

Low blood pressure and Parkinson's

Some people with Parkinson's may experience low blood pressure (hypotension) as a symptom of the condition or a side effect of their medication.

This information looks at what low blood pressure is and how to manage it.

What is blood pressure?

Blood pressure is a measure of how forcefully your heart is pumping blood around your body. This is important because your blood carries oxygen from your lungs to your other organs, including your brain.

Blood pressure goes up and down naturally during the day. It may go up if you are stressed or doing physical activity and goes down when you are resting.

How is blood pressure controlled?

The autonomic nervous system (part of the brain, nerves and spinal cord) controls your blood pressure. This process involves sensors in your neck, which send signals about your blood pressure to your brain. The brain monitors your blood pressure and tells your heart and blood vessels when to adjust it.

The autonomic nervous system also sends or diverts blood to the parts of the body that need it most. This helps to control the supply as there is only a certain amount.

This happens during certain activities. For example, during exercise your blood pressure increases so your muscles can get more oxygen. Or, if you have eaten recently, more blood goes to your stomach to allow it to digest food, reducing blood pressure elsewhere.

Where can I get my blood pressure checked?

If you are concerned about your blood pressure, you can ask your GP, Parkinson's nurse or specialist to check it. If your GP surgery has a practice nurse, they can also take your blood pressure for you. In some cases your pharmacist may be able to check your blood pressure, too.

How is blood pressure measured?

To measure your blood pressure your doctor will listen to your pulse in your arm and take two readings from each beat.

To do this they will use a blood pressure monitoring machine with a stethoscope. A cuff is wrapped around your arm and pressure is increased to 180mm Hg and then decreased.

The first reading is a measure of the highest pressure when your heart pumps blood around your body. This is called systolic pressure.

The second reading is a measure of the lowest pressure when your heart is resting between beats. This is called diastolic pressure. These two readings will give you a maximum and minimum blood pressure.

The readings are given as two numbers with both measures of pressure called 'mm Hg'. For example, if your systolic pressure is 120mm Hg and your diastolic pressure is 70mm Hg, your blood pressure is written as 120/70.

Is my blood pressure reading normal?

A normal blood pressure reading is one between 90/60 and 140/90. Any readings outside of this range are classed as low or high.

Don't worry if your blood pressure is higher or lower than expected – a one-off reading may be nothing to worry about. But if you are concerned that your blood pressure might still be too high or low after a period of time, see your doctor or Parkinson's nurse.

What is high blood pressure?

High blood pressure is a reading of 140/90 or higher. High blood pressure usually has no obvious symptoms and many people have it without even knowing.

High blood pressure can increase the risk of a heart attack and stroke. You are also more likely to have problems with high blood pressure if you drink too much alcohol, eat a poor diet or smoke. High blood pressure can sometimes run in families.

What is low blood pressure?

Low blood pressure is a reading of below 90/60.

What causes low blood pressure?

Sometimes Parkinson's itself can cause low blood pressure. This is because Parkinson's affects the 'autonomic nervous system,' which controls blood pressure. In other cases, low blood pressure in Parkinson's is linked to medication (see our section below on postural hypotension and medication for more information).

What are the symptoms of low blood pressure?

Blood pressure which is naturally low doesn't cause any symptoms. But, if it drops too low you may experience:

- feeling dizzy or light-headed (especially when you stand up after sitting or lying down)
- blurred vision
- feeling weak
- feeling muddled or confused

If you experience symptoms that you think are linked to low blood pressure, get your blood pressure measured while you are sitting or lying and then after you have stood up for a couple of minutes. This will provide a better picture of your blood pressure overall.

Postural hypotension in people with Parkinson's

Postural hypotension (also known as orthostatic hypotension) is a large drop in blood pressure when standing or changing position.

For example, usually your body senses when you stand up, increases your heart rate and squeezes your blood vessels to move blood around your body. This process stops gravity from pooling blood in your legs.

But with postural hypotension this doesn't happen. Because of this, it means less blood returns to the heart and reaches the brain. This can cause dizziness or fainting.

Postural hypotension can be a particular problem for people with Parkinson's so it's important to speak to your GP, specialist or Parkinson's nurse about how to manage it.

