

Measuring Blood Pressure Checklist

Updated February 2026

Prepare the Patient



- ☐ Verify patients have not engaged in activities within the last 30 minutes that can raise blood pressure, such as:
 - » Exercise
 - » Consuming caffeine
 - » Using nicotine
- ☐ Ask patients to empty their bladder to avoid elevated readings.

- ☐ Allow patients to rest quietly for at least 5 minutes before measurement (Canada: 1–5 minutes)
- ☐ Seat patients with back supported, both feet flat on the floor, and legs uncrossed.
- ☐ Avoid talking with the patient, and instruct the patient not to talk, during resting period and blood pressure measurement.



Use Proper Equipment

- ☐ Ensure automated equipment has been validated and calibrated.



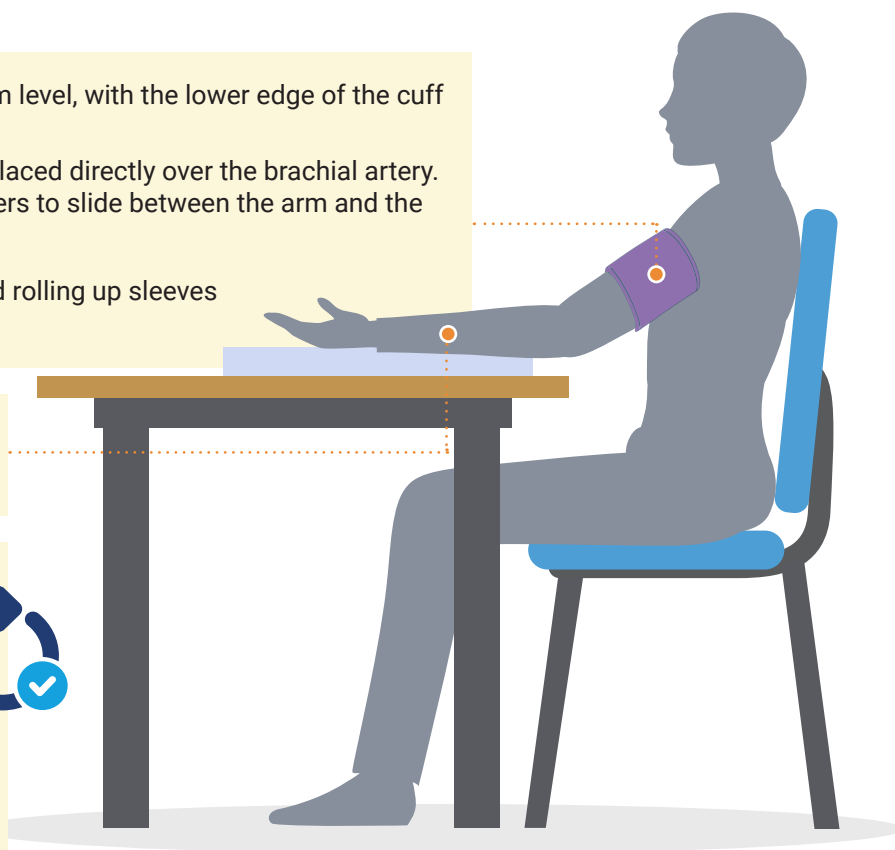
- ☐ Use the correct cuff size for the patient:
 - » The width of the bladder should be about 37% to 50% of the patient's arm circumference.
 - » When positioning the cuff, the cuff bladder should go at least 75%, but not more than 100%, of the way around the patient's arm.

Use Proper Technique

- ☐ Place the middle of the cuff at the right atrium level, with the lower edge of the cuff above the elbow crease:
 - » The center of the cuff bladder should be placed directly over the brachial artery.
 - » Cuff should feel snug enough for two fingers to slide between the arm and the bottom of the cuff.
- ☐ Ensure the cuff is placed on a bare arm; avoid rolling up sleeves and restricting blood flow.

- ☐ Ensure the patient's arm is supported at the level of the heart.

- ☐ For a patient's first blood pressure measurement, check the pressure in both arms. If blood pressure differs between arms (e.g., >10 mm Hg), use the arm with the higher pressure.
- ☐ Take two or three readings, separated by one minute, and average the readings.



