

Low blood pressure and Parkinson's

Some people with Parkinson's may have problems with low blood pressure (also called hypotension). It can be a symptom of Parkinson's or it can be a side effect of the drugs used to treat the condition. It may also be connected to another health condition.

This information sheet gives you the facts about low blood pressure in Parkinson's and how to manage it.

What is blood pressure?

Your heart beats to pump blood around your body. One of the functions of blood is to carry oxygen from the lungs to your other organs, including your brain.

Blood pressure is a measure of how forcefully your heart is pumping blood around your body.

How is blood pressure controlled?

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

There are sensors in the main artery in your neck that report your blood pressure to your brain. This is part of the 'autonomic nervous system'.

The autonomic nervous system is part of the brain, nerves and spinal cord. It controls a number of automatic functions (things your body does without you thinking about them), including your heart rate and blood pressure. The brain monitors your blood pressure and sends messages to your heart and blood vessels to adjust it as needed.

During certain activities, some parts of the body need more blood than others. For example, during exercise your blood pressure increases so that 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.

As there is only a certain amount of blood in your body, the supply has to be managed. The autonomic nervous system reduces the blood supplying some parts of the body to send or divert it to the parts that need it most.

Your body also senses when you stand up and stops blood pooling in your legs (due to gravity). It does this by increasing your heart rate and squeezing or contracting your blood vessels, to move blood around your body.

If blood does pool in your veins when you stand, less blood returns to the heart and as a result, less blood reaches the brain. This can cause dizziness or fainting. This is called postural hypotension and can be a problem for people with Parkinson's. See below for more information.

How is blood pressure measured?

Blood pressure is measured by listening to your pulse in your arm, using a stethoscope with an inflated arm cuff. Two readings are taken from each beat.

The first reading is a measure of the highest pressure when your heart pumps blood around your body (systolic pressure). The second is a measure of the lowest pressure when your heart is resting between beats (diastolic pressure). By taking the two readings, you are getting a maximum and minimum blood pressure.

The readings are given as two numbers, 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. 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.

High blood pressure

High blood pressure is a reading of 140/90 or higher. High blood pressure sometimes runs in families or can result from drinking too much alcohol.

High blood pressure usually has no obvious symptoms and many people have it without even knowing.

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

You may be more likely to experience high blood pressure if you have other medical conditions, including diabetes, kidney disease and hardening of the arteries (atherosclerosis). Some medications can also cause high blood pressure.

Low blood pressure

Low blood pressure is a reading of below 90/60. Naturally-low blood pressure doesn't have any symptoms. However, if it drops too low you may experience symptoms, so it might need to be treated.

Common symptoms of low blood pressure include:

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

Where can I get my blood pressure checked?

If you are concerned about your blood pressure, you can ask your GP, Parkinson's nurse (if you have one) or specialist to check it. If your GP surgery has a practice nurse, they can also take your blood pressure for you.

Parkinson's and low blood pressure

Low blood pressure is sometimes caused by Parkinson's itself. This is because Parkinson's affects the autonomic nervous system – the system that regulates blood pressure (see page 1). The medicines used to treat Parkinson's can also lower blood pressure.

Postural hypotension

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

People with Parkinson's can experience this as a symptom of their condition. It can also be caused by the drugs used to treat Parkinson's, for example levodopa.

So, if you are having symptoms that you think could be due to low blood pressure, ask your GP to measure your blood pressure sitting (or lying) and then after you have stood up for a couple of minutes.

It's unlikely that you'll experience any serious problems from postural hypotension if your Parkinson's medication is built up gradually, your blood pressure closely monitored and if you follow the advice on page 4.

Remember, it is 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, don't stop taking your medication, because this can be dangerous.

Find out more: For more information about the side effects of Parkinson's medication, see our booklet *Drug treatments for Parkinson's*.

Is low blood pressure dangerous?

Normally low blood pressure doesn't cause major problems, but if you faint or black out, you could fall and hurt yourself.

If your GP finds your blood pressure is low, you may not necessarily need treatment unless your low blood pressure is making you feel unwell.

When can low blood pressure cause problems?

If the blood flow to your brain is reduced too much, you can feel light-headed or faint. Feeling weak and faint may feel unpleasant. Sometimes it can cause mild confusion, which can be worrying, but the confusion should clear 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, with help if you need it, into a sitting position.

Find out more: see our information sheet *Falls and Parkinson's*.

In a rare type of parkinsonism called multiple system atrophy (MSA), symptoms from low blood pressure are particularly common. This is because the autonomic nervous system is more severely affected than in Parkinson's.

Symptoms of low blood pressure are most likely to happen when there is an increased demand for blood, such as:

- standing up quickly, particularly from a lying position or after periods of not much movement
- after meals – the stomach and intestines' need for more blood lowers blood pressure in other parts of the body when you are dehydrated. 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
- in 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
- if you are constipated (a common problem in people with Parkinson's), sometimes the effort of straining may cause you to feel faint. This can also occur when coughing. You may also feel faint when you pass urine.

Find out more: see our booklets *Diet and Parkinson's* and *Looking after your bladder and bowels when you have Parkinson's*.

Symptoms can also happen:

- 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 over-breathing (hyperventilation), which lowers your blood pressure

Find out more: see our information sheet *Anxiety and Parkinson's*.

Although low blood pressure is associated with Parkinson's, try not to immediately assume it's your condition that's causing your low blood pressure – it could be other factors. For example, you are 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. Dehydration, perhaps as a result of diarrhoea, vomiting, overheating or not drinking enough, can also cause low blood pressure. More information is available at the NHS Choices website, visit www.nhs.uk

Your GP should always look carefully at the medication you take or need to take for conditions other than your Parkinson's, in case they interact with your Parkinson's drugs. Make sure that all of your healthcare professionals know what medication you're taking and what for.

