Review of the 2025 Guidelines for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults

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Disclosures

None

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Objectives

01	Review of the 2025 Guidelines for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults
02	Interpret risk stratification data from the PREVENT™ equations, including the clinical significance of eGFR and albuminuria, to prioritize pharmacological intervention for Stage 1 patients who meet the 7.5% 10-year cardiovascular risk threshold.
03	Justify the intensive blood pressure target of >130/80 mm Hg in the elderly (≥65 years) by communicating the evidence-based link between blood pressure control and the reduction of Mild Cognitive Impairment (MCI) and dementia.

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Endorsing Societies

- American College of Cardiology
- American Heart Association
- American Academy of Physician Associates
- American Association of Nurse Practitioners
- American College of Clinical Pharmacy
- American College of Preventive Medicine
- American Geriatrics Society
- American Medical Association
- American Society of Preventive Cardiology
- Association of Black Cardiologists
- National Medical Association
- Preventive Cardiovascular Nurses Association
- Society of General Internal Medicine.

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Overview

- How to check a blood pressure
- Definitions and classifications of hypertension
- Using PREVENT to determine the CVD risk
- Treatment algorithm and comorbidity specific considerations
- Treatment goals
- Monitoring
- Resistant hypertension
- Secondary hypertension
- Severe hypertension and hypertensive emergency
- Pregnancy
- Team based approach

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How to Check a Blood Pressure

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Office Blood Pressure Measurement



1. The patient should avoid caffeine, exercise, and smoking for at least 30 minutes before measurement. Ensure the patient has emptied their bladder.
2. Use a blood pressure device that has been validated for accuracy (validatebp.org).
3. Use the correct cuff size on a bare arm.
4. The patient's arm should be supported at heart level.
5. Have the patient relax, sitting in a chair (feet on floor, legs uncrossed, and back supported) for more than 5 minutes of rest.
6. Neither the patient nor the clinician should talk during the rest period or during the measurement. The patient should not be using their phone.
7. Blood pressure measurement should be taken in a temperature-controlled room.
8. Take 2 or more blood pressure measurements at least 1 minute apart. Average the readings, and provide the patient their blood pressure readings both verbally and in writing.

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Home Blood Pressure Monitoring



Device and blood pressure cuff

Use a blood pressure device that has been validated for accuracy. Check with your clinician or other members of your care team, and the following website for devices: www.validatebp.org.

Use the correct cuff size matched to the size of your arm.

Patient preparation

Avoid smoking, caffeinated beverages, or exercise within 30 minutes before blood pressure measurements.

Positioning of patient and cuff

Place the cuff on a bare arm, and your arm should be supported at heart level.

The bottom of the cuff should be placed directly above the bend of the elbow.

You should relax, and sit in a chair (feet on floor, legs uncrossed, and back supported) for at least 5 minutes.

Blood pressure measurement

While relaxing and measuring your blood pressure, please do not talk, use your phone, or watch TV.

You should take 2 readings 1 min apart twice a day (for a total of 4 readings): 2 readings in the morning after emptying your bladder (urinating) and before taking your medication and eating; and 2 readings at bedtime before sleep.

Check blood pressure for 3 days (minimum) to 7 days (preferred) before your appointment or interaction with your clinician.

Document your daily blood pressure measurements in writing or electronically.

Share your readings with the clinician taking care of you.

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Best Practices for BP Measurement	Common Measurement Pitfalls	Impact of Improper Practice on SBP (mm Hg)
Use appropriate cuff size	Cuff too small	+ 5-20
	Cuff too large	- 1-6
Rest for 5 min before measurement	No rest period	+ 10-20
Sit quietly	Talking or texting during measurement	+ 10-15
Avoid caffeine for 30 min before measurement	Drinking coffee before measurement	+ 5-8
Have an empty bladder	Full bladder	+10-15
Avoid alcohol consumption	Excess alcohol consumption	+ 5-8
Sit with back supported	Sitting upright on examination table	+ 5-15
Keep both feet flat on floor	Crossing legs, legs dangling from examination table	+ 5-8
BP cuff should be placed on bare arm	Measurement over clothing	± 10-50

https://www.acc.org/latest-in-cardiology/articles/2023/06/05/19/18/why-is-cuff-size-so-important-and-other-factors-that-affect-accurate-bp-measurement

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White Coat Hypertension
Masked Hypertension

- White Coat Hypertension
  - BP spikes in office but normal at home
- Masked Hypertension
  - BP normal in office but elevated at home
- It is a Class 1 recommendation to use home BP readings to initiate and titration antihypertensives.

