

HYPERTENSION POCKET GUIDE

- * Recommend healthy lifestyle changes, including increased physical activity and a low-sodium diet, for all patients with hypertension and pre-hypertension.
- * Prescribe thiazide diuretics as the initial drug of choice for most patients.
- * Aim for target blood pressure of <140/90 for most hypertensive patients and <130/80 for those with diabetes or kidney disease.

CLASSIFICATION OF BLOOD PRESSURE LEVELS FOR PEOPLE 18 AND OLDER*

BP Classification	Systolic BP (mm Hg)	Diastolic BP (mm Hg)
Normal	< 120 AND	< 80
Pre-Hypertension**	120 – 139 OR	80 – 89
Stage 1 Hypertension	140 – 159 OR	90 – 99
Stage 2 Hypertension	≥ 160 OR	≥ 100

* Based on the average of 2 or more correctly measured, seated readings taken on each of 2 or more office visits

** New Category introduced in JNC-7 Report

Adapted from: JNC-7, National Heart, Lung, and Blood Institute

PERFORM LAB TESTS AND ROUTINE STUDIES

- Electrocardiogram
- Urinalysis
- Blood glucose
- Hematocrit
- Serum potassium
- Serum creatinine (or GFR)
- Fasting lipid panel (TChol, HDL, LDL, TGL)

PHYSICAL EXAMINATION

- Body Mass Index (BMI)
- Optic fundi
- Auscultation for carotid, abdominal, and femoral bruits
- Thyroid gland
- Heart and lungs
- Abdomen for enlarged kidneys, masses, abnormal aortic pulsation
- Lower extremities edema and pulses
- Neurological assessment

SELECTING FIRST-LINE ANTI-HYPERTENSIVE DRUGS

	Medication Options <small>RED = Recommended first-line drug</small>	Comments
Most Patients	Thiazide diuretics Alone or combined with other drugs	If THIAZ contraindicated or not well-tolerated, try ACE-I, BB, ARB, or CCB.
Patients WITH Compelling Indications		
Coronary disease (confirmed or suspected)	BB, ACE-I, CCB, THIAZ	If using a CCB, select a non-dihydropyridine. Consider aspirin and provide aggressive lipid management.
Post-myocardial infarction	BB, ACE-I	Consider aspirin and provide aggressive lipid management.
Heart failure – systolic (low output)	ACE-I or ARB, BB, ALDO, THIAZ	ACE-I, BB, and ALDO associated with improved survival in systolic heart failure.
Heart failure – diastolic (abnormal left ventricular filling)	ACE-I or ARB, BB, THIAZ	ACE-I, ARB and BB improve ventricular diastolic relaxation and decrease stiffness. BB reduces heart rate to improve diastolic filling. Monitor response to THIAZ closely as patients may be pre-load dependent.
Diabetes	ACE-I or ARB, THIAZ, BB, CCB	ACE-I and ARB have a reno-protective effect in addition to favorable blood pressure-lowering properties. Goal: < 130/80 mm Hg
Kidney disease	ACE-I or ARB	ACE-I and ARB have a reno-protective effect in addition to favorable blood pressure-lowering properties. Goal: < 130/80 mm Hg
Cerebrovascular disease (non-acute)	THIAZ, ACE-I	See AHA/ASA guidelines for evaluation of CVD risk in stroke patients.

For more detailed information on first-line antihypertensive drugs see the DOHMH City Health Information.

The New York City Department of Health and Mental Hygiene

LIFESTYLE MODIFICATIONS TO MANAGE HYPERTENSION AND PRE-HYPERTENSION*

KEY MODIFICATIONS	RECOMMENDED ACTIONS	APPROXIMATE SYSTOLIC BP REDUCTION
Physical activity	<ul style="list-style-type: none"> Get at least 2 hours and 30 minutes a week of moderate activity (such as a brisk walk) performed in episodes of at least 10 minutes. 	4 – 9 mm Hg
Healthy Diet	<ul style="list-style-type: none"> Eat plenty of fruits and vegetables, low-fat dairy products, whole grains, fish, lean poultry and nuts – a diet low in saturated, trans and total fat. 	8 – 14 mm Hg
	<ul style="list-style-type: none"> Reduce sodium intake to no more than 100 mmol/day (about 2.4 g sodium or 6 g sodium chloride). 	2 – 8 mm Hg
	<ul style="list-style-type: none"> Maintain adequate dietary potassium: more than 90 mmol (3,500 mg) a day. 	2 – 4 mm Hg
Weight Reduction	<ul style="list-style-type: none"> Maintain a healthy weight; keep body mass index (BMI) < 25 (for someone 5'10", < 175 pounds; for someone 5'4", < 146 pounds). 	5 – 20 mm Hg per 22 lbs weight loss
Alcohol Consumption	<ul style="list-style-type: none"> Limit to no more than: <ul style="list-style-type: none"> - 2 drinks/day for most men - 1 drink/day for women and lighter weight persons (One drink = 12 oz beer, 5 oz wine, or 1.5 oz spirits) 	2 – 4 mm Hg

*Consistent with DASH (Dietary Approaches to Stop Hypertension) eating plan