What can be done to improve low blood pressure?

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

- Do not sit in the sun or a hot environment for too long. Try to avoid a lot of activity when it is 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.
- 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 by rocking on your toes and then heels or change tasks for a while. This will keep your blood moving and keep your blood pressure up.
- Some dizzy spells can be avoided by taking your time when changing your position, such as rising from a chair to standing position. Get up slowly, especially if you have been dozing. Once standing, do not walk away from your chair straight away. Stand for a while until you feel steady. If you are getting out of bed, allow your feet to dangle on the floor for a few minutes before standing slowly.

- 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 needed – allowing you to rest whenever you want to. Sporting shops often sell them.
- 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.
- Bend or reach for things slowly and hold on to something if you need to – so you do not lose balance and fall over.
- Taking some medication on an empty stomach may make the problem worse, as the medication is absorbed more quickly than usual. But speak to your specialist or Parkinson's nurse before changing the times of your medication.
- 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. Keep a diary of what triggers your symptoms and what makes them better or worse. This will help manage the problem.
- 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 sheet *Physiotherapy and Parkinson's*.

Postural hypotension can often be helped by following the above advice, but if your symptoms are severe you should speak to your GP, specialist or Parkinson's nurse.

For some people, postural hypotension can be controlled by medication. This is something that should be discussed with your health professional(s). The drugs that may be prescribed include ephedrine, midodrine and fludrocortisone.

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.

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, you don't need to tell the DVLA in England, Scotland and Wales or the DVA in Northern Ireland about your blood pressure if you drive a car or motorcycle. But you do if you drive a bus, coach or lorry. Please check with your relevant authority if you have problems with your blood pressure, as the rules may have recently changed.

Do note that you must contact your relevant licensing agency when you are diagnosed with Parkinson's. Contact details for these organisations can be found on page 6.

Find out more: see our booklet *Driving and Parkinson's*.

More information and support

Blood Pressure Association

020 7882 6255/5793
www.bpassoc.org.uk

Disabled Living Foundation

0300 999 0004 (Monday–Friday 10am–4pm)
helpline@dlf.org.uk
www.dlf.org.uk

DVA (Northern Ireland)

08454 024 000
www.nidirect.gov.uk/motoring

DVLA (England, Scotland and Wales)

0300 790 6806
www.gov.uk/health-conditions-and-driving

NHS Choices

www.nhs.uk

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

We also have a self-management programme for people with Parkinson's, partners and carers. It is an opportunity to reflect on life with the condition, learn about self-management and think about the future. To find out if there is a group near you visit parkinsons.org.uk/selfmanagement

Our website [parkinsons.org.uk](https://www.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](https://www.parkinsons.org.uk/localtoyou)

You can also visit [parkinsons.org.uk/forum](https://www.parkinsons.org.uk/forum) to speak with other people in a similar situation on our online discussion forum.

Thank you

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

Dr Richard Grunewald, Consultant Neurologist, Royal Hallamshire Hospital, Sheffield

Annette Hand, Parkinson's Nurse, Jubilee Day Hospital, North Tyneside General Hospital

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



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If you have comments or suggestions about this information sheet, we'd love to hear from you. This will help us ensure that we are providing as good a service as possible. We'd be very grateful if you could complete this form and return it to **Editorial and Creative Services, Parkinson's UK, 215 Vauxhall Bridge Road, London SW1V 1EJ**. Or you can email us at **publications@parkinsons.org.uk**. Thanks!

Please tick...

- I have Parkinson's. When were you diagnosed?
- I'm family/a friend/a carer of someone with Parkinson's
- I'm a professional working with people with Parkinson's

Where did you get this information sheet from?

- GP, specialist or Parkinson's nurse
- Information and support worker
- Parkinson's UK local group or event
- Ordered from us directly
- Our website
- Other

How useful have you found the information sheet? (1 is not useful, 4 is very useful) 1 2 3 4

Have you found the publication easy to read/use? Yes No

Has this resource given you information that might help you manage your condition better?

- NA
- It hasn't helped
- It has helped a little
- It has helped a lot

What aspects did you find most helpful?

Were you looking for any information that wasn't covered?

Do you have any other comments?

If you would like to become a member of Parkinson's UK, or are interested in joining our information review group, please complete the details below and we'll be in touch.

- Membership
- Information review group (who give us feedback on new and updated resources)

Name

Address

Telephone Email

What is your ethnic background? Asian or Asian British Black or Black British Chinese Mixed White British White other Other (please specify)

We're the Parkinson's support and research charity. Help us find a cure and improve life for everyone affected by Parkinson's.

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 **020 7932 1303** or visit our website at **parkinsons.org.uk/support**. Thank you.

Parkinson's UK

Free* confidential helpline **0808 800 0303**

Monday to Friday 9am–8pm, Saturday
10am–2pm. Interpreting available.

Text Relay **18001 0808 800 0303**

(for textphone users only)

hello@parkinsons.org.uk

parkinsons.org.uk

*calls are free from UK landlines and most mobile networks.

How to order our resources

0845 121 2354

resources@parkinsons.org.uk

Download them from our website

at **parkinsons.org.uk/publications**

We make every effort to make sure that our services provide up-to-date, unbiased and accurate information. We hope that this will add to any professional advice you receive and will 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.

References for this information sheet can be found in the Microsoft Word version at **parkinsons.org.uk/publications**

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