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Definitions and Classification of Hypertension

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	SBP		DBP
BP Category			
Normal	<120 mm Hg	and	<80 mm Hg
Elevated	120 to 129 mm Hg	and	<80 mm Hg
Hypertension			
Stage 1	130 to 139 mm Hg	or	80 to 89 mm Hg
Stage 2	≥140 mm Hg	or	≥90 mm Hg

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SEVERE HYPERTENSION WITHOUT ACUTE TARGET ORGAN DAMAGE

- >180/>120 and no target organ damage

HYPERTENSIVE EMERGENCY

- >180/>120 and evidence of end organ damage
- Examples of end organ damage:
  - Neurologic: hypertensive encephalopathy, ischemic or hemorrhagic stroke, seizures
  - Cardiovascular: acute coronary syndrome/myocardial infarction, acute heart failure/pulmonary edema, aortic dissection
  - Renal: AKI, decreased urine output
  - Ocular: Papilledema, hemorrhages, exudates on fundoscopic exam

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Determining the CVD risk – PREVENT

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Sex* Male ○ Female

Current Smoking
Any cigarette use within the last 30 days
No ○ Yes

Lipid-lowering medication
Current use of statin medication to lower cholesterol
No ○ Yes

Age (years)* 30-79

HDL Cholesterol (mg/dL)* 20-100

BMI (kg/m²)* 18.5-39.9

Total Cholesterol (mg/dL)* 130-320

SBP (mmHg)* 90-200

eGFR (mL/min/1.73m²)* 15-140

Diabetes
Any history of diabetes.
No ○ Yes

Anti-hypertensive medication
Current use of any medication for hypertension
No ○ Yes

The following three predictors are optional for further personalization of risk assessment. When they are clinically indicated or available,
If available or indicated, select "Yes" and enter the value.

UACR (mg/g)
UACR is clinically indicated for individuals with chronic kidney disease, diabetes, or hypertension
No ○ Yes

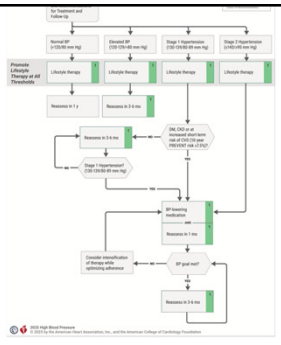
HbA1C
HbA1c is clinically indicated for individuals with diabetes, prediabetes, overweight, or obesity, or those with history of gestational diabetes
No ○ Yes

Zip Code
valid 5-digit zip code is needed to estimate social deprivation index [SDI]
No ○ Yes

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Treatment

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TABLE 12 Lifestyle and Stress Reduction Interventions to Lower Blood Pressure

