



Clinical Practice Aids Management and Treatment of Hypertension in Adults

These guidelines were developed to provide guidance to primary care providers and are not intended to replace or preclude the provider's clinical judgment.

Prevention, Detection, Evaluation and Treatment of High Blood Pressure (NJC7) available at www.nhlbi.nih.gov/guidelines

Classification and management of blood pressure for adults*

BP Classification	SBP* MMHG	DBP* MMHG	Lifestyle Modification	Initial Drug Therapy	
				Without Compelling Indication	Without Compelling Indications (See Table 8)
Normal	< 120	And < 80	Encourage	No antihypertensive drug indicated.	Drug(s) for compelling indications.‡
Prehypertension	120-139	Or 80-89	Yes		
Stage 1 Hypertension	140-159	Or 90-99	Yes	Thiazide-type diuretics for most. May consider ACEI, ARB, BB, CCB, or combination	Drug(s) for the compelling indications.‡
Stage 2 Hypertension	> 160	Or > 100	Yes	Two-drug combination for most† (usually thiazide-type diuretic and ACEI or RB or BB or CCB).	Other antihypertensive drugs (diuretic, ACEI, ARB, BB, CCB) as needed.

* Treatment determined by highest BP category

† Initial combined therapy should be used cautiously in those at risk for orthostatic hypertension.

‡ Treat patients with chronic kidney disease or diabetes to BP goal of <130/80 mmHg.

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Lifestyle modifications to manage hypertension*†

Modification	Recommendation	Approximate SBP Reduction (Range)
Weight reduction	Maintain normal body weight (body mass index 18.5-24.9 kg/m ²)	5-20 mmHg/10 kg Weight loss ^{23,24}
Adopt DASH eating plan	Consume a diet rich in fruits, vegetables, and lowfat dairy products with a reduced content of saturated and total fat.	8-14 mmHg ^{25,26}
Dietary sodium reduction	Reduce dietary sodium intake to no more than 100 mmol per day (2.4 g sodium or 6 g sodium chloride).	2-8 mmHg ²⁵⁻²⁷
Physical activity	Engage in regular aerobic physical activity such as brisk walking (at least 30 min per day, most days of the week).	4-9 mmHg ^{28,29}
Moderation of alcohol consumption	Limit consumption to no more than 2 drinks (1 oz or 30 mL ethanol; e.g., 24 oz beer, 10 oz wine, or 3 oz 80-proof whisky) per day in most men and to no more than 1 drink per day in women and lighter weight persons.	2-4 mmHg ³⁰

Key: DBP, diastolic blood pressure, SBP, systolic blood pressure.

Drug abbreviations: ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker; BB, beta-blocker; CCB, calcium channel blocker. DASH, Dietary Approaches to Stop Hypertension.

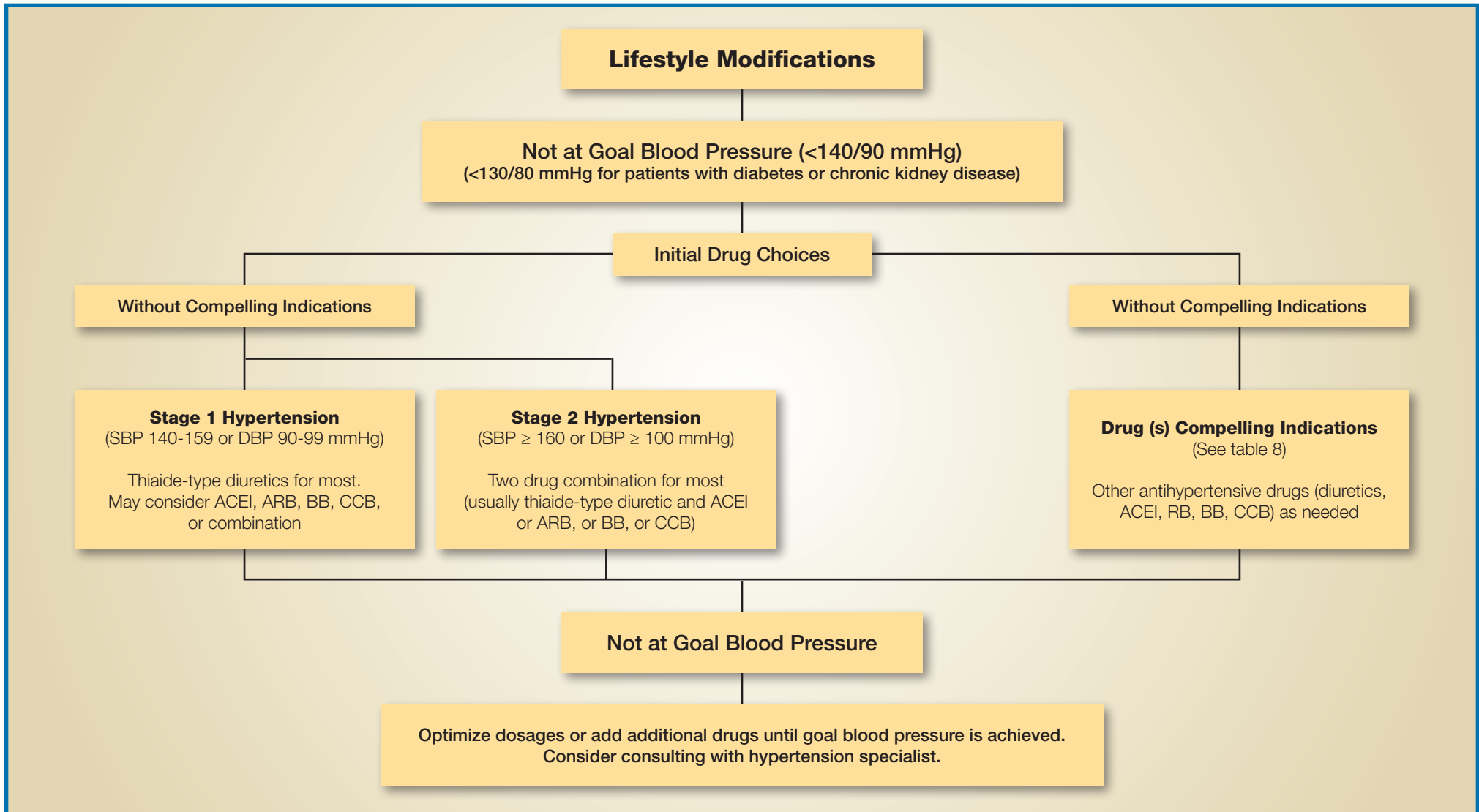
* For overall cardiovascular risk reduction, stop smoking.

† The effects of implementing these modifications are dose and time dependent, and could be greater for some individuals.

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Treatment of Hypertension



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