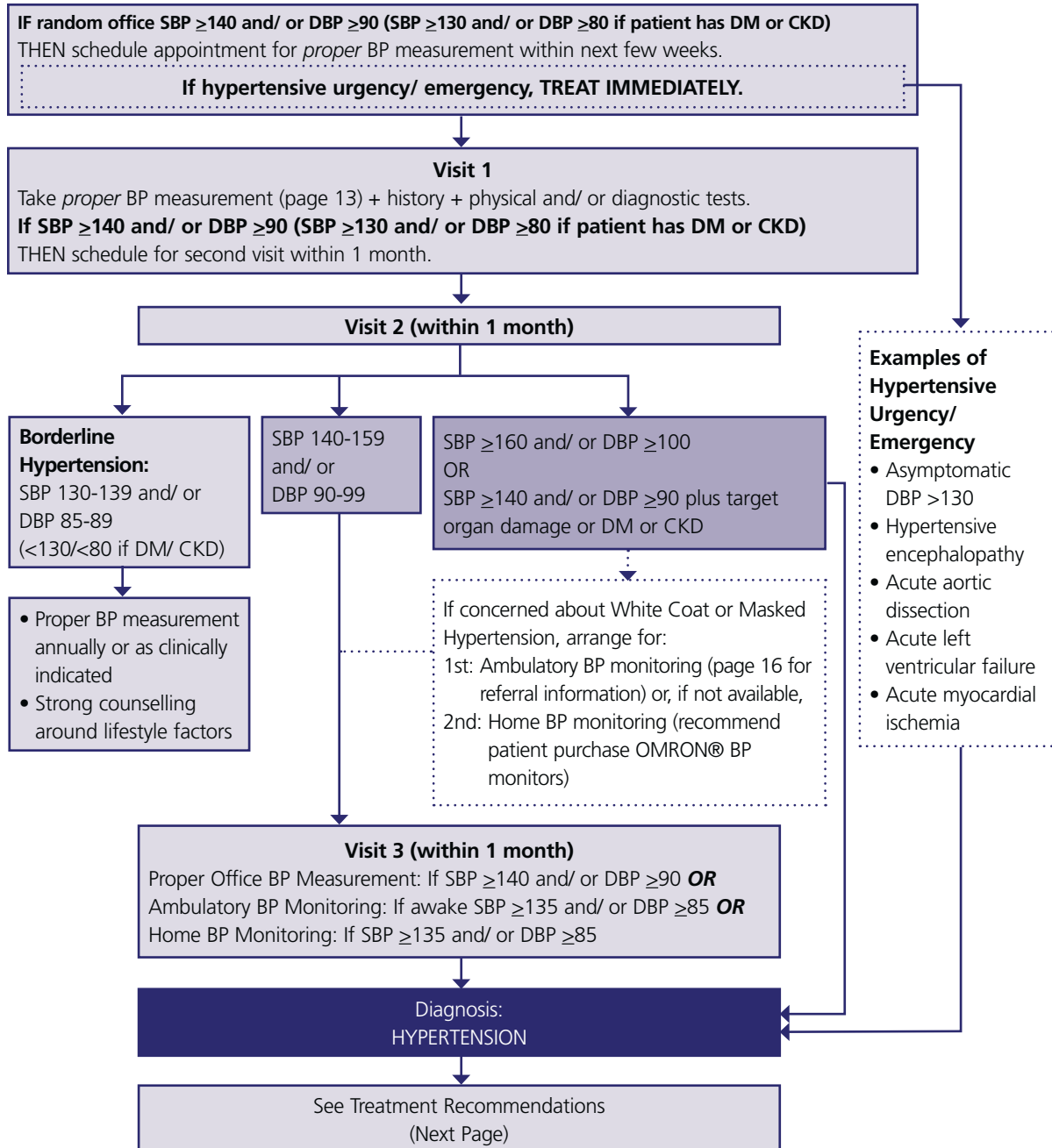




HYPERTENSION

DIAGNOSIS OF HYPERTENSION

Source: Adapted for clinical practice from the Canadian Hypertension Education Program (CHEP). Recommendations for the Management of Hypertension 2006, 2009, and 2010.^{7,15, 36}