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Use Proper Technique (continued)



- ☐ When taking a manual measurement (e.g., using a stethoscope and sphygmomanometer):
 - » Place the bell or diaphragm of the stethoscope over the brachial artery.
 - » Inflate the cuff to a pressure 30 mm Hg above where you can no longer feel the radial pulse.
 - » Deflate the cuff at a rate of ~2 mm Hg per second.
 - » Pressure when the first Korotkoff sound appears is the SBP.
 - » Pressure when all Korotkoff sounds disappear is the DBP.

Document Results

- ☐ Document the time that the last blood pressure medication dose (if applicable) was taken before measurement.



- ☐ Provide result to patient in writing and verbally, and explain what it means. (See footnote a for definition of hypertension.)



Abbreviations: DBP = diastolic blood pressure; SBP = systolic blood pressure

a. Hypertension in non-pregnant adults:

- Blood pressure $\geq 130/80$ mm Hg, confirmed with ambulatory or home blood pressure monitoring (preferred), or at office follow-up (i.e., ≥ 2 separate visits).
- ISH: Blood pressure $\geq 140/90$ mm Hg at 2 to 3 office visits separated by 1 to 4 weeks, depending on blood pressure. A blood pressure of $\geq 180/110$ mm Hg on a single occasion may be enough for a diagnosis if signs or symptoms of cardiovascular disease are present.

References

1. Jones DW, Ferdinand KC, Taler SJ, et al. 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Hypertension. 2025 Aug 14.
2. Goupil R, Tsuyuki RT, Santesso N, et al. Hypertension Canada guideline for the diagnosis and treatment of hypertension in adults in primary care. CMAJ. 2025 May 25;197(20):E549-E564.
3. Unger T, Borghi C, Charchar F, et al. 2020 International Society of Hypertension Global Hypertension Practice Guidelines. Hypertension. 2020 Jun;75(6):1334-1357.
4. Muntner P, Shimbo D, Carey RM, et al. Measurement of Blood Pressure in Humans: A Scientific Statement From the American Heart Association. Hypertension. 2019 May;73(5):e35-e66.

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Treatment of Hypertension

Updated September 2025



WITHOUT CVD or CKD	CAD ^b	Stroke/TIA ^a	CKD ^b	HFrEF ^b	HFpEF ^b	Other CVD
One, or low-dose combo ^b of two, of these: ACEI ^h or ARB ^h , thiazide, ^a long-acting DHP, CCB ^{1,2,e}	Evidence-based ACEI, ^h ARB ^h , or BB ^d (BB especially for recent MI or ACS, or angina) ^{1,11} Add-ons: long-acting DHP, CCB, ^e thiazide, ^a MRA ^{a,1,11}	Thiazide, ^a ACEI, ^h or ARB ^{1,h}	ACEI ^h or ARB. ^{1,h} Can add a long-acting DHP, CCB ^e or thiazide (loop if eGFR <30 mL/min/1.73m ²). ^{1,4} Consider adding finereone for diabetic kidney disease. ¹⁷	Evidence-based BB; ^d MRA ^g (if symptomatic, eGFR >30 mL/min/1.73m ² , potassium <5 mEq/L); sacubitril/valsartan (NYHA Class II to III [preferred over ACEI ^h or ARB ^h]), and SGLT2 inhibitor (if symptomatic) ¹ Loop diuretic as needed. ¹ Can add hydralazine plus isosorbide dinitrate in Black patients, or other patients who can't take sacubitril/valsartan, ACEI ^h or ARB. ^{1,h}	SGLT2 inhibitor. ^{1,5} Consider MRA ^g or sacubitril/valsartan or ARB. ^{1,5,h} Loop diuretic as needed. ¹ HFmrEF^b SGLT2 inhibitor. ⁵ Consider MRA ^g or sacubitril/valsartan or ARB. ⁵ Consider Evidence-based BB. ^{d,5}	A-fib^b ACEI, ^h ARB ^h , or MRA ^{1,g,1,3} Aortic disease^b BB ^d (largely extrapolated from acute management) ¹ Aortic VALVE regurgitation^b ACEI, ^h ARB ^h (note: antihypertensives that reduce HR may increase SBP)