Intervention	Target/Biomarker	Evidence-Based Goals	Approximate Mean Change in SBP (mm Hg)[a] With Hypertension	Approximate Mean Change in SBP (mm Hg)[a] Without Hypertension	References
Weight loss	Body weight or BMI	Aim for sustained ≥5% reduction in body weight or ≥3 kg/m² reduction in BMI; expect about 1 mm Hg reduction for every 1-kg reduction in body weight	−6 to −8	−3 to −5	[2,6,74,77]
Heart-healthy diet	DASH eating pattern	Consume a diet rich in fruits, vegetables, whole grains, and low-fat dairy products, with reduced content of saturated and total fat	−5 to −8	−3 to −7	[3–7,9,64,73]
Reduced intake of sodium	Dietary sodium intake; 24-h urinary sodium	Optimal goal is <2,300 mg/d, but aim for an ideal limit of <1,500 mg/d	−6 to −8	−1 to −4	[6–10,79,120,121]
Use of salt substitute	Replace cooking/table salt (100% sodium chloride) with salt substitute (25%–30% potassium chloride, 65%–75% sodium chloride, and 0%–10% flavoring agents); 24-h urinary sodium and potassium	Reduce dietary sodium intake as above	−5 to −7	−5	[69–72,80]
Enhanced intake of potassium	Dietary potassium intake; 24-h urinary potassium	Aim for 3,500–5,000 mg/d, ideally by consumption of a diet rich in potassium; or alternative use of moderate-dose pharmacological potassium supplementation (<80 mmol)	−6	−3 to −6	[81–87]
Reduced alcohol intake	Alcohol consumption	Optimal goal is abstinence for all adults for best health outcomes; in patients who consume alcohol, aim for ≥50% reduction in daily intake to no more than 2 drinks/d in men or 1 drink/d in women	−4 to −6	−3	[29]
Exercise	Aerobic exercise	90–150 min/wk 65%–75% heart rate reserve	−4 to −8	−2 to −7	[14,26,34,110,122]
	Dynamic resistance	90–150 min/wk 50%–80% 1 rep maximum 6 exercises, 3 sets/exercise, 10 repetitions/set	−2 to −7	−2 to −5	[11,46,108,127]
	Isometric resistance	4 × 2 min (hand grip), 1 min rest between exercises, 30%–40% maximum voluntary contraction, 3 sessions/wk	−5 to −10	−4 to −6	[14,22,23,45,109,130]
Meditation	Transcendental meditation	Training by a professional, followed by 2 × 20 min sessions/d while seated comfortably with eyes closed	−5 to −7	−5	[16,119]
Breathing control	Slowing respiration	Device-guided session to decrease respiration to ~10 breaths/min for 15 min/d	−5	−5	[14]

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DASH Eating Plan

The Benefits: Lowers blood pressure & LDL "bad" cholesterol.

Eat This	Limit This
Vegetables	Fatty meats
Fruits	Full-fat dairy
Whole grains	Sugar sweetened beverages
Fat-free or low-fat dairy	Sweets
Fish	Sodium intake
Poultry	
Beans	
Nuts & seeds	
Vegetable oils	

www.nhlbi.nih.gov/DASH

Based on these recommendations, the following table shows examples of daily and weekly servings that meet DASH eating plan targets for a 2,000-calorie-a-day diet.

Food Group	Daily Servings
Grains	6–8
Meats, poultry, and fish	6 or less
Vegetables	4–5
Fruit	4–5
Low-fat or fat-free dairy products	2–3
Fats and oils	2–3
Sodium	2,300 mg*
	Weekly Servings
Nuts, seeds, dry beans, and peas	4–5
Sweets	5 or less

*1,500 milligrams (mg) sodium lowers blood pressure even further than 2,300 mg sodium daily.

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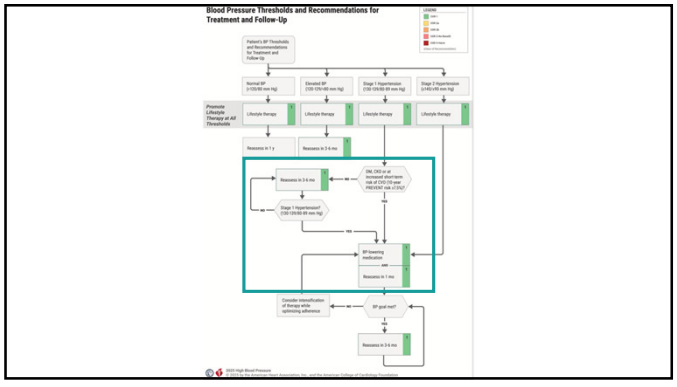
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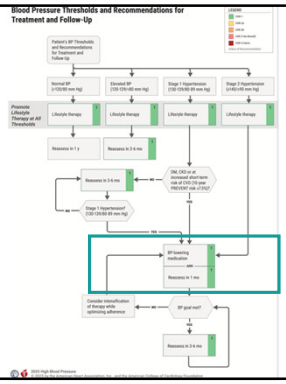
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Stage 2 = Start with 2 antihypertensives simultaneously

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Medication Recommendations

- Thiazide type diuretics
- ACE Inhibitors
- ARBS
- Long-acting dihydropyridine CCB

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Table 15. Evidence-Based Strategies for Improving Antihypertensive Medication Adherence

Evidence-Based Strategies for Improving Antihypertensive Medication Adherence
Dose consolidation
Single pill combination rather than separate pills
Education/coaching by pharmacists and other health professionals
Electronic/home blood pressure monitoring and feedback
Integration of patient preferences and values/shared decision-making into management plan
Medication synchronization and reminder aids
Mindfulness-based stress reduction or counseling for high stress, anxiety, and/or depression
Self-management interventions

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Comorbidity Specific Considerations

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Diabetes

More than 80% of adults with T2D also have hypertension.

