

Hypertension Management (JNC-8)

Healthy patients Over the age of 60 should aim for systolic blood pressures less than 150 mmHg and diastolic blood pressures less than 90 mmHg. For patients <60 years old or those at any age with diabetes or chronic kidney disease (CKD), the target systolic and diastolic blood pressures are 140 mmHg and 90 mmHg, respectively. To treat hypertension, patients should begin with lifestyle modifications such as weight loss, healthy dieting, exercise, smoking cessation, and limiting alcohol consumption. Medical management for non-African American patients include single or combination therapy with thiazide diuretics, ACE inhibitors, ARBs, or calcium channel blockers (CCBs). Hypertensive African American patients should be treated with a thiazide diuretic or CCB. Patients age 18 and over with CKD, with or without diabetes, should be treated with an ACE inhibitor or an ARB.



PLAY PICMONIC

Goal of Treatment

Age Over 60 years (and Healthy)

Over (60) Social-security-card

The target blood pressure (BP) of healthy patients over age 60 is 150 mmHg systolic over 90 mmHg diastolic, more commonly written as 150/90.

150/90

150/90 with (5) Hand

The target blood pressure of healthy patients over age 60 is 150 mmHg systolic over 90 mmHg diastolic.

Age Under 60 years (and Healthy)

Under (60) Without Social-security-card

The target blood pressure of healthy patients under age 60, as well as all patients with diabetes mellitus or CKD, is 140/90.

Any Age with Diabetes or CKD

Any Age with Dye-d-bead-pancreas and Crone Kidney

Healthy patients under age 60, and all patients with diabetes mellitus or CKD, should have a target BP of 140/90.

140/90

140/90 with (4) Fork

A systolic BP of 140 mmHg systolic and a diastolic pressure of 90 mmHg are the optimal pressures for patients with diabetes mellitus or CKD.

Treatment

ARB/ACE-I/Thiazide/CCB (Primary or Combo)

Angel-tennis Receptor Blocks, Ace-inhibitor, Tarzan, and Calcium-cow Channel Blocks

For non-African American patients with hypertension, treatment should begin with a thiazide diuretic, an angiotensin converting enzyme (ACE) inhibitor, an angiotensin receptor blocker (ARB), or a calcium channel blocker (CCB). These drugs may be used alone or in combination to lower blood pressure; however, patients should not take ACE inhibitors and ARBs together to control hypertension.

CKD (w/wo Diabetes)

[Crone Kidney](#)

In hypertensive patients age 18 and over with chronic kidney disease (with or without diabetes), clinical trials have shown ACE inhibitors or ARBs to be the most effective.

ARB or ACE-I Primary

[Angel-tennis Receptor Blocks and Ace-Inhibitor](#)

ACE inhibitors and ARBs have been shown to be the most effective pharmacological treatment of hypertension in patients with chronic kidney disease. However, patients should not take ACE inhibitors and ARBs together to control hypertension.

African American

[African American](#)

African Americans develop high blood pressure earlier in life than other groups in the U.S. This is thought to be due to genetic as well as environmental factors. African Americans are more likely to develop complications due to high blood pressure, which includes an increased incidence of stroke, cardiovascular disease, kidney disease, dementia, and blindness.

Thiazide or CCB Primary

[Tarzan and Calcium-cow Channel Blocks](#)

For African American patients with hypertension, treatment should begin with a thiazide diuretic, such as hydrochlorothiazide or a calcium channel blocker. These drugs have been shown to be more efficacious than ACE inhibitors and ARBS. In this group of patients, hypertension is more severe, the onset is earlier, and is associated with increased comorbidities.