

Treatment for high blood pressure normally aims to reduce your blood pressure to 140/90mm Hg or below. In kidney disease doctors may want to reduce it to 130/80mmHg. Renal patients need to take particular care and work closely with their doctors and medical team. This is a generic piece of information on blood pressure medication and the drugs may not be relevant for your disease.

There are five main classes of drugs here:

Angiotensin-converting enzyme (ACE) inhibitors

These drugs reduce the amount of a chemical that you make in your bloodstream called angiotensin II. This chemical tends to narrow blood vessels. Inhibiting this chemical reduces the effect on the body. ACE inhibitors should not be taken by people with certain types of kidney problems so care is needed here. A blood test is carried out before taking it to check kidney function and at regular intervals after that.

Angiotensin Receptor Blockers

These block the effect of angiotensin II on the blood vessel walls and have a similar effect to ACE inhibitors.

Calcium-channel blockers

These affect the way calcium is used in the blood vessels and heart muscle, having a relaxing effect on the blood vessels.

Diuretics

Diuretics increase the amount of salt and fluid that you pass out. This has some effect on reducing the fluid in the circulation which reduces blood pressure. They may also have a 'relaxing' effect on the blood vessels which reduces the pressure within the blood vessels. Only a low dose of a diuretic is needed to treat high blood pressure. Therefore, you will not notice much diuretic effect (that is, you will not pass much extra urine).

Particular care is needed with renal disease.

Beta-blockers

Again, there are various types and brands. For example, acebutolol, atenolol, bisoprolol, metoprolol, oxprenolol, pindolol, propranolol, sotalol, and timolol. They work by slowing the heart rate, and reducing the force of the heart. These actions lower the blood pressure. Beta-blockers are also commonly used to treat angina, and some other conditions. You should not take a beta-blocker if you have asthma, chronic obstructive pulmonary disease (COPD), or certain types of heart or blood vessel problems.

What about side-effects?

All drugs have possible side-effects, and no drug is without risk. However, most people who take drugs to lower blood pressure do not develop any side effects, or only have mild side-effects. A full list of cautions and possible side-effects is listed on the leaflet inside the drug packet. The most common ones are:

- **ACE inhibitors** - sometimes cause an irritating cough.
- **Angiotensin receptor blockers** - sometimes cause dizziness.
- **Calcium channel blockers** - sometimes cause dizziness, facial flushing, swollen ankles, and constipation.
- **Diuretics** - can cause gout attacks in a small number of users, or can make gout worse if you already have gout. Impotence develops in some users.
- **Beta-blockers** - can cause cool hands and feet, poor sleep, tiredness, and impotence in some users.

If you do develop a side-effect, a different drug may suit you better. There is a lot of choice so one can usually be found to suit. See your doctor if you develop any problem which you think is due to your medication.

Other drugs for high blood pressure

Apart from the five main classes of drugs listed above, sometimes other drugs are used to lower blood pressure. For example, methyldopa or alpha blockers are sometimes used if there are problems with the more commonly used drugs.