The prevalence rate of hypertension in adults with T2D is double that of age-matched adults without diabetes.

CVD risk in adults with both T2D and hypertension is more than double the risk for either condition alone.

Recommendations for Diabetes
Referenced studies that support the recommendations are summarized in the Evidence Table.

COR	LOE	Recommendations
1	A	1. In adults with T2D and hypertension, antihypertensive drug treatment should be initiated at an SBP of ≥130 mm Hg with a treatment goal of <130 mm Hg, with encouragement to achieve an SBP <120 mm Hg to reduce CVD morbidity and mortality.[1-5]
1	C-LD	2. In adults with T2D and hypertension, antihypertensive drug treatment should be initiated at a DBP of ≥80 mm Hg with a treatment goal of <80 mm Hg to reduce CVD morbidity and mortality.[6]
1	A	3. In adults with T2D and hypertension, all first-line classes of antihypertensive agents (ie, thiazide-type diuretics, long-acting CCB, ACEi, and ARB) are useful and effective for BP lowering.[7-9]
1	A	4. In adults with diabetes and hypertension, ACEi or ARB are recommended in the presence of CKD as identified by eGFR <60 mL/min/1.73 m^2 or albuminuria ≥30 mg/g and should be considered when mild albuminuria (<30 mg/g) is present to delay progression of diabetes-related kidney disease.[10-12]

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Obesity and Metabolic Syndrome

Recommendations for Obesity and Metabolic Syndrome
Referenced studies that support the recommendations are summarized in the Evidence Table.

COR	LOE	Recommendations
2b	B-R	1. In adults with hypertension who also have overweight or obesity with a BMI ≥27 kg/m^2, incretin mimetics (eg, GLP-1 receptor agonists) when used for weight management may be effective as an adjunct to lower BP.[1-4]
2b	B-R	2. In adults with hypertension who have obesity with a BMI ≥35.0 kg/m^2, bariatric surgery (when considered for weight loss) in combination with behavioral interventions and antihypertensive therapies may be effective at lowering BP.[5,6]

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Chronic Coronary Disease

- ACEi, ARB, and BB have been shown to reduce CVD events and all-cause death in adults with CCD and hypertension
- CCB, thiazide-type diuretics, and/or MRA are recommended if additional agents needed

Valvular Heart Disease

- adults with severe aortic stenosis who have undergone transcatheter aortic valve implantation, the use of ACEi or ARB to achieve BP control is associated with reduced mortality

Aortic Disease

- BB recommended but data is limited

A-fib

- CCB or BB for rate control

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Heart Failure

- Reduced Ejection Fraction
  - BB, MRA, ACE, ARBs, SGLT2s
  - Diuretics for volume overload
  - Dihydropyridine CCB may be used to treat hypertension in patients with elevated BP despite the optimization of GDMT. Nondihydropyridine CCB may be harmful in patients with HFrEF due to their negative inotropic effects and are not recommended for hypertension management.
- Preserved Ejection Fraction
  - Entresto (sacubitril/valsartan) or ARB
  - Diuretics
  - BB not recommended due to negative chronotropic effects and only used if needed for arrhythmias or acute coronary syndrome
  - SGLT2s

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Chronic Kidney Disease

Recommendations for Hypertension Treatment in Patients With CKD
References that support recommendations are summarized in the Evidence Table.

COR	LOE	Recommendations
1	A	1. For adults with hypertension and CKD as identified by eGFR <60 mL/min/1.73 m² or albuminuria ≥30 mg albumin/g creatinine, treatment should target an SBP goal of <130 mm Hg to decrease all-cause mortality.[1-3]
1	B-R	2. For adults with hypertension and CKD as identified by eGFR <60 mL/min/1.73 m² with albuminuria of ≥30 mg/g, RAASi (either with ACEi or ARB but not both) is recommended to decrease CVD and delay progression of kidney disease.[4,5]

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Mild Cognitive Impairment and Dementia

Recommendation for Prevention of Mild Cognitive Impairment and Dementia
Referenced studies that support the recommendation are summarized in the Evidence Table.

