

# 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 <b>AND</b>	< 80
Pre-Hypertension**	120 – 139 <b>OR</b>	80 – 89
Stage 1 Hypertension	140 – 159 <b>OR</b>	90 – 99
Stage 2 Hypertension	≥ 160 <b>OR</b>	≥ 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	<b>Thiazide diuretics</b> Alone or combined with other drugs	If THIAZ contraindicated or not well-tolerated, try ACE-I, BB, ARB, or CCB.
<b>Patients WITH Compelling Indications</b>		
<b>Coronary disease</b> (confirmed or suspected)	<b>BB, ACE-I, CCB, THIAZ</b>	If using a CCB, select a non-dihydropyridine. Consider aspirin and provide aggressive lipid management.
<b>Post-myocardial infarction</b>	<b>BB, ACE-I</b>	Consider aspirin and provide aggressive lipid management.
<b>Heart failure – systolic</b> (low output)	<b>ACE-I or ARB, BB, ALDO, THIAZ</b>	ACE-I, BB, and ALDO associated with improved survival in systolic heart failure.
<b>Heart failure – diastolic</b> (abnormal left ventricular filling)	<b>ACE-I or ARB, BB, THIAZ</b>	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.
<b>Diabetes</b>	<b>ACE-I or ARB, THIAZ, BB, CCB</b>	ACE-I and ARB have a reno-protective effect in addition to favorable blood pressure-lowering properties. Goal: < 130/80 mm Hg
<b>Kidney disease</b>	<b>ACE-I or ARB</b>	ACE-I and ARB have a reno-protective effect in addition to favorable blood pressure-lowering properties. Goal: < 130/80 mm Hg
<b>Cerebrovascular disease</b> (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
<b>Physical activity</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	4 – 9 mm Hg
<b>Healthy Diet</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	8 – 14 mm Hg
	<ul style="list-style-type: none"> <li>Reduce sodium intake to no more than 100 mmol/day (about 2.4 g sodium or 6 g sodium chloride).</li> </ul>	2 – 8 mm Hg
	<ul style="list-style-type: none"> <li>Maintain adequate dietary potassium: more than 90 mmol (3,500 mg) a day.</li> </ul>	2 – 4 mm Hg
<b>Weight Reduction</b>	<ul style="list-style-type: none"> <li>Maintain a healthy weight; keep body mass index (BMI) &lt; 25 (for someone 5'10", &lt; 175 pounds; for someone 5'4", &lt; 146 pounds).</li> </ul>	5 – 20 mm Hg per 22 lbs weight loss
<b>Alcohol Consumption</b>	<ul style="list-style-type: none"> <li>Limit to no more than:                             <ul style="list-style-type: none"> <li>- 2 drinks/day for most men</li> <li>- 1 drink/day for women and lighter weight persons (<b>One drink = 12 oz beer, 5 oz wine, or 1.5 oz spirits</b>)</li> </ul> </li> </ul>	2 – 4 mm Hg

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

