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BLOOD PRESSURE MONITORING

A GUIDE FOR PERSONS
WITH PARKINSONISM
AND THEIR FAMILIES



BLOOD PRESSURE MONITORING

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WHAT IS BLOOD PRESSURE (BP)?

Each time the heart beats, it pumps blood into the arteries and around the body. Blood pressure (BP) is the force of blood pushing against the walls of arteries.

Know your BP numbers

BP always has two numbers:

Systolic Pressure is the top number – it is the amount of pressure in your arteries when your heart contracts (beats) to pump blood around the body.

Diastolic Pressure is the bottom number – it is the pressure in your arteries when your heart relaxes between beats.



Categories of BP

	Top number (Systolic)	Bottom number (Diastolic)
High BP (Hypertension)	140mmHg or higher	90mmHg or higher
Normal	100 – 139mmHg	60 – 89mmHg
Low BP (Hypotension)	Less than 100mmHg	Less than 60mmHg

Importance of BP monitoring in persons with Parkinsonism

Check your BP regularly at home because:

- The readings reflect how the medication affects your body and if your Parkinsonism is progressing.
- Your doctor can identify trends in your BP and adjust your treatment if necessary.
- It allows persons with Parkinsonism and their family to manage health conditions together and detect abnormal changes early.

BP changes can occur in persons with Parkinsonism due to disease progression and/or medication side effects.

Low BP (Hypotension)

- **Postural Hypotension** is a significant drop in systolic BP (more than 20mmHg) and diastolic pressure (more than 10mmHg) when there is a change in body position:
 - Lying → sitting
 - Sitting → standing



Common symptoms of low BP:

- Light headedness
- Dizziness
- Blurred vision
- Fainting

High BP (Hypertension)

- **Supine Hypertension** is a significant rise in BP when lying flat after sitting or standing. It is caused by autonomic nervous system (ANS) dysfunction, and is often associated with postural hypotension.

Medications that commonly affect BP for persons with Parkinsonism are: Madopar, Bromocriptine, Ropinirole etc.

How to measure BP

TIP Follow the BP machine operational manual or professional personnel's instruction.

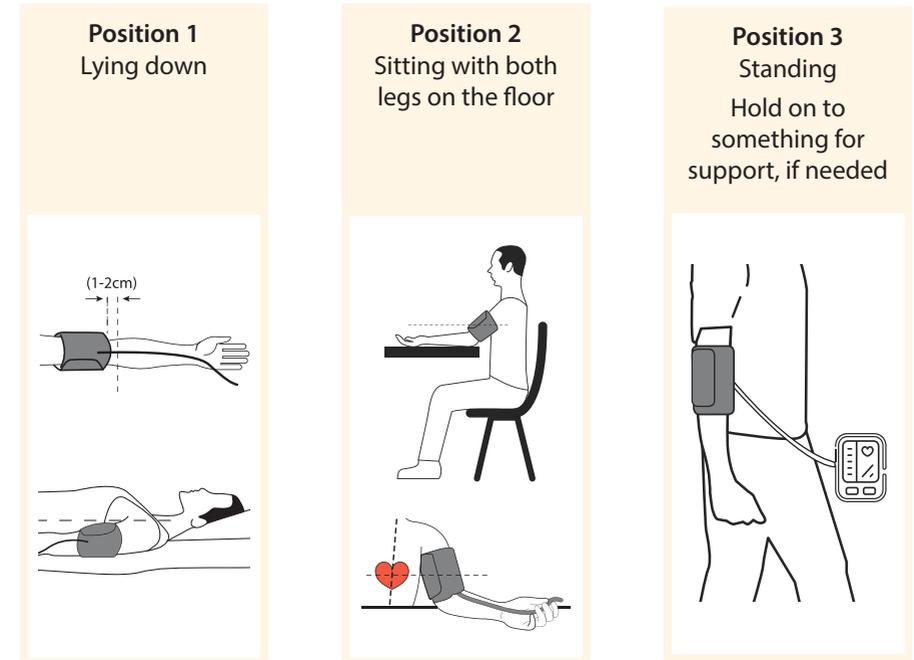
Taking just one BP reading is not reliable, because BP is affected by multiple factors such as:

- Activity
- Temperature
- Diet
- Emotional state
- Posture
- Physical state
- Medications
- Medical condition



BP should be taken after a period of rest and when the person is calm and relaxed. Timing of BP measurement is as advised by your doctor.

Persons with Parkinsonism are encouraged to measure their BP daily. BP measurements should be taken at the following different positions, **2 to 3 minutes after the position has changed.**



WHAT TO DO...?