COR	LOE	Recommendation
1	A	1. In adults with hypertension, a goal of <130 mm Hg SBP is recommended to prevent mild cognitive impairment and dementia.[1-5]

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Treatment Goals

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Recommendations for BP Goal for Patients With Hypertension
Referenced studies that support recommendations are summarized in the Evidence Table.

COR	LOE	Recommendations
1	A	1. In adults with confirmed hypertension who are at increased risk* for CVD, an SBP goal of at least <130 mm Hg, with encouragement to achieve SBP <120 mm Hg, is recommended to reduce the risk of cardiovascular events and total mortality.[1-4]
2b	B-NR	2. In adults with confirmed hypertension who are not at increased risk* for CVD, an SBP goal of <130 mm Hg, with encouragement to achieve SBP <120 mm Hg, may be reasonable to reduce risk of further elevation of BP.[5]
1	B-R	3. In adults with confirmed hypertension who are at increased risk* for CVD, a DBP target of <80 mm Hg is recommended to reduce the risk of cardiovascular events and total mortality.[6]
2b	B-NR	4. In adults with confirmed hypertension who are not at increased risk* for CVD, a DBP target of <80 mm Hg may be reasonable to reduce the risk of cardiovascular events.[5]

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Orthostatic Hypotension

Recommendations for Management of OH
Referenced studies that support the recommendations are summarized in the Evidence Table.

COR	LOE	Recommendations
1	A	1. In adults with hypertension, improved BP control is recommended to reduce the risk for OH.[1-4]
2a	A	2. In adults receiving intensive BP-lowering therapy with asymptomatic OH, treatment with a goal of SBP <130 mm Hg is reasonable due to increased CVD and mortality benefit.[3,5]
2a	B-R	3. In adults with hypertension initiating treatment or adding medication with a goal of SBP <130 mm Hg, assessment for symptomatic OH is reasonable to detect other chronic conditions.[1-4,6,7]

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Nuances for Frailty

- Guidelines can be relaxed or individualized
  - Frailty
  - Autonomic dysfunction
  - Polypharmacy
- Goal is to minimize symptoms of dizziness and prevent falls rather than achieving a specific numerical target
- If there is symptomatic OH or frailty starting with monotherapy is recommended for stage 2 HTN
- >/= 85 year or those with lifespan <3 years the target should be <140 systolic or "as low as reasonably achievable" without causing syncope or renal injury

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Monitoring

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Monitoring

- CBC, BMP including a fasting glucose, lipid panel, TSH, UA and urine albumin-to-creatine ratio are all recommended at the time of diagnosis.
- EKG recommended at time of diagnosis
- ECHO not recommended unless there is another reason to have concern for structural damage
- BMP should be checked 2 to 4 weeks after initiation or dose titration of diuretics, ACEi, ARB, and MRA.
- Yearly BMPs to monitor for progression of kidney disease annually
- Yearly Lipid panels

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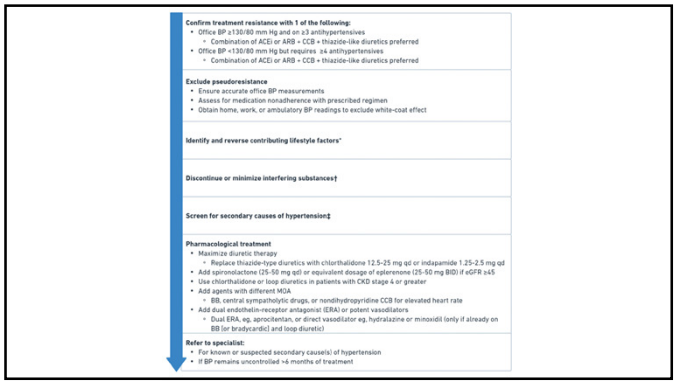
Resistant Hypertension

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Resistant Hypertension

- BP above goal despite treatment with 3 antihypertensive medications with complementary mechanisms of action
- Risk Factors: older age, obesity, CKD, and diabetes
- 50% higher risk of MI, stroke, end-stage kidney disease, and cardiovascular death than adults with hypertension without resistance to treatment.