BP = Blood Pressure CKD = Chronic Kidney Disease DBP = Diastolic Blood Pressure DM = Diabetes Mellitus SBP = Systolic Blood Pressure

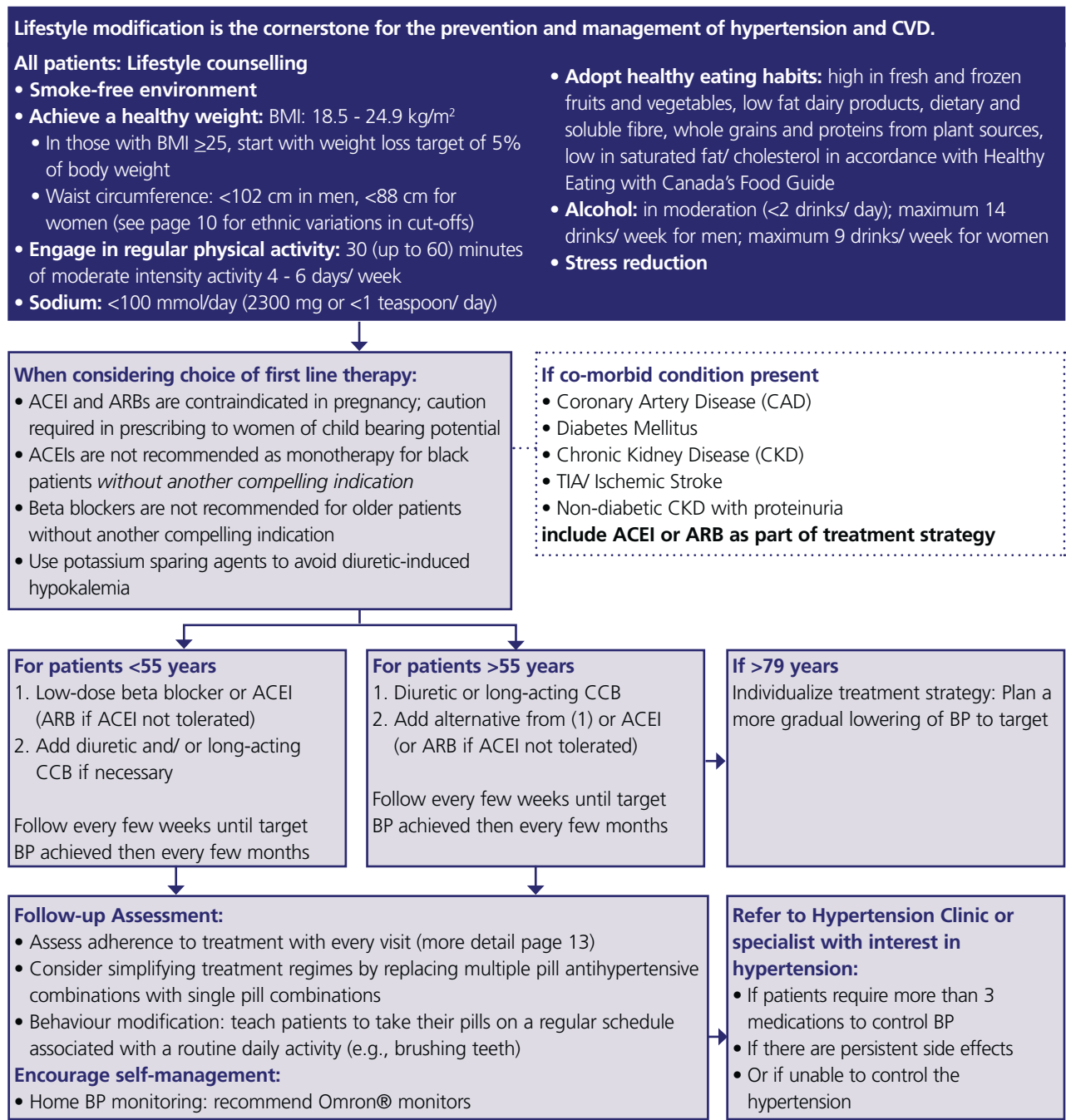


TREATMENT OF HYPERTENSION

Source: Adapted from the Canadian Hypertension Education Program (CHEP). Recommendations for the Management of Hypertension 2006 and 2009 ^{7,15}

KEY CONSIDERATIONS:

- Consider associated CVD risk factors when making treatment decision.
- Treat to target (<140/90 mmHg; <130/80 mmHg in patients with Diabetes or Chronic Kidney Disease).
- To achieve targets, sustained lifestyle modification plus medication is usually required – add second or third medications if necessary.
- Strategies to improve patient adherence to lifestyle modifications and antihypertensive therapy need to be incorporated in every patient’s management.