Postural hypotension and medication

People with Parkinson's are mostly likely to experience postural hypotension because of medication, including:

- your Parkinson's drugs, particularly levodopa and dopamine agonist
- drugs which help reduce swelling in your feet and ankles, called diuretics
- antidepressants
- blood pressure lowering drugs (anti-hypertensives)

It is particularly important to take your medication as prescribed. Postural hypotension alone may not be a reason to change drugs. If you are worried about your symptoms, speak to your specialist or Parkinson's nurse about changing your medication. But remember not to stop taking your medication suddenly, because this can be dangerous.

Postural hypotension doesn't usually cause serious problems if your Parkinson's medication is built up gradually and your blood pressure is closely monitored.

If postural hypotension causes you particular problems, your GP, specialist or Parkinson's nurse may be able to prescribe specific medication to help you manage it. The drugs that may be prescribed include ephedrine, midodrine and fludrocortisone. However, this medication can interact with some Parkinson's drugs so your healthcare professional will be able to advise you on whether this is the right choice for you.

If you have been taking medication to lower your blood pressure, make sure your blood pressure is checked regularly. Medication to lower blood pressure, combined with the drugs used for Parkinson's, may make your blood pressure too low.

Find out more: For more information about the side effects of Parkinson's medication see our information on drug treatments for Parkinson's.

Low blood pressure and fainting

If the blood flow to your brain is reduced too much because of low blood pressure, you can feel light-headed or faint. If you faint or black out, you could fall and hurt yourself.

Feeling weak and faint may feel unpleasant. Sometimes it can cause mild confusion, which can be worrying, but the confusion should go away when your blood pressure returns to normal.

If you faint, it is important to stay lying flat and not try to stand up immediately afterwards. This will allow the blood to reach your brain and help you feel better. You can then get up gradually into a sitting position.

If you feel dizzy or faint, sit with your legs raised or lie down, until the feeling passes. Some people also find it helpful to use a Derby or shooting stick to sit on. These look like walking sticks but can turn into a chair when you need them to. This allows you to rest whenever you want to. Sport shops often sell them or you could try online.

Find out more: see our information on falls and Parkinson's.

When am I most likely to experience low blood pressure and what can I do about it?

Symptoms of low blood pressure are most likely to happen when there is an increased demand for blood in your body. This can include:

- if you stand up quickly, particularly from a lying position or after periods of not much movement
- after meals – the stomach and intestines don't need as much blood which lowers blood pressure in other parts of the body
- when you are dehydrated. This can be because of vomiting, overheating or not drinking enough. A lack of fluids and salt in your body makes it harder for your autonomous nervous system to regulate your blood pressure. Drinking alcohol can cause dehydration and that can disturb the control of blood pressure, so try to drink water in between alcoholic drinks
- a hot environment, such as a centrally heated room, hot bath or on a summer's day. This is because the blood vessels, particularly those close to the skin, become larger as a way of cooling the blood down. This also reduces your blood pressure

Symptoms of low blood pressure can also happen if you are constipated. This can be a common problem in people with Parkinson's and sometimes the effort of straining may cause you to feel faint. You may also feel faint when you pass urine or cough.

Find out more: see our information on diet and Parkinson's and looking after your bladder and bowels when you have Parkinson's.

You may also experience symptoms of low blood pressure:

- in the morning. Your blood pressure drops while you are sleeping, so it is already low when you wake up
- when you're anxious. Anxiety can cause you to breathe too much (hyperventilation), which lowers your blood pressure

Find out more: see our information on anxiety and Parkinson's.

Although low blood pressure is associated with Parkinson's, it may not be your condition that's causing your low blood pressure – it could be other factors. For example, you can be more at risk of low blood pressure if you are older, have diabetes or are already taking medication to treat high blood pressure. Some of the drugs taken for prostate problems can also lower blood pressure.

Multiple system atrophy (MSA) and low blood pressure

Parkinsonism is a group of similar conditions that includes Parkinson's and multiple system atrophy. MSA is rare but symptoms from low blood pressure are particularly common. This is because the autonomic nervous system is more severely affected in MSA than in Parkinson's.

Tips on managing low blood pressure or postural hypotension?

There are lots of things you can do to manage blood pressure. Healthcare professionals have suggested the following tips.

