

Practical Guidelines for Hypertension

This document provides practical guidelines for Allied Healthcare Professionals and other clinicians to support hypertension diagnoses and recommended actions.

External resources

- Hypertension in adults: diagnosis and management NICE guidelines [NG136] Last updated: 21st November 2023: <https://www.nice.org.uk/guidance/ng136>.
- NICE CKS Hypertension. Last updated: March 2025: <https://cks.nice.org.uk/topics/hypertension/>
- NICE Hypertension in adults: diagnosis and treatment <https://www.nice.org.uk/guidance/ng136/resources/visual-summary-pdf-6899919517> or scan the QR code
- North London Severe Hypertension guidelines: https://www.nwlondonicb.nhs.uk/download_file/9979/0
- On treatment BP target: <https://www.nature.com/articles/s41371-025-01055-z>



Primary Care Considerations Before Referring: Essential Hypertension

Diagnosis	Investigations
<p>If clinic BP $\geq 140/90$ mmHg:</p> <ul style="list-style-type: none"> Offer ABPM (ambulatory BP monitoring) to confirm diagnosis If ABPM not suitable, offer home BP monitoring <p>If BP 130–139/85–89 mmHg and high cardiovascular risk or suspected masked hypertension:</p> <ul style="list-style-type: none"> Consider ABPM/home monitoring (if resources allow) <p>Hypertension diagnosis = Daytime average BP $\geq 135/85$ mmHg (via ABPM/home)</p>	<p>Assess for organ damage:</p> <ul style="list-style-type: none"> Proteinuria Fundoscopy Blood tests: glucose, HbA1c, U&Es (yearly bloods for patients on ACE inhibitors/ARB), eGFR, cholesterol (total & HDL) 12-lead ECG <p>Estimate 10-year CVD risk:</p> <ul style="list-style-type: none"> Use QRISK3 or Joint British Societies tool Heart Age: Use NHS tool: Heart Age Calculator
BP Targets	Lifestyle Advice
<ul style="list-style-type: none"> Age <80 years: <ul style="list-style-type: none"> Clinic BP $<140/90$ mmHg (lower when feasible/tolerable) ABPM/HBPM $<135/85$ mmHg Age ≥ 80 years: <ul style="list-style-type: none"> Clinic BP $<150/90$ mmHg (lower when feasible/tolerable) ABPM/HBPM $<145/85$ mmHg Postural Hypotension: <ul style="list-style-type: none"> Base target on standing BP Frailty/Multimorbidity: <ul style="list-style-type: none"> Use clinical judgement 	<ul style="list-style-type: none"> Weight: Ideal BMI = 18.5-24.9 kg/m². *If South Asian, Chinese, other Asian, Middle Eastern, Black African, or African-Caribbean family background Ideal BMI = 18.5 to 23 kg/m². Salt Intake: Target <6g/day; reduce processed food intake (bread etc.) Physical Activity: 30 mins/day at least 5 days per week Diet: ≥ 5 portions of fruit/veg, less saturated fat Caffeine: $\leq 4-5$ cups/day Alcohol: ≤ 14 units/week; drink-free days Smoking Cessation Hypotension: Consider if BP $\leq 90/60$ mmHg with symptoms (e.g. dizziness, weakness)

* National Institute for Health and Care Excellence (NICE). (2013). BMI: preventing ill health and premature death in black, Asian and other minority ethnic groups. Public health guideline [PH46]. Retrieved from: <https://www.nice.org.uk/guidance/ph46>