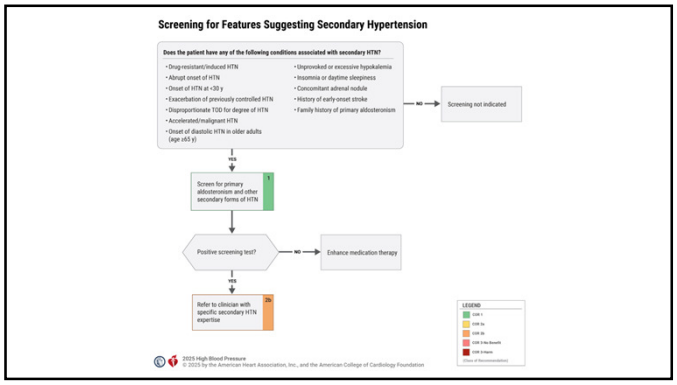
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Secondary Hypertension

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Secondary Causes of Hypertension

COMMON CAUSES

- OSA
- CKD
- Primary Aldosteronism
- Drug or Alcohol Induced
- Renovascular Hypertension

UNCOMMON CAUSES

- Hypo- and Hyperthyroidism
- Pheochromocytoma/paraganglioma
- Aortic coarctation
- Cushing Syndrome
- Primary Hyperparathyroidism
- Congenital Adrenal Hyperplasia
- Mineralocorticoid Excess Syndromes other than Primary Aldosteronism
- Acromegaly

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Who to Screen for Primary Aldosteronism

- Resistant Hypertension
  - BP remains high on 3 medications, regardless of K levels
- Stage 2 Hypertension
- Spontaneous or diuretic-induced hypokalemia
- Adrenal Incidentalomas
- OSA – this is new
- Fam Hx of Hypertension or stroke prior to age 40
- A-Fib without a clear cause

The 2025 Endocrine Society Guidelines have suggested screening all patients with hypertension

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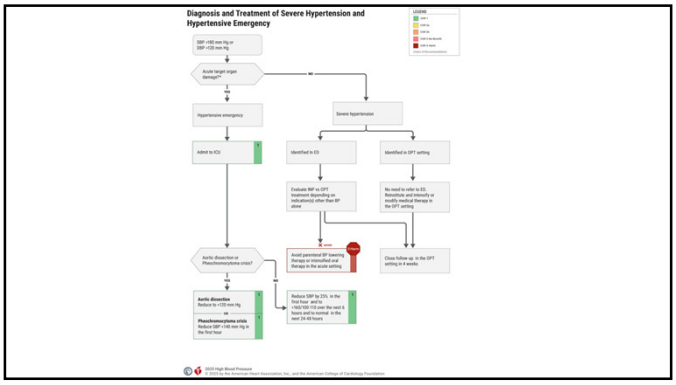
How to Screen for Primary Aldosteronism

- Plasma Aldosterone Concentration and Plasma Renin Activity to calculate Aldosterone-to-Renin Ratio
  - ARR >/= 30 (with PAC >/= 10 ng/dL and suppressed renin <1 ng/mL/h) generally suggests PA and requires further investigation
- You can now continue BP meds during the initial screen, MRAs like spironolactone or eplerenone are the exception, these must be stopped for 4 weeks prior to testing
- Has to be done in the morning
- Do not restrict salt intake prior
- Hypokalemia should be corrected prior

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Severe Hypertension and Hypertensive Emergency

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Pregnancy

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Differences from ACOG

DIAGNOSTIC THRESHOLDS

- AHA/ACC
  - Hypertension is >130/80 for all adults
- ACOG
  - >140/90 defines chronic hypertension in pregnancy
  - >160/110 is classified as severe range hypertension

TREATMENT THRESHOLDS

- AHA/ACC
  - Target is <130/80 for MOST adults, it does acknowledge that pregnant individuals are an exception
- ACOG
  - Target is <140/90 for chronic hypertension in pregnancy

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Table 20. Classification of Hypertensive Disorders of Pregnancy[20]

Condition	Definition
Chronic hypertension	Diagnosis prior to pregnancy or at <20 wks' gestation
Gestational hypertension	De novo hypertension at ≥20 wks' gestation in the absence of proteinuria or other signs of preeclampsia
Preeclampsia	Gestational hypertension with proteinuria or other maternal end-organ dysfunction including neurologic findings, pulmonary edema, hematologic findings, acute kidney injury, hepatic dysfunction (Section 5.5.2 "Preeclampsia and Eclampsia, Including Preeclampsia Superimposed on Chronic Hypertension")
Preeclampsia superimposed on chronic hypertension	Preeclampsia in a woman with a history of hypertension before pregnancy or before 20 weeks' gestation

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Pregnancy

Recommendations for Individuals With Hypertension and Pregnancy[a] Referenced studies that support the recommendations are summarized in the Evidence Table.

