turn to **page 2** for practical tips about finding the right time to quit, managing cravings, and getting support for yourself.

How does smoking cause stroke?

It's thought that smokers are around three times more likely to have a stroke than non-smokers. And the more you smoke, the bigger your chance of a stroke.

Tobacco smoke contains over 7,000 toxic chemicals, including nicotine, carbon monoxide, formaldehyde, arsenic and cyanide. When you breathe smoke, the chemicals enter your bloodstream, changing and damaging cells all around your body.

Smoking can:

- Reduce oxygen levels in your blood.
- Increase your risk of high blood pressure.
- Trigger atrial fibrillation (a type of irregular heartbeat).
- Raise levels of 'bad' cholesterol.
- Raise your risk of a blood clot.

Conditions such as high blood pressure, atrial fibrillation and high cholesterol all increase your stroke risk.

E-cigarettes and vapes

Vaping has become popular in recent years. Nicotine is extracted from tobacco and inhaled as a vapour through an electronic device called an e-cigarette or vape. Some people use e-cigarettes when trying to give up traditional cigarettes, and others use them as a substitute.

They are less harmful than cigarettes, but they are not completely risk-free, and we do not know enough yet about long-term effects. The healthiest option is to aim to give up using tobacco products entirely.

Visit nhs.uk/live-well/quit-smoking to find out more about e-cigarettes and stopping smoking.

What happens when you quit?

1. The benefits of stopping smoking begin right away. Your oxygen levels return to normal, and carbon monoxide and nicotine levels reduce by more than half within eight hours. (Carbon monoxide is a poison because it reduces the oxygen going to your body and brain.)
2. You'll notice the difference within 48 hours as your ability to taste and smell improves.
3. In a few days, your breathing becomes easier and your energy levels go up.
4. After 12 weeks, blood will be pumping to your heart and muscles more efficiently.
5. Between three and nine months, any coughing and wheezing should ease and your lung function improves by up to 10%.
6. After one year, your risk of a heart attack is half that of a smoker.
7. After about five years, your risk of having a stroke is around the same level as someone who has never smoked.



Quit or cut down?

Your risk of a stroke goes down the less you smoke. But even smoking one cigarette per day still gives you a significantly higher risk of stroke than if you do not smoke at all. That's why you'll be advised to try quitting.

How can I quit?

Quitting is not easy. But you're much more likely to succeed if you have a little help. This can include using stop-smoking aids like nicotine replacement products or stop-smoking medication.

Joining a free stop-smoking service can be very helpful. These give you access to professional advisers and stop-smoking treatments on prescription. You'll get individual advice and support to keep going. You might be able to join a group, use a quitting app or get email support.

You'll discuss with your adviser why you want to give up. If you decide you want to quit, you'll work with your adviser to make an action plan and set a quit date. Your action plan can include a prescription for stop-smoking treatment, as well as practical advice and support for you.

Find a stop-smoking service

There are stop-smoking services across the UK. Your GP can refer you for help or you can contact a local service yourself. Details are available from your GP surgery or pharmacist, or visit nhs.uk/live-well/quit-smoking to find a service. You can also find the main contact details for services in England, Wales, Scotland and Northern Ireland on [page 6](#) of this guide.



Getting motivated

- Write down all the reasons you want to quit. This could include how passive smoking affects your family, or your reasons for wanting to stay healthy and active.
- Download the free NHS Quit Smoking app on the Google Play or Apple App store, to help you track your progress and get support.
- Work out how much money you can save by quitting and what you could do with it. Try an online savings calculator like this one at thestopsmokingservice.co.uk/money-calculator
- Stay positive. Tell yourself that you're going to do it!
- Getting support and encouragement from friends and family can be helpful too.

What if I start smoking again?

Giving up smoking is a long-term change, and it can take a few tries to stop for good. If you start smoking again, it can be a chance to learn more about the things that trigger your smoking, and how to change them.

If you do start smoking again, visit nhs.uk/better-health/quit-smoking for useful advice and to use the personal quit plan tool.

Managing cravings

When you first stop smoking, your craving for nicotine will decrease gradually over a few weeks. But even after you have stopped smoking, cravings can come back at moments of stress, or at certain times and places where you used to smoke.