If you have high BP (more than 140/90mmHg)

- Repeat BP measurement after resting for 15 to 30 minutes
- See your Polyclinic doctor or family doctor for a check-up if the BP is persistently high
- Tell the doctor what medications you are currently taking
- Take low salt diet as instructed

If you have low BP (less than 100/60mmHg)

- Lie down and rest if you have symptoms of low BP e.g. dizziness, blurred vision
- Repeat BP measurement after resting for 15 to 30 minutes
- Tell your PD specialist if your systolic BP is persistently lower than 100mmHg at any posture or see your Polyclinic doctor or family doctor for a check-up
- Tell the doctor what medications you are taking, especially if any are for high blood pressure (anti-hypertensives)
- Drink adequate fluids (provided you are not on any fluid restrictions)
- To prevent falls, move and change positions slowly and use walking aids as advised by your healthcare team
- Go to the Emergency Department or call 995 if you experience fainting spells, chest pain, shortness of breath or other emergency conditions

If you continue to have low BP (less than 100/60mmHg) after seeing the doctor

- Do monitor and record your BP daily while lying down, sitting and standing
- Lie down and rest if you experience symptoms of low BP e.g. dizziness, blurred vision
- Take medication to raise your BP if prescribed by your doctor e.g. Fludrocortisone or Midodrine
- Take Potassium Chloride together with Fludrocortisone if prescribed by doctor
- Increase salt intake as a temporary measure to increase body water retention and raise BP as instructed by the doctor. Stop high salt intake once BP has normalised
- To prevent falls, move and change positions slowly, use walking aids as advised by your healthcare team and do supervised exercise as tolerated

TIP These are general guidelines. Follow the advice given by your doctor or nurse specialist which is individualised for your specific needs. Speak to your Parkinson specialist if you have any concerns.

TIPS TO MANAGE POSTURAL HYPOTENSION

- Don't rush! Take time to change positions e.g. from a lying down position to sitting up, from sitting to standing up
- Do simple leg exercises before standing up; this is to prevent a sudden and sharp drop in blood pressure
- After changing from lying/sitting position to a standing position, steady yourself before attempting to walk
- Increase intake of fluids and salt as per doctor's advice
- Avoid consuming big meals to prevent post-meal dizziness, which can occur when blood is diverted to the intestines to digest the food
- Wear compression stockings or abdominal binder (if not contraindicated) to reduce pooling of blood in the legs and increase blood flow to the rest of the body, especially the brain



SOCIAL SUPPORT AND COMMUNITY RESOURCES

Getting help and support will help you manage your condition. These organisations in Singapore provide social support, education and training for you and your caregivers.



Parkinson Society Singapore (PSS)

Parkinson Society Singapore supports

People with Parkinson (PwP) and caregivers holistically through their Parkinson journey. The society was founded in 1996 by a group of doctors and caregivers and opened Singapore's first community-based Parkinson Centre in 2013 to provide the much-needed support beyond hospitals.

PSS offers a wide range of therapeutic programmes, social and recreational activities to help PwP live better with Parkinsons, including physiotherapy, yoga, Tai Chi, kickboxing, Chinese calligraphy and vocal classes. PSS also provides information, training and support to PwP, caregivers and community partners.

For more information, contact us at:

PARKINSON SOCIETY SINGAPORE (PSS)

Located near Bishan MRT

Block 191, Bishan Street 13,
#01-415, Singapore 570191

Tel: 6353 5338

Email: info@parkinson.org.sg

Website: www.parkinson.org.sg

PARKINSON SUPPORT GROUPS

National Neuroscience Institute (at Tan Tock Seng Hospital)

Neuroscience Clinic, Level 1

11 Jalan Tan Tock Seng

Singapore 308433

Tel: 6357 7138

Email: enquiry@nni.com.sg



www.nni.com.sg

National Neuroscience Institute (at Singapore General Hospital)

Learning Space

Block 6 Level 1

Outram Road, Singapore 169608

Tel: 9295 3331

Email: neurocare@sgh.com.sg



www.sgh.com.sg

HELPLINES

SAGE Counselling Centre

1 Jurong West Central 2

#06-04, Jurong Point Shopping

Centre Singapore 648886

Tel: 6354 1191

Hotline: 1800 555 5555



www.sagecc.org.sg

Samaritans of Singapore (SOS)

Hotline: 1800 221 4444



www.sos.org.sg

TOUCH Caregivers Support

Tel: 6804 6555



www.touch.org.sg/about-touch/our-services/touch-caregivers-support-homepage

OTHER USEFUL RESOURCES

To cope with the challenges ahead, it is important to find out as much as you can about your condition. Here are some websites that may be useful in your search for more information.



National Neuroscience Institute

<https://bit.ly/3eGY6AO>



National Institute of Neurological Disorders and Stroke

<https://bit.ly/3eFTDOF>



Parkinson's Foundation

www.parkinson.org