Changing position

Take your time when changing position to avoid dizzy spells – for example when rising from a chair to standing position. Get up slowly, especially if you have been dozing. Once you are out of your chair, stand still for a while until you feel steady.

Try not to stand still for long periods, for example while doing the ironing. Do tasks such as getting dressed sitting down and in stages. If you are doing something that means you have to stand, then move about a little. For example, rocking on your toes and then heels or change tasks for a while will keep your blood moving and keep your blood pressure up.

If you are getting out of bed, allow your feet to dangle on the floor for a few minutes before standing slowly.

Doing activities

Bend or reach for things slowly and hold on to something if you need to. This will mean you don't lose your balance and fall over.

Do not sit in the sun or a hot environment for too long. Try to avoid a lot of activity when it's hot and make sure you drink plenty of liquids. If you feel too hot, use a fan or a cold flannel to cool yourself down.

Gentle exercise can help. Try leg exercises such as moving the ankle and foot up and down, squeezing the calf muscles, gentle marching movements or crossing and uncrossing your legs. You can do these sitting, standing or lying in bed. Talk to a physiotherapist for more information about exercises.

Support stockings often help as they encourage circulation. They are available as tights or men's socks, either on prescription or over the counter. Your local pharmacist may stock them or be able to tell you where you can get them.

Find out more: see our information on physiotherapy and Parkinson's.

Food and drink

Having a drink of water before you get up can sometimes help.

If you tend to feel dizzy after a meal, try drinking two small glasses of water at the end of the meal.

Taking some medication on an empty stomach may make the problem worse, as the medication will be absorbed more quickly than usual. But speak to your specialist or Parkinson's nurse before changing the times of your medication.

Eating large and heavy hot meals may add to the problem. When you eat, the blood goes from your brain to your stomach to help digest the food, so keep meals small and frequent if you feel faint after eating.

Avoid caffeine at night. Drinking less alcohol may also help. Your GP or a dietitian may suggest adding more salt to your diet. Don't add extra salt without speaking to your GP or a dietitian first.

Monitor your blood pressure

You may find it useful to keep a diary of what triggers your symptoms and what makes them better or worse. This will help manage the problem.

Can low blood pressure affect my driving?

If you have low (or high) blood pressure, you may need to tell the relevant driving authority, depending on what you drive.

At the time of printing, the government website states that you need to tell the DVLA in England Scotland and Wales or the DVA in Northern Ireland, if treatment for blood pressure causes side effects that could affect your ability to drive.

Please check with your relevant authority if you have problems with your blood pressure, as the rules may have recently changed.

Remember that you must contact your relevant driving licensing agency when you are diagnosed with Parkinson's. Contact details for these organisations can be found below.

Find out more: see our information on driving and Parkinson's

More information and support

Blood Pressure Association

www.bpassoc.org.uk

DVA (Northern Ireland)

0300 200 7861

www.nidirect.gov.uk/motoring

DVLA (England, Scotland and Wales)

0300 790 6806

www.gov.uk/health-conditions-and-driving

Parkinson's nurses

Parkinson's nurses provide expert advice and support to people with Parkinson's and those who care for them. They can also make contact with other health and social care professionals to make sure your needs are met.

The role of the Parkinson's nurse varies. Each will offer different services, aiming to meet local needs. Some nurses are based in the community, whereas others are based in hospital settings.

Many Parkinson's nurses are independent prescribers. This means they can prescribe and make adjustments to medication, so someone with Parkinson's doesn't always need to see their specialist for changes to or queries about their Parkinson's drugs.

Parkinson's nurses may not be available in every area, but your GP or specialist can give you more details on local services.

You can find out more at parkinsons.org.uk/nurses

Information and support from Parkinson's UK

You can call our free confidential helpline for general support and information. Call **0808 800 0303** (calls are free from UK landlines and most mobile networks) or email hello@parkinsons.org.uk.

We run a peer support service if you'd like to talk on the phone with someone affected by Parkinson's who has faced similar issues to you. The service is free and confidential – ring the helpline to talk to someone about being matched with a volunteer.

Our helpline can put you in touch with one of our Parkinson's local advisers, who give one-to-one information and support to anyone affected by Parkinson's. They can also provide links to local groups and services.