A craving could last several minutes before it passes. Some practical tips to avoid smoking when you have a craving include:

- Keep nicotine replacement therapy with you. If you know you're going somewhere you're likely to get cravings, try to take a fast-acting type such as a mouth spray.
- Delay responding to the urge. It's very intense, but it should reduce within a few minutes.
- Make it harder to smoke. Avoid places where people smoke or where you could ask someone for a cigarette. Do not buy a packet or keep cigarettes at home.
- Avoid triggers. If you tend to smoke after dinner or in your lunch break, try doing something different at these times. For instance, if you usually have a cigarette after dinner, go and wash the dishes straight away, or go into a room where you do not smoke. Changing your pattern of behaviour for a while could help you break the association with smoking.

More practical tips are available from your local stop smoking service or the **NHS Better Health** website.

Waterpipes

Smoking a waterpipe (shisha) can deliver far more nicotine, smoke and harmful chemicals in a session than smoking a cigarette.



Staying healthy after quitting

Emotional wellbeing

Smoking can give you a feeling of relaxation because nicotine alters mood chemicals in the brain. The problem is you become dependent on nicotine to give you that feeling. When you quit, cravings can make you feel anxious and irritable at first. But after a while, your mood and anxiety levels should improve.

If you feel low mood or anxiety is affecting you, or if you take medication for anxiety or depression, contact your GP. They can help make sure you get the help and support you need.

Stay active and eat well

Being as active as possible will help your overall health and wellbeing and reduce your risk of a stroke. It's also great for improving mood and sleep. Walking, swimming or indoor exercise like housework are all great ways of starting to move more.

We have lots of great suggestions for getting motivated and adding more movement into your day, plus free exercise videos for stroke survivors, at stroke.org.uk/getting-active

Try to follow healthy diet advice, like having plenty of vegetables and fruit, and reducing salt and sugar. Have healthy snacks ready if you crave sweet food. Things like fresh fruit, nuts and vegetable sticks are good. If you're eating more than usual, try to keep your portion sizes small. Keep using any stop-smoking treatment regularly, as cravings can make you eat more.



Medication and stop-smoking aids

There are several different types of medicine and stop-smoking aids that can help you stop smoking. Speak to your doctor, pharmacist or an advisor at your local stop smoking service about which type of treatment is most suitable for you. These may include:

- Nicotine replacement therapy (NRT) including patches, gum, lozenges, microtabs, inhalators, and nasal sprays.
- Varenicline.
- Zyban tablets (bupropion).
- E-cigarettes.
- Other stop-smoking techniques.

Nicotine replacement therapy (NRT)

NRT steadily releases nicotine into your blood stream without you having to inhale cigarette smoke. Using NRT helps to relieve smoking withdrawal symptoms, such as cravings, restlessness and irritability. After setting a stop date, you can start on your chosen NRT. You might use more than one type at the same time, such as a long-acting type, plus a fast-acting kind to deal with cravings.

There is a wide range of NRT products available. They are available on prescription from an NHS Stop Smoking Service. You can also ask your pharmacist for advice on products available over-the-counter and about any side effects.

Types of nicotine replacement therapy (NRT)

- **Patches** deliver a continuous supply of nicotine into the bloodstream. There are two kinds available: 16 hours for daytime use and 24 hours to be worn day and night for those with particularly strong cravings. They come in various strengths to reflect how much you smoke. Users should aim to reduce the level of nicotine gradually while quitting.
- **Gum** delivers bursts of nicotine through chewing. The strength of the gum and number of pieces you use will be determined by how much you have smoked. You chew this type of gum slowly, until the taste becomes stronger and hold it between your gums and cheek to allow the nicotine to be absorbed into the bloodstream, repeating this action when the taste fades.
- **Lozenges** work in a similar way to gum, providing short bursts of nicotine. You suck the lozenge until the taste becomes stronger and store it inside your cheek until it fades, starting again when this happens. They usually dissolve after 20–30 minutes.
- **Nasal sprays** can work for heavy smokers or people who get severe withdrawal symptoms. The nicotine is quickly absorbed into the blood vessels in the nose, relieving cravings quickly, although they can produce side effects such as nose and throat irritation, coughing and watery eyes.
- **Inhalators** are made of plastic and shaped to look like cigarettes. Users suck on the tube to release a burst of nicotine. They are particularly suited to people who miss the physical action of smoking.
- **Microtabs** are very small tablets that dissolve under your tongue and should not be chewed. The dosage depends on how much you have smoked. They may suit people who prefer a discreet aid to stopping smoking.

