

GETTING THE MOST FROM BLOOD PRESSURE MEDICINES



Blood Pressure UK

Helping you to lower your
blood pressure

About this booklet

This is one of a series of booklets produced by Blood Pressure UK, to help people with high blood pressure take practical steps to manage their condition. The booklets in the series are:

- 1 Introducing high blood pressure**
- 2 Healthy eating and blood pressure**
- 3 Healthy lifestyle and blood pressure**
- 4 Getting the most from blood pressure medicines**
- 5 Measuring your blood pressure at home**

Blood Pressure UK is a registered charity and we rely on donations to help us carry out our work. We would be grateful for any donation that you can make towards the cost of producing this booklet. Contact us by telephone **(020) 7882 6255** or visit our website: **www.bloodpressureuk.org**






High blood pressure is the **biggest** known cause of disability and premature death in the UK through stroke, heart attack and heart disease. **One in three adults** in the UK **has high blood pressure** and every day 350 people have a preventable stroke or heart attack caused by the condition.

Deciding when you need medicines

If you have high blood pressure, you need to take action to bring it down. This may not mean taking medicines right away. Your doctor or nurse may prefer that you make some healthy lifestyle changes at first.

However, sometimes lifestyle changes may not lower your blood pressure enough on their own. If this is the case, then your doctor or nurse may decide that you also need to take medicines.

Whether you need to take medicines also depends on your overall risk of heart disease, stroke or other health problems. Other factors as well as high blood pressure increase this risk, such as if:

-  **you have high cholesterol**
-  **you smoke**
-  **you have diabetes or kidney disease**
-  **you have a family history of high blood pressure or heart disease, or**
-  **you have any other medical condition that could affect the health of your heart or blood vessels.**

If any of these factors apply to you, your doctor or nurse may decide you need to take blood pressure medicines sooner rather than later. By lowering your blood pressure, you are lowering your overall risk of heart disease and stroke.

Types of blood pressure medicine

There is a wide range of medicines available for high blood pressure. You can take more than one type of medicine because they each lower your blood pressure in different ways.

There are four main types of medicine that doctors use to treat high blood pressure:

- 📍 **Angiotensin Converting Enzyme inhibitors (or ACE):** these medicines help to control hormones that affect blood pressure. Most of these medicines have names that end in 'pril'.
- 📍 **Angiotensin receptor blockers (or ARBs):** these also control hormones that affect blood pressure. Most of these medicines have names that end in 'artan'.
- 📍 **Calcium-channel blockers (or CCB):** these medicines make the artery walls relax, making them wider, which lowers blood pressure. Most of these medicines have names that in 'pine'.
- 📍 **Thiazide diuretics:** these medicines remove excess salt and water from the body, which helps lower blood pressure. Most of these medicines have names that end in 'ide'.



We have information on the different medicines for high blood pressure. Contact us for more details.

♥ Beta-blockers

Until recently, medicines called called beta-blockers were often given to people with high blood pressure. Beta-blockers are not usually given as a first choice because the other types of medicine appear to be better at reducing your risk of heart disease and stroke.



Beta-blockers are safe to use, so you do not need to worry if you are taking one. You may like to discuss with your doctor or nurse if another medicine might be better for you. However, there are times when beta-blockers can be useful, for example if you have heart failure or angina.

♥ Other types of medicine

There are other types of medicines which are not very commonly used, but which can help to lower your blood pressure. Some examples of these are alpha-blockers, vasodilators, or direct renin inhibitors.

These medicines may be used in special cases – for example if you are pregnant, or if you cannot take the main blood pressure medicines already mentioned. Your doctor or nurse will decide which medicines are best for you.

♥ Taking more than one medicine

Many people will need to take more than one medicine to fully control their blood pressure. This is because each medicine works in different ways. None of them can control your blood pressure completely.

As one medicine lowers your blood pressure, your body may try to use another way to raise it. You may then need to take other medicines to control your blood pressure this way.

This means that some people with high blood pressure may need to take two or three different medicines, or sometimes even more.

How your doctor chooses your medicines

Research shows that some types of medicine work better in different types of people. Their effects can depend on your:

- ♥ **age;**
- ♥ **ethnic origin;**
- ♥ **medical problems (such as kidney disease or angina); or**
- ♥ **medical history, for example which blood pressure medicines you have tried in the past.**

Of course, everyone is different. Some medicines will work better than others for you. Your doctor and nurse will usually go through a number of steps to find the right medicines for you.

Guidelines for choosing blood pressure medicines

	Younger than 55 years old	55 years and older or black* people of any age
Step 1	A ACE inhibitor or angiotensin receptor blocker if side effects	C Calcium-channel blocker or D Thiazide diuretic
Step 2	A + C or A + D	
Step 3	A + C + D	
Step 4	Add other medicines or consider seeking specialist advice	

*Black means a person of African or Caribbean descent who is not mixed race or Asian

Step 1

The first medicine you will take will depend on your age and ethnic origin.

- ♥ If you are under 55 and do not have African-Caribbean origins, you will probably start with an ACE inhibitor or an angiotensin receptor blocker.
- ♥ If you are 55 or older, or have African-Caribbean origins (but you are not mixed race), you will probably start with a calcium-channel blocker or thiazide diuretic.



Step 2

You may find that one medicine on its own is not enough to lower your blood pressure. Your doctor will then add a medicine from another group. This means that:

- ♥ If you are already taking an ACE inhibitor or angiotensin receptor blocker, you will also have to take a calcium-channel blocker or a thiazide diuretic.
- ♥ If you are already taking a calcium-channel blocker or a thiazide diuretic, you will also have to take an ACE inhibitor.