Our website parkinsons.org.uk has a lot of information about Parkinson's and everyday life with the condition. You can also find details of your local support team and your nearest local group meeting at parkinsons.org.uk/localtoyou

Visit parkinsons.org.uk/forum to chat to other people with similar experiences on our online discussion forum.

Thank you

Thank you very much to everyone who contributed to or reviewed this information sheet:

Liz Scott, Parkinson's Nurse, Parkinson's UK helpline

Lee Kieft, Parkinson's Nurse, Lewisham and Greenwich Hospital NHS Trust

Thanks also to our information review group and other people affected by Parkinson's who provided feedback.

Can you help?

At Parkinson's UK, we are totally dependent on donations from individuals and organisations to fund the work that we do. There are many ways that you can help us to support people with Parkinson's.

If you would like to get involved, please contact our Supporter Services team on **0800 138 6593** or visit our website at **parkinsons.org.uk/donate**. Thank you.

Our information

All of our most up-to-date information is available at **parkinsons.org.uk/information-support**
If you'd prefer to read one of our printed leaflets or booklets, find out how to place an order at **parkinsons.org.uk/ordering-resources** or by calling **0300 123 3689**.

We make every effort to ensure that our services provide current, unbiased and accurate information. We hope that this will add to any professional advice you receive and help you to make any decisions you may face. Please do continue to talk to your health and social care team if you are worried about any aspect of living with Parkinson's.

If you'd like to find out more about how we put our information together, including references and the sources of evidence we use, please contact us at **publications@parkinsons.org.uk**

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Do you have any feedback about this information? Your comments will help us ensure our resources are as useful and easy to understand as possible. Please return to **Information Content team, Parkinson's UK, 215 Vauxhall Bridge Road, London SW1V 1EJ**, or email publications@parkinsons.org.uk. Thank you!

1. Please choose the option that best fits you.

- I have Parkinson's and was diagnosed in I care for someone with Parkinson's
 I have a friend or family member with Parkinson's I'm a professional working with people with Parkinson's
 Other (please specify)
-

2. Where did you get this information from?

- GP Specialist Parkinson's nurse Parkinson's UK local group Parkinson's UK local adviser
 Ordered directly from us Call to the helpline
 Other (please specify)
-

3. Has it answered all your questions?

- Yes, completely Yes, mostly Not sure Partly Not at all

4. How easy was it to understand?

- Very easy Easy Not sure Quite difficult Very difficult

5. Has it helped you manage your condition better, or make choices that have improved your life in some way?

- It helped a lot It helped a little No change It didn't help It made things worse

6. What is your ethnic background?*

- Asian or Asian British Black or Black British Chinese Mixed White British White other
 Other (please specify)
-

*We ask about your ethnicity to ensure our information is reaching a broad range of people. However, this question is optional.

Want to hear more from us?

- I would like a response to my feedback I would like to be a member of Parkinson's UK
 I'm interested in joining the Information review group, to offer feedback on Parkinson's UK information

If you've answered yes to any of these options, please complete your details below.

Name

Address

Email

Telephone

How would you prefer us to contact you? Email Post Phone

We will not pass on your details to any other organisation or third party. To find out more, read our privacy policy at parkinsons.org.uk/termsandconditions

Every hour, two people in the UK are told they have Parkinson's – a brain condition that turns lives upside down, leaving a future full of uncertainty.

Parkinson's UK is here to make sure people have whatever they need to take back control – from information to inspiration.

We want everyone to get the best health and social care. So we bring professionals together to drive improvements that enable people to live life to the full.

Ultimately, we want to end Parkinson's. That's why we inspire and support the international research community to develop life-changing treatments, faster. And we won't stop until we find a cure.

Together we can bring forward the day when no one fears Parkinson's.

Parkinson's UK

Free confidential helpline **0808 800 0303**

Monday to Friday 9am–7pm, Saturday 10am–2pm. Interpreting available.

NGT Relay **18001 0808 800 0303** (for use with smart phones, tablets, PCs and other devices).

For more information see **www.ngts.org.uk**

hello@parkinsons.org.uk

parkinsons.org.uk



Last updated July 2019. We review our information within three years.
Please check our website for the most up-to-date versions of all our information.
PKFS50

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