SUPPLEMENTAL INFORMATION

Source: Adapted from the Canadian Hypertension Education Program (CHEP). Recommendations for the Management of Hypertension 2006 and 2009^{7,15}

RECOMMENDED TECHNIQUE FOR OFFICE BLOOD PRESSURE (BP) MEASUREMENT

- Measurements should be taken with a sphygmomanometer known to be accurate.
- Automated office blood pressure measurements (e.g. BPTru) can be used in the assessment of office blood pressure.
- Automated office SBP ≥ 135 or DBP ≥ 85 should be considered analogous to mean awake ambulatory SBP ≥ 135 and DBP ≥ 85 .
- Choose a cuff with an appropriate bladder width matched to the size of the arm.

Arm Circumference	Size of Cuff
18 – 26 cm	Child Model
26 – 33 cm	Standard Adult
33 – 41 cm	Large
41 – 47 cm	Extra Large
>47 cm	Thigh Cuff

- Place the cuff so that the lower edge is 3 cm above the elbow crease and the bladder is centered over the brachial artery.
- Have the patient *rest comfortably and quietly for 5 minutes in the seated position with back supported, legs uncrossed, arm bare, and ensure patient does not talk during BP measurement.*
- When first assessing blood pressure, take the blood pressure in both arms.
 - For follow up blood pressure measurements, use the arm with the highest readings.
- Take at least 2 measurements on the same arm.
- Increase the pressure rapidly to 30 mmHg above the level at which the radial pulse is extinguished.
- Place stethoscope over the brachial artery.
- Deflate the cuff at the approximate rate of 2 mmHg per heart beat.
- Read the systolic level (the first appearance of a clear tapping sound) and the diastolic level (the point at which the sounds disappear).
- Continue to auscultate at least 10 mmHg below phase V to exclude a diastolic auscultatory gap.
- Document:
 - BP to closest 2 mmHg on the manometer
 - Arm used
 - Patient position (sitting, standing, supine)
 - Heart rate

VALIDATED QUESTION TO ASSESS HYPERTENSIVE MEDICATION ADHERENCE¹⁶

If you are currently on treatment with drugs to lower your blood pressure, tick one of the following statements which most accurately describes you:

- I take my blood pressure pills every day regularly. I never forget to take them.
- I take my blood pressure pills almost every day. Occasionally I forget.
- Sometimes I either forget or decide not to take my blood pressure pills, for short periods of time (days).
- I frequently forget or decide not to take my blood pressure pills for extended periods of time (weeks or months).



STRATEGIES TO ENHANCE ADHERENCE TO TREATMENT

Simplify treatment regimens:

- Use long-acting, once daily medications
- Use fixed-dose, combination regimes
- Use unit-of-use packaging

Refer to Appendix C for patient education strategies around medication adherence

IMPACT OF LIFESTYLE INTERVENTIONS ON BLOOD PRESSURE IN ADULTS

Lifestyle Risk Factor	Recommendations	Impact on Systolic/ Diastolic Blood Pressure (mmHg)
Physical Activity	Moderate exercise 3 or more times per week, at least 30 minutes at a time; or daily activity in 10-minute segments every day	↓10.3 / ↓7.5
Weight	A loss of 4.5 kg/10 lbs of total weight	↓7.2 / ↓5.9
Dietary Patterns	Follow the DASH diet	↓11.4 / ↓5.5
Sodium Intake	No more than 1 tsp salt per day (2300 mg of sodium)	↓5.8 / ↓2.5
Alcohol Intake	Limit your alcohol intake to 1-2 drinks a day to a weekly maximum of 14 drinks for men & 9 drinks for women	↓4.6 / ↓2.3

NOTES
