How do I control my blood pressure? Lifestyle options and choice of medicines

Patient decision aid

I've been diagnosed with high blood pressure. What does this mean for me?

If you have high blood pressure, your heart has to work harder to pump blood around your body. This means that you may be at risk of **cardiovascular disease**, for example a **stroke** or a **heart attack**. You may also be at risk of other problems such as damage to the blood vessels in your kidneys or eyes. The higher your blood pressure, the more likely you are to have these problems. But it's not possible to say what will happen to any individual person and not everyone with high blood pressure will get these problems.

The aim of treating your high blood pressure is to make it less likely you'll get cardiovascular disease, or stop it getting worse if you already have it (although there is a chance that these things could still happen). High blood pressure is just one of several things that can lead to a stroke or a heart attack.

The actual benefit you might get from lowering your blood pressure depends on several things, such as your chance of having a stroke or a heart attack to start with, your age, sex and your blood pressure at the moment.

Your healthcare professional can help you understand your risk of cardiovascular disease, and may use a risk assessment tool to do this.

NICE National Institute for Health and Care Excellence

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What are my options?

- You can choose to **do nothing**.
- You can choose to make **lifestyle changes** before trying medicines.
- You can choose to **take medicines** to lower your blood pressure as well as trying **lifestyle changes**.

If you decide to make lifestyle changes, talk to your healthcare professional about what changes you want to try first.

If you decide to try medicines, you and your healthcare professional can decide together which medicine is best for you.

The first medicine you try might not lower your blood pressure enough on its own, so you might also need to decide whether or not you want to add extra medicines.

This decision aid can help you and your healthcare professional decide together which is the best option for you.

Table 1 on page 3 gives some advantages and disadvantages for you to think about when choosing the best option for you.

You may find that you have more things to add to this list as you think about each option.

Table 2 on page 5 has more information about the medicines often used to control high blood pressure.

Sometimes other medicines are used too, so if your medicine isn't listed here, talk to your healthcare professional.

Table 1. What can I do to try to lower my blood pressure and lessen my chances of a stroke or a heart attack?

	Do nothing	Trying lifestyle changes	Taking medicines + trying lifestyle changes
What does this involve?	• Carrying on as I am.	Not all of these changes might apply to you, but any will help: • Eating a healthy diet. This includes reducing the amount of salt you eat, and eating more fruit & veg. • Being more physically active. • Trying to get to a healthier weight. • Avoiding drinking too much alcohol. • Stopping smoking.	• You'll take medicines to lower your blood pressure, as well as making lifestyle changes at the same time. • You'll take one or more medicines every day, long term.
Advantages	• No changes to make. • No extra medicines.	• You'll feel healthier and fitter. • You're less likely to have a stroke or a heart attack (although this might still happen). • You might not need to take medicines.	• Medicines can help to lower your blood pressure even more than lifestyle changes on their own. • You'll be even less likely to have a stroke or a heart attack (although this might still happen).

	Do nothing	Trying lifestyle changes	Taking medicines + trying lifestyle changes
Disadvantages	• You are more likely to have a stroke or a heart attack if you don't control your blood pressure (but these aren't certain to happen).	• Changing habits can be hard. • If you stick to lifestyle changes on their own, and your blood pressure is still high, you won't have lowered your chance of a stroke or a heart attack as much as if you take medicines as well.	• You'll have to remember to take your medicines every day. • There might be times when your blood pressure is too low. This may not always cause symptoms, but some people may feel light headed (especially when they stand up), or even faint. • You might get side effects from blood pressure medicines (see table 2 on page 5). But not everyone will get side effects and they go away quickly if you stop taking the medicine. They may be short lived or not trouble you if they do happen. • You might need blood tests (see table 2 on page 5).

Other things I want to think about

Use this space to make any notes on things you might want to talk about with your healthcare professional.

Table 2. What medicines could I try to control my blood pressure?