- Optimize dose, then add another appropriate first-line agent (e.g., thiazide,^a ACEI,^h ARB^h, long-acting dihydropyridine CCB^e).^{2,4}
 - DO NOT combine an ACEI plus ARB and/or aliskiren.¹
- Consider SGLT2 inhibitor (for diabetes, HF) or GLP-1 agonist (diabetes, obesity) for appropriate patients.^{1,18}



Investigate resistant HTN (i.e., BP >goal despite optimal dosing of three antihypertensives from different classes,^{6,7} or BP controlled with four antihypertensives.⁶) Consider pseudoresistance and secondary HTN. **See footnote c** for more information on resistant HTN.



Add a drug(s) from a class not currently in use.

Spironolactone (preferred^{1,2,4}) or eplerenone^{1,6,g}

OR

Amiloride^{4,7,13}

If HR ≥70 bpm:
Beta-blocker (consider carvedilol)^{6,14,d}

OR

Clonidine^{4,6}

OR

Guanfacine⁶

OR

Long-acting diltiazem or verapamil^{6,e}

Doxazosin
Consider for BPH^{1,4} Risk of orthostatic hypotension, especially with first dose and in older patients.¹

Hydralazine
Max dose 50 mg TID to reduce lupus risk.⁶ Use with BB and diuretic to counteract reflex tachycardia and fluid retention. Add nitrate for HFrEF.⁶

OR

Minoxidil⁶
Causes hirsutism.⁶ Use with BB and diuretic to counteract reflex tachycardia and fluid retention.¹

Aprocitan (Tryvio [US]).¹²
Risk of embryo-fetal toxicity. Lacks CV risk reduction data. Can cause fluid retention, hepatotoxicity, hemoglobin eGFR reduction, reduced sperm count.

Therapy Optimization (consider during all steps above)



- Optimize lifestyle interventions (e.g., healthy diet, exercise, weight loss, sodium restriction [e.g., 2,400 mg/day], increased dietary potassium [if appropriate], alcohol restriction, stress reduction).^{1,6,7}
- Consider discontinuation or dose reduction of drugs or substances that may increase blood pressure.
- Consider use of once-daily antihypertensives (to improve adherence), giving at least one dose at bedtime; patients with resistant HTN often have BP that doesn't "dip" at night like it should.^{6,10}
- Consider choosing indapamide or chlorthalidone (with azilsartan for resistant HTN) over hydrochlorothiazide.^{6,7,a} See footnote a for details.
- Consider switching amlodipine to long-acting nifedipine.⁶