Using nicotine replacement therapy (NRT) after a stroke

NRT should only be started under medical supervision in someone who has had a very recent stroke (within the last four weeks). In most cases, NRT will still be prescribed as the risks associated with continuing to smoke are usually greater than the risk of using NRT after a stroke.

Stop-smoking medication

Varenicline

Varenicline is a tablet that can reduce withdrawal symptoms and cravings, to help you quit and be less likely to relapse. You start taking it about a week before you plan to stop smoking. It is not suitable for people with some health conditions and cannot be used if you're pregnant. It is only available on prescription, and treatment usually lasts for 12 weeks.

Zyban (bupropion hydrochloride)

Zyban is usually taken for a couple of months. It's thought it alters brain chemistry in such a way that nicotine is less effective and the desire to smoke is reduced. It is not suitable for people with some health conditions and it's only available on prescription.

E-cigarettes and vaping

Advisers at Stop Smoking Services can suggest trying vapes as part of your quitting plan, but they are not currently available on prescription. You can buy them from some pharmacies and other retailers.

Other stop-smoking techniques

Acupuncture and hypnotherapy may help some people, but have not been through any large-scale clinical trials and are not licensed as stop-smoking treatments on the NHS. If you wish to try one of these therapies, make sure you see a qualified practitioner.

Where to get help and information

From the Stroke Association

Stroke Support Helpline

Our Stroke Support Helpline offers information and support for anyone affected by stroke, including family, friends and carers.

Call us on **0303 3033 100**, from a
textphone **18001 0303 3033 100**
Email **helpline@stroke.org.uk**

[Read our information](#)

Log onto **stroke.org.uk** where you can find easy-to-understand information, videos and an online community to support you. You can also call the Helpline to ask for printed copies of our guides.

Other sources of help and information

Action on Smoking and Health (ASH) (England)

Website: ash.org.uk

ASH Scotland

Website: ashscotland.org.uk

Tel: 0131 225 4725

ASH Wales

Website: ash.wales

Tel: 029 2049 0621

A campaigning public health charity working to eliminate the harm caused by tobacco.

Find help to stop smoking

NHS Stop Smoking Services (England)

Website: [nhs.uk/live-well/quit-smoking](https://www.nhs.uk/live-well/quit-smoking)

Helpline: 0300 123 1044

Help me quit (Wales)

Website: helpmequit.wales

Helpline: 0800 085 2219

Stop smoking (Northern Ireland)

Website: stopsmokingni.info

Quit your way (Scotland)

Website:

nhsinform.scot/quit-your-way-scotland

Smokeline: 0800 84 84 84

Your notes

[illegible]

About our information

We want to provide the best information for people affected by stroke. That's why we ask stroke survivors and their families, as well as medical experts, to help us put our publications together.

How did we do?

To tell us what you think of this guide, or to request a list of the sources we used to create it, email us at **feedback@stroke.org.uk**

Accessible formats

Visit our website if you need this information in audio, large print or braille.

Always get individual advice

This guide contains general information about stroke. But if you have a problem, you should get individual advice from a professional such as a GP or pharmacist. Our Helpline can also help you find support. We work very hard to give you the latest facts, but some things change. We don't control the information provided by other organisations or websites.

You know more than most just how shocking and confusing having a stroke is. We're here to support you and your family find the strength and determination to get back to life.

Learn more about stroke support: **stroke.org.uk**

© Stroke Association 2024
Version 5. Published December 2024
To be reviewed: April 2027
Item code: **A01F19**

Stroke Association is registered as a charity in England and Wales (No 211015) and in Scotland (SC037789). Also registered in the Isle of Man (No. 945) and Jersey (No. 221), and operating as a charity in Northern Ireland.