	ACE inhibitor	ARB	CCB	Diuretic
What are the types of medicine and what are they called? The medicines are shown here in alphabetical order. The choice of medicine will depend on which option is best for you after discussion with your healthcare professional.	ACE stands for 'angiotensin converting enzyme'. The names of these medicines commonly end in '**pril**' (for example, lisinopril, perindopril and ramipril).	ARB stands for 'angiotensin receptor blocker'. The names of these medicines commonly end in '**artan**' (for example, candesartan, losartan and valsartan).	CCB stands for 'calcium channel blocker'. The names of these medicines commonly end in '**dipine**' (for example, amlodipine, felodipine and lacidipine).	A common example is indapamide.

	ACE inhibitor	ARB	CCB	Diuretic
What are some of the common side effects? The diagrams on page 10 may help make sense of the numbers. Sometimes, other problems have been reported by people taking these medicines. These are listed in the information leaflet you will get with the medicines.	A common side effect of ACE inhibitors is a persistent dry cough: 10 or more people in every 100 taking an ACE inhibitor may get this (but not everyone does). But the cough may not trouble you if it does happen. Other possible side effects include changes to how well your kidneys work and swelling of the lips, eyes or tongue: 1 or more people in every 100 taking an ACE inhibitor may get one or more of these (but not everyone does). A blood test taken within a few weeks of starting the ACE inhibitor will show any effect the medicine will have on your kidneys.	The side effects of ARBs are similar to those of ACE inhibitors. But you are less likely to get a persistent dry cough and swelling of the lips, eyes or tongue with ARBs than with ACE inhibitors. Other possible side effects include changes to how well your kidneys work: 1 or more people in every 100 taking an ARB may get this (but not everyone does). A blood test taken within a few weeks after starting an ARB will show any effect the medicine will have on your kidneys.	Common side effects of CCBs include swollen ankles (this improves if the dose is reduced and goes away quickly if you stop taking the CCB), flushing, headaches and palpitations (these tend to ease over a few days if you continue to take the medicine): 1 or more people in every 100 taking a CCB may get one or more of these (but not everyone does).	Common side effects of diuretics are feeling light-headed on standing and salt imbalance (low sodium or potassium in the blood) which may make you feel weak: 1 or more people in every 100 taking a diuretic may get one or more of these (but not everyone does). People often notice an increased need to pass urine after taking these medicines (and so they are often taken in the morning). This usually stops after about a month of taking a diuretic. **Continued over page...**

	ACE inhibitor	ARB	CCB	Diuretic
What are some of the common side effects? (Continued.) The diagrams on page 10 may help make sense of the numbers. Sometimes, other problems have been reported by people taking these medicines. These are listed in the information leaflet you will get with the medicines.			A less common side effect is gum problems: fewer than 1 person in every 100 taking a CCB may get this (but not everyone does). However, gum problems are usually caused by poor gum care so speak to your dentist about this.	Sometimes diuretics can affect how well your kidneys work: 1 or more people in every 100 taking a diuretic may get this (but not everyone does). A blood test taken within a few weeks after starting the diuretic will show any effect the medicine will have on your kidneys.

	ACE inhibitor	ARB	CCB	Diuretic
Will I need blood tests?	You'll need blood tests to check how well your kidneys are working before starting treatment, between 1 and 2 weeks after starting, and after increasing the dose. You'll also need blood tests while you are taking these medicines, usually once a year unless you are unwell for another reason.	You'll need blood tests to check how well your kidneys are working before starting treatment, between 1 and 2 weeks after starting, and after increasing the dose. You'll also need blood tests while you are taking these medicines, usually once a year unless you are unwell for another reason.	Blood tests are not usually needed with these medicines.	You'll need blood tests to check how well your kidneys are working before starting treatment, between 1 and 2 weeks after starting, and after increasing the dose. You'll also need blood tests while you are taking these medicines, usually once a year but maybe more frequently if you are unwell for another reason.
Your healthcare professional can tell you how often you'll need blood tests				