COR	LOE	Recommendations
1	A	1. For individuals with hypertension who are planning a pregnancy or who become pregnant, labetalol and extended-release nifedipine are preferred agents to treat hypertension and minimize fetal risk.[1]
1	B-R	2. Individuals with hypertension who are planning a pregnancy or who become pregnant should be counseled about the benefits of low-dose (81 mg/day) aspirin to reduce the risk of preeclampsia and its sequelae.[2]
1	B-R	3. Pregnant individuals with SBP ≥160 mm Hg or DBP ≥110 mm Hg confirmed on repeat measurement within 15 minutes should receive antihypertensive medication (Table 23) to lower BP to <160/<110 mm Hg within 30 to 60 minutes to prevent adverse events.[3–7]
1	B-R	4. Pregnant individuals with chronic[i] hypertension (defined as prepregnancy hypertension or SBP 140 to 159 mm Hg and/or DBP 90 to 109 mm Hg prior to 20 weeks' gestation) should receive antihypertensive therapy to achieve BP <140/90 mm Hg to prevent maternal and perinatal morbidity and mortality.[7,8,9]
3: Harm	C-LD	5. Individuals with hypertension who are planning a pregnancy or who become pregnant should not be treated with atenolol, ACEi, ARB, direct renin inhibitors, nitroprusside, or MRA to avoid fetal harm.[10–14]

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Team Based Approach

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Hypertension Team Responsibilities

Communication, shared decision-making, and care coordination among various clinical team members, the patient, and patient caregivers
Effective use of evidence-based diagnosis and management guidelines
Regular, structured follow-up mechanisms and reminder systems to monitor patient progress
Medication adherence support and patient education about hypertension medication
Medication initiation, addition, and titration using evidence-based treatment algorithms
Use of evidence-based tools and resources designed to maximize self-management (including health behavior change, lifestyle modification, etc)

Individual Hypertension Team Members	Roles (examples)
Primary care physician/cardiologist, physician assistant or associate/nurse practitioner/advanced practice nurse	Routine and complex hypertension care, managing primary care issues
Cardiologist/physician assistant or associate/nurse practitioner/advanced practice nurse	Routine and complex hypertension care, especially for patients with cardiac disease or high risk for major cardiovascular events
Nephrologist, endocrinologist, hypertension specialist	Management of complex hypertension care, especially due to secondary causes, and/or resistant hypertension
Nurse (including in-office, home care, internal and external population health personnel)	Accurate assessment of BP, medication reconciliation, patient education, self-management, lifestyle modification, and adherence
Clinical Pharmacist	Comprehensive medication management, identification of medication-related interactions, and educating patients on their medication regimen
Dietician	Ongoing patient-centered counseling to assess dietary habits and preferences and set and monitor goals for healthy lifestyle
Social Worker	Assess for psychosocial, cultural, and financial barriers and find solutions to overcome these barriers
Community health worker	Assess and address social determinants of health and identify and promote acceptable community-based resources to overcome these barriers

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Take Home Points

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- Utilize patients home blood pressure readings.
- Educate everyone on the lifestyle recommendations.
- Risk stratify using PREVENT
- 130-139 over 80-89 = 3-month trial of lifestyle changes then start monotherapy if not at goal
- >/=140 over >/=90 = initiation of two medications
- Combo pills improve adherence
- Thiazide type diuretics, ACEi, ARBs, dihydropyridine CCBs are your top choices
- Treating blood pressure reduces risk of mild cognitive impairment and dementia
- Think about secondary causes of HTN
- Screen for primary aldosteronism, do not need to have hypokalemia
- Hypertensive urgency is now severe hypertension without acute target organ damage and it can be managed as an outpatient, no need to send to the ED
- Remember to utilize the whole healthcare team

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