Step 3

If you have to take three medicines, you will take an ACE inhibitor (or an angiotensin receptor blocker) and a calcium channel blocker and a thiazide diuretic.

Step 4

Sometimes three types of medicine together are still not enough to fully control a person's blood pressure. Your doctor may give you another medicine or they may refer you to a specialist.

Getting the most from your medicines

There is no cure for high blood pressure. This means that if you start taking medicines, you will probably need to keep taking them for life. If you stop taking them, your blood pressure will quickly rise again.

Here are some tips to help you get the most from your blood pressure medicines:

- ✔ **Accept your medicines** Remind yourself that your medicines are helping to keep your heart and blood vessels healthy. Your body can't do this on its own anymore.
- ✔ **Make them a part of your routine** Take your medicines at the same time every day. Your blood pressure will usually be highest in the morning, so you could take them with breakfast.
- ✔ **Learn about your medicines** Read the information that comes with your medicines. If you have any questions, ask your doctor or nurse, or your pharmacist.
- ✔ **Measure your blood pressure at home** If you measure your blood pressure at home you will be able to see the effect that your medicines are having on your blood pressure.
- ✔ **Keep up with a healthy lifestyle** The more you can lower your blood pressure without medicines, the less medicine you will need. A healthy lifestyle can also help your medicines to work better.

Top five healthy lifestyle recommendations:

Eat less salt and sugar

Eat more fruit and vegetables

Maintain a healthy weight

Be more active

Limit alcohol intake to recommended guidelines

Working with your doctor or nurse

When your doctor or nurse first gives you a medicine or changes your dose, they will probably want to see you again in a few weeks. This is to make sure that the medicines are working, and that you are not having any side effects.

If your blood pressure is still high, they may give you a higher dose, or give you another medicine. Your doctor or nurse will continue to monitor your blood pressure closely until it is under control.

Other medicines

If you take medicines for high blood pressure, you should be careful when taking any other medicines, whether they are prescription or 'over-the-counter' medicines, or even herbal remedies.

For example, some cold and flu remedies can raise your blood pressure. Also, some painkillers, such as ibuprofen, can make your blood pressure medicines less effective.

Effervescent and soluble tablets, for example vitamin C supplements and soluble painkillers such as aspirin and Alka Seltzer, contain sodium carbonate or bicarbonate which makes them fizz. They can increase your blood pressure if taken regularly, so avoid these and use non-effervescent alternatives.

Ask your doctor or pharmacist for advice and always speak to them about any new prescription or over-the-counter medicines you are going to take.

You may be able to take two medicines in one tablet. This is sometimes called a combination tablet. It can make it easier to take all your medicines, and it can also make your prescriptions cheaper. If you need to take more than one medicine, ask your doctor or nurse if a combination tablet is available.



Side effects

Most people will be able to take their medicines without any problems. However, a few people can have side effects from their medicines. Everyone is different, and there is no way to tell whether you will have a side effect from your medicine.

Most people who do have side effects will feel them soon after they start to take a new medicine, or a higher dose of their medicine. If you start to feel different after you start a new medicine speak to your doctor or nurse. They may be able to change your dose, or try a different medicine.

Some side effects may wear off over time, or you may get used to them. In all but a few rare cases, the side effects of blood pressure medicines are not dangerous. You may be willing to put up with them if they keep your blood pressure under control and protect you from a heart attack or stroke.

If you do experience side effects to a medicine you can report them via the MRHA Yellow Card scheme - <https://yellowcard.mhra.gov.uk>

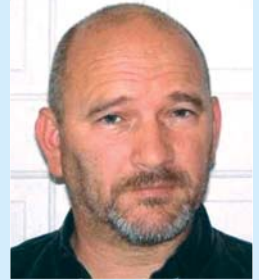
Your medicines will usually come with an information leaflet. This leaflet will contain a list of all known side effects for this medicine. No one will have all the side effects listed, and most of them are very rare. If you are concerned about side effects, speak to your doctor or nurse, or your pharmacist.



Dale's story

'It's hard to take my pills because I don't feel ill'

After Dale Dobson was diagnosed with high blood pressure, it took time to find a combination of medicines that worked well for him. Now, he takes his medicines every day and his blood pressure is under control. He says:



'I was prescribed an ACE inhibitor and the dose was slowly increased, but it only lowered my blood pressure by a small amount. They then added a calcium channel blocker but it was still not enough. The dose of the ACE inhibitor was increased further and finally, five months after I was diagnosed, my blood pressure had dropped to 120 over 80.

The biggest issue I wrestle with is needing to take several pills a day. Even now it is still a struggle to remember to take them because I've never been someone who takes pills.

Also it is hard because I have never, and still don't, feel ill. Occasionally I find myself wondering if I would have been better off never having had my blood pressure tested because it caused me so much worry and anguish.

But I know, in my heart of hearts, that ignorance is not bliss and I am determined to keep on with the pills since they are helping to lower my risk of heart attack and stroke.'

This booklet has been written to help you make the most of your blood pressure medicines. Most people with high blood pressure will need to take medicines to lower it, but this can sometimes be difficult to accept.

This booklet aims to answer the most common questions people have about their blood pressure medicines. It gives you information on:

- ♥ **Why you might need medicines**
- ♥ **The different types of medicines available**
- ♥ **Finding the right medicines for you**
- ♥ **Learning to live with your medicines**

The booklet has been written with help from people who have high blood pressure, and from professionals who are experts in the field. It has been designed to give you the information you need to make the right choices for you.

For more information, go to www.bloodpressureuk.org.

About Blood Pressure UK

We are the UK's leading blood pressure charity - lowering the nation's blood pressure to prevent stroke, heart attack and heart disease. High blood pressure can be successfully treated and prevented. We are here to help.

For more information, please contact:

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