Treatment of Hypertension

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Footnotes

- a. **Thiazide considerations.** "Thiazide" includes thiazide-like diuretics. Chlorthalidone or indapamide have a longer duration of action than hydrochlorothiazide and may be preferable in patients with resistant HTN.^{1,7} Chlorthalidone may provide better CV outcomes in patients with a history of stroke or MI, at the expense of higher risk of hypokalemia.^{1,2} Thiazides are effective to eGFR 25 to 30 mL/min/1.73m².⁶ Chlorthalidone is about twice as potent as hydrochlorothiazide.⁹ Chlorthalidone is available alone or in combination with azilsartan (Edarbyclor). Azilsartan may provide more BP reduction than other ARBs or ACEIs.⁶
- b. Combination Therapy vs. Stepped-Care
 - Consider starting with a **combo** of two meds, especially if baseline BP ≥140/90 mm Hg, Black, or CV risk >7.5%.¹ Hypertension Canada recommends starting with a combo in all patients.²
 - Monitor older adults for orthostatic hypotension.¹
 - Choose a single-pill combination with two meds to promote adherence.^{1,2,4} Available single-pill combinations include ACEI/CCB, ARB/CCB, ACEI/diuretic, ARB/diuretic.
 - Consider starting with a single agent, carefully uptitrating, then adding other agents if needed (**stepped care**) when starting antihypertensives in frail patients, patients with a history of adverse effects with antihypertensives (e.g., hypotension), and/or baseline BP 130 to 139/80 to 89 mm Hg.¹
- c. Resistant Hypertension
 - Hypertension Canada recommends specialist referral for patients not at goal with three agents.⁷
 - Consider pseudoresistance due to **nonadherence, blood pressure measurement error, or white coat HTN.**^{6,7}
 - Consider secondary HTN due to obstructive sleep apnea (very common),⁸ primary hyperaldosteronism (AHA guidelines recommend screening all patients⁶), CKD, renal artery stenosis, chromaffin cell tumors (e.g., pheochromocytoma), coarctation of the aorta (even post-repair), Cushing's disease, rare endocrine disorders.⁶
 - Adverse effects are an important consideration when choosing an add-on antihypertensive because evidence that BP reduction improves CV outcomes in resistant HTN is lacking.⁷
- d. Beta-blocker considerations:
 - BB are not recommended first-line for HTN unless the patient has CAD or HF.¹
 - In **HTN**, BBs do not reduce stroke risk as much as ACEIs, ARBs, thiazides, or dihydropyridine CCBs.²
 - For **CAD**, evidence-based BB choices include carvedilol, metoprolol succinate, nadolol, bisoprolol, propranolol, or timolol.¹¹
 - Avoid atenolol; it is inferior to other BBs for reducing CV events.¹¹
 - For **HF**, evidence-based BB choices include metoprolol succinate, bisoprolol, or carvedilol.¹
 - Avoid combining a BB with clonidine or a non-DHP CCB (diltiazem, verapamil).¹²
 - For indications and dosing, see our chart, [Comparison of Oral Beta-Blockers](#).
- e. Calcium channel blocker considerations
 - Do not use short-acting nifedipine.¹
 - Consider use of long-acting nifedipine over amlodipine for potentially better BP control; however, nifedipine may cause more edema than amlodipine.⁶
 - Do not use a non-DHP CCB (diltiazem, verapamil) in patients with HFrEF.¹
 - A nondihydropyridine CCB (diltiazem, verapamil) can be used **instead of** a BB for angina unless the patient has significant left ventricular dysfunction.¹¹
 - DHP and non-DHP (diltiazem, verapamil) can be combined.¹
- f. Some evidence suggests that ACEIs or ARBs may reduce A-fib recurrence, and MRAs may reduce A-fib burden.^{1,3}
- g. Mineralocorticoid receptor antagonist considerations
 - Do not combine MRAs (spironolactone, eplerenone, finerenone).¹
 - MRAs with evidence in HFrEF are spironolactone and eplerenone.⁵
 - In HFpEF, consider MRAs (spironolactone or finerenone) for females, or males with ejection fraction <55% to 60%).^{5,15,16}
 - MRAs with evidence in HFmrEF are spironolactone and finerenone.^{5,16}
 - Spironolactone has been studied for BP control in resistant HTN, and is a first-line-add-on.¹
 - Eplerenone is dosed BID for HTN, but poses lower risk of gynecomastia and erectile dysfunction than spironolactone.¹
 - Like eplerenone, finerenone is less likely than spironolactone to cause gynecomastia.¹⁷
- h. ACEIs and ARBs: for indications and dosing, see our chart, [Angiotensin Receptor Blockers and Angiotensin-Converting Enzyme Inhibitors](#).

Abbreviations: ACEI = Angiotensin converting enzyme inhibitor; A-fib = atrial fibrillation; ARB = angiotensin receptor blocker; BB = beta-blocker; BID = twice daily; BNP = brain natriuretic peptide; BP = blood pressure; BPH = benign prostatic hypertrophy; bpm = beats per minute; CCB = calcium channel blocker; CKD = chronic kidney disease; CVD = cardiovascular disease; DBP = diastolic blood pressure; DHP = dihydropyridine; DM = diabetes mellitus; GLP-1 = glucagon-like peptide-1; HF = heart failure; HR = heart rate; HTN = hypertension; ISH = isolated systolic hypertension; LVH = left ventricular hypertrophy; MI = myocardial infarction; MRA = mineralocorticoid receptor antagonist; NT-proBNP = N terminal pro-B-type natriuretic peptide; NYHA = New York Heart Association; SGLT2 = sodium-glucose cotransporter-2