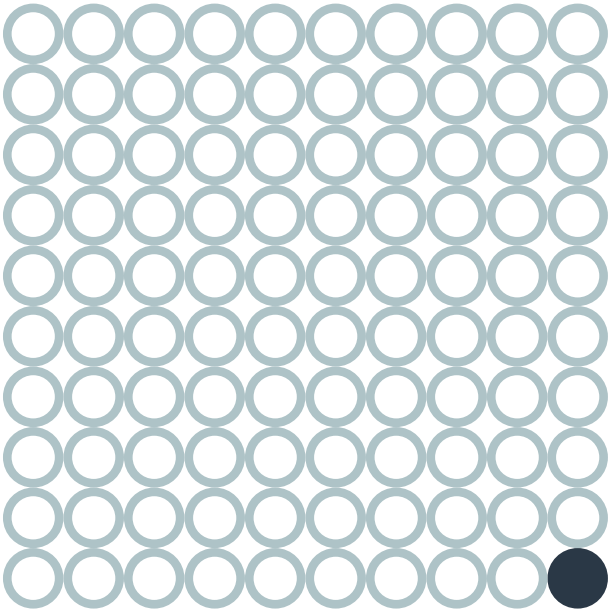
	ACE inhibitor	ARB	CCB	Diuretic
What else do I need to think about? Speak to your healthcare professional if you would like more information about why different medicines work better for people of different family origins.	ACE inhibitors are not suitable for women who are pregnant or who may become pregnant. Most are not usually recommended during breastfeeding. For people with type 2 diabetes, ACE inhibitors help protect the kidney. For people of black African or African–Caribbean family origin, ACE inhibitors work less well than CCBs or diuretics when used on their own. For people of black African or African–Caribean family origin ARBs are better than ACE inhibitors because the chance of getting swelling of the lips, eyes or tongue is less.	ARBs are not suitable for women who are pregnant or who may become pregnant. Most are not usually recommended during breastfeeding. For people with type 2 diabetes, ARBs help protect the kidney. For people of black African or African–Caribbean family origin, ARBs work less well than CCBs or diuretics when used on their own. For people of black African or African–Caribean family origin ARBs are better than ACE inhibitors because the chance of getting swelling of the lips, eyes or tongue is less.	CCBs are not usually prescribed if you have heart failure.	If you have diabetes, these medicines may affect your blood sugar levels. If you have gout, then these medicines can make it worse.

Your chance of getting side effects

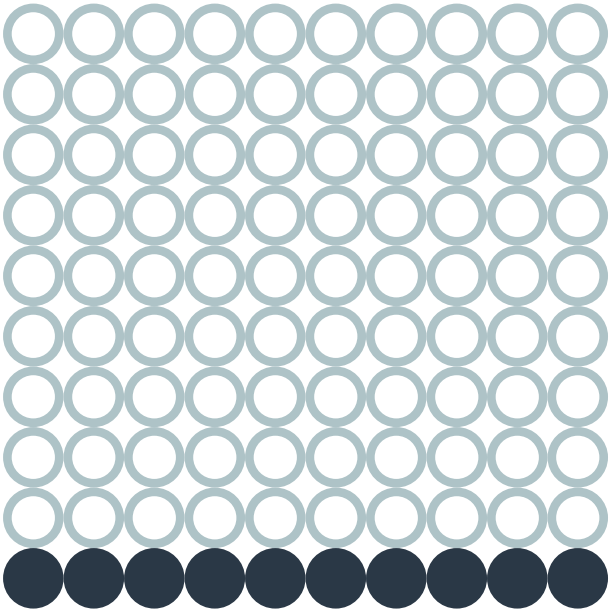
It isn't possible to give very precise figures for the chances of different side effects happening, so this decision aid gives a general idea. For example, "1 or more people in every 100 may get this side effect (but not everyone does)".

Some people find the type of diagram below makes it easier to picture the chances of something happening to them. People who have **experienced an effect** are shown as **filled circles**.

1 in 100



10 in 100



It is not possible to know in advance what will happen to any individual person