Blood pressure (mmHg)	Recommended action																																		
Normal BP: NICE: BP reading <140/90 (ABPM/HBPM <135/85)	<ul style="list-style-type: none"> Check BP at least every 5 years and annually if clinic BP \geq 135/85 mmHg If evidence of target organ damage, consider alternative causes 	Recheck in 5 years if no CVD risk factors present Recheck annually if CVD risk factors present For type 2 Diabetes: check BP annually regardless of QRisk																																	
Stage 1 hypertension: BP reading 140/90 to 159/99 mmHg (ABPM or HBPM average 135/85 to 149/94 mmHg)	<ul style="list-style-type: none"> Offer ABPM (or HBPM if ABPM is declined or not tolerated) Investigate for target organ damage <ul style="list-style-type: none"> Assess cardiovascular risk 	<ul style="list-style-type: none"> Age >80 with clinic BP $>150/90$ mmHg: <ul style="list-style-type: none"> Offer lifestyle advice and consider drug treatment Age <80 with target organ damage, CVD, renal disease, diabetes or 10-year CVD risk $\geq 10\%$: <ul style="list-style-type: none"> Offer lifestyle advice and discuss starting drug treatment Age <60 with 10-year CVD risk $<10\%$: <ul style="list-style-type: none"> Offer lifestyle advice and consider drug treatment Age <40: <ul style="list-style-type: none"> Consider specialist evaluation of secondary causes and assessment long-term benefits and risks of treatment 																																	
Stage 2 hypertension: BP reading 160/100 to 179/119 mmHg (ABPM or HBPM average $\geq 150/95$ mmHg)	<ul style="list-style-type: none"> Offer lifestyle advice and discuss starting drug treatment Assess for target organ damage immediately: <ul style="list-style-type: none"> If target organ damage is present → start drug treatment immediately (no need for ABPM/HBPM) If no target organ damage: <ul style="list-style-type: none"> Repeat clinic BP within 7 days or Use ABPM or HBPM, with a clinical review within 7 days 	<p>On-treatment BP target</p> <p>For patients on treatment for hypertension, BP target $< 130/80$ mmHg (measured by 7-day average HBPM or day-time average ABPM or office BP*) or ALARA without causing unacceptable side-effects, and within 6-months of initiating treatment, for all adults.</p> <p>Possible subgroups to whom this may not apply are those who are frail and/or have limited life expectancy where higher targets may be appropriate based on clinical judgement and the individuals' tolerance to treatment.</p> <p>*Among people with diagnosed white-coat hypertension out-of-office measurements should always be used to evaluate treatment.</p>																																	
ABPM vs HBPM	<p>It is suggested that</p> <ul style="list-style-type: none"> ABPM is used for diagnosis of hypertension, assessing nocturnal BP and dipping status or resistant hypertension. HBPM is used for ongoing monitoring to improve patient engagement and adherence to treatment and detecting white coat effect in stable patients. 	<table border="1"> <thead> <tr> <th data-bbox="1057 1168 1282 1226">Scenario</th> <th data-bbox="1282 1168 1507 1226">Best First Option</th> <th data-bbox="1507 1168 1731 1226">Alternative</th> <th data-bbox="1731 1168 2097 1226">Notes</th> </tr> </thead> <tbody> <tr> <td data-bbox="1057 1226 1282 1255">New hypertension</td> <td data-bbox="1282 1226 1507 1255">ABPM</td> <td data-bbox="1507 1226 1731 1255">HBPM</td> <td data-bbox="1731 1226 2097 1255">ABPM more accurate for diagnosis</td> </tr> <tr> <td data-bbox="1057 1255 1282 1285">Stroke/TIA</td> <td data-bbox="1282 1255 1507 1285">ABPM</td> <td data-bbox="1507 1255 1731 1285">HBPM (monitoring)</td> <td data-bbox="1731 1255 2097 1285">Nocturnal BP important</td> </tr> <tr> <td data-bbox="1057 1285 1282 1314">Pregnancy</td> <td data-bbox="1282 1285 1507 1314">HBPM</td> <td data-bbox="1507 1285 1731 1314">ABPM rarely needed</td> <td data-bbox="1731 1285 2097 1314">Use pregnancy-validated devices</td> </tr> <tr> <td data-bbox="1057 1314 1282 1344">White coat/masked HTN</td> <td data-bbox="1282 1314 1507 1344">ABPM</td> <td data-bbox="1507 1314 1731 1344">HBPM</td> <td data-bbox="1731 1314 2097 1344">ABPM more sensitive to both</td> </tr> <tr> <td data-bbox="1057 1344 1282 1374">Resistant hypertension</td> <td data-bbox="1282 1344 1507 1374">ABPM</td> <td data-bbox="1507 1344 1731 1374">HBPM</td> <td data-bbox="1731 1344 2097 1374">Helps avoid overtreatment</td> </tr> <tr> <td data-bbox="1057 1374 1282 1404">Elderly/frail</td> <td data-bbox="1282 1374 1507 1404">HBPM</td> <td data-bbox="1507 1374 1731 1404">ABPM (with caution)</td> <td data-bbox="1731 1374 2097 1404">Comfort and usability are key</td> </tr> <tr> <td data-bbox="1057 1404 1282 1434">Suspected hypotension</td> <td data-bbox="1282 1404 1507 1434">ABPM</td> <td data-bbox="1507 1404 1731 1434"></td> <td data-bbox="1731 1404 2097 1434"></td> </tr> </tbody> </table>		Scenario	Best First Option	Alternative	Notes	New hypertension	ABPM	HBPM	ABPM more accurate for diagnosis	Stroke/TIA	ABPM	HBPM (monitoring)	Nocturnal BP important	Pregnancy	HBPM	ABPM rarely needed	Use pregnancy-validated devices	White coat/masked HTN	ABPM	HBPM	ABPM more sensitive to both	Resistant hypertension	ABPM	HBPM	Helps avoid overtreatment	Elderly/frail	HBPM	ABPM (with caution)	Comfort and usability are key	Suspected hypotension	ABPM		
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Severe hypertension: BP reading ≥180/120 mmHg	<p>North London Severe Hypertension guidelines: https://www.nwlondonicb.nhs.uk/download_file/9979/0</p> <p>Assess for target organ damage as soon as possible:</p> <ul style="list-style-type: none">• If target organ damage, consider starting drug treatment immediately without ABPM/HBPM• If no target organ damage, confirm diagnosis by:<ul style="list-style-type: none">– repeating clinic blood pressure measurement within 7 days, or– considering monitoring using ABPM/ HBPM and ensuring a clinical review within 7 days	<p>Refer for same-day specialist review if:</p> <ul style="list-style-type: none">• retinal haemorrhage or papilloedema (accelerated hypertension) or• life-threatening symptoms or• suspected pheochromocytoma <p>• Age <40: Consider specialist evaluation of secondary causes and assessment long-term benefits and risks of treatment</p>
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Medication choices (first line)

Choices align with NWL joint formulary v50			
Class	Drug	Starting dose	Daily range
ACE-i	Ramipril	2.5mg OD	2.5-10mg OD
	Lisinopril	10mg OD	10-80mg OD (usual maintenance dose 20mg OD for hypertension)
A2RA's	Losartan	50mg OD (25mg OD if >75yrs old)	50-100mg OD
CCB's	Amlodipine	5mg OD	5-10mg OD
Thiazide - like diuretics	Indapamide immediate release (IR)	2.5mg OD	2.5mg OD
Aldosterone antagonist	Spironolactone	25mg OD	25mg OD (can go upto 50mg OD)
Alpha-Blocker	Doxazosin immediate release (IR)	1-2mg OD	2-16mg OD (or BD dosing when dose >8mg/day)
Beta-Blocker	Bisoprolol (1st line)	5-10mg OD	5-20mg OD
	Carvedilol (2nd line)	12.5mg OD	12.5-50mg OD Single dose or divided doses. 12.5mg may provide satisfactory control in the elderly