References

1. Jones DW, Ferdinand KC, Taler SJ, et al. 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Hypertension. 2025 Aug 14.
2. Goupil R, Tsuyuki RT, Santesso N, et al. Hypertension Canada guideline for the diagnosis and treatment of hypertension in adults in primary care. CMAJ. 2025 May 25;197(20):E549-E564.
3. Joglar JA, Chung MK, Armbruster AL, et al. 2023 ACC/AHA/ACCP/HRS Guideline for the Diagnosis and Management of Atrial Fibrillation: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Circulation. 2024 Jan 2;149(1):e1-e156. Erratum in: Circulation. 2024 Jan 2;149(1):e167. Erratum in: Circulation. 2024 Feb 27;149(9):e936. Erratum in: Circulation. 2024 Jun 11;149(24):e1413.
4. Unger T, Borghi C, Charchar F, et al. 2020 International Society of Hypertension Global Hypertension Practice Guidelines. Hypertension. 2020 Jun;75(6):1334-1357.
5. Heidenreich PA, Bozkurt B, Aguilar D, et al. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Circulation. 2022 May 3;145(18):e895-e1032. Erratum in: Circulation. 2022 May 3;145(18):e1033. Erratum in: Circulation. 2022 Sep 27;146(13):e185.
6. Carey RM, Calhoun DA, Bakris GL, et al. Resistant Hypertension: Detection, Evaluation, and Management: A Scientific Statement From the American Heart Association. Hypertension. 2018 Nov;72(5):e53-e90.
7. Hiremath S, Sapir-Pichhadze R, et al. Hypertension Canada's 2020 Evidence Review and Guidelines for the Management of Resistant Hypertension. Can J Cardiol. 2020 May;36(5):625-634.
8. Vongpatanasin W. Resistant hypertension: a review of diagnosis and management. JAMA. 2014 Jun 4;311(21):2216-24. Erratum in: JAMA. 2014 Sep 17;312(11):1157.
9. Ernst ME, Carter BL, Zheng S, Grimm RH Jr. Meta-analysis of dose-response characteristics of hydrochlorothiazide and chlorthalidone: effects on systolic blood pressure and potassium. Am J Hypertens. 2010 Apr;23(4):440-6.
10. Hermida RC, Crespo JJ, Domínguez-Sardiña M, et al. Bedtime hypertension treatment improves cardiovascular risk reduction: the Hygia Chronotherapy Trial. Eur Heart J. 2020 Dec 21;41(48):4565-4576.
11. Writing Committee Members; Virani SS, Newby LK, et al. 2023 AHA/ACC/ACCP/ASPC/NLA/PCNA Guideline for the Management of Patients With Chronic Coronary Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines. J Am Coll Cardiol. 2023 Aug 29;82(9):833-955.
12. Clinical Pharmacology powered by ClinicalKey. Tampa (FL): Elsevier. 2025. <http://www.clinicalkey.com>. (Accessed August 31, 2025).
13. Lee CJ, Ihm SH, Shin DH, et al. Spironolactone vs Amiloride for Resistant Hypertension: A Randomized Clinical Trial. JAMA. 2025 Jun 17;333(23):2073-2082.
14. Leonetti G, Egan CG. Use of carvedilol in hypertension: an update. Vasc Health Risk Manag. 2012;8:307-22.
15. Kittleson MM, Panjath GS, Amancherla K, et al. 2023 ACC Expert Consensus Decision Pathway on Management of Heart Failure With Preserved Ejection Fraction: A Report of the American College of Cardiology Solution Set Oversight Committee. J Am Coll Cardiol. 2023 May 9;81(18):1835-1878.
16. Solomon SD, McMurray JJV, Vaduganathan M, et al. Finerenone in Heart Failure with Mildly Reduced or Preserved Ejection Fraction. N Engl J Med. 2024 Oct 24;391(16):1475-1485.
17. González-Juanatey JR, Górriz JL, Ortiz A, et al. Cardiorenal benefits of finerenone: protecting kidney and heart. Ann Med. 2023 Dec;55(1):502-513.
18. Krüger N, Schneeweiss S, Fuse K, et al. Semaglutide and Tirzepatide in Patients With Heart Failure With Preserved Ejection Fraction. JAMA. 2025 Aug 31:e2514092.

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