

PRIMARY HYPERTENSION IN ADULTS – HEALTHY LIFESTYLE HABITS AND PHARMACOLOGICAL SUPPORT

TARGET USERS

Physicians, healthcare professionals, and frontline health and social services providers.

PURPOSE

Review the key considerations to initiating antihypertensive treatment.

This reminder is provided for information purposes only and does not replace the clinicians' judgment in the performance of activities reserved to them by law or regulation.

TARGET POPULATION

Adults diagnosed with primary hypertension.

EXCLUSION

- [Hypertensive emergency](#)
- Chronic renal failure (eGFR less than 30 ml/min/1.73 m²)
- Pregnancy and breastfeeding

DEFINITION OF HYPERTENSION

Adult with a blood pressure (BP) greater than or equal to **130/80 mm Hg** measured using a valid automated blood pressure monitor and under ideal conditions. For more details, see [Hypertension Canada – Diagnosis](#).

The diagnosis should not be based on a single measurement and should be confirmed by home or ambulatory blood pressure monitoring (ABPM).

 Avoid caffeine, smoking, and exercise 30 minutes before BP measurement.

ANALYSES AND TESTS PERFORMED AT DIAGNOSIS (NON-EXHAUSTIVE LIST)

→ Serum sodium and potassium, serum creatinine (eGFR), urinalysis or summary, urine albumin-to-creatinine ratio (uACR), fasting plasma glucose or HbA_{1c}, lipid profile, electrocardiogram (ECG).

THERAPEUTIC APPROACH

1. FIRST-LINE TREATMENT IS THE ADOPTION AND MAINTENANCE OF HEALTHY LIFESTYLE HABITS.

→ A diet rich in fruits and vegetables and low in sodium, regular physical activity, reduced consumption of alcohol, nicotine and recreational drugs, adequate sleep (quality and quantity), stress reduction.



When assessing sleep quality and quantity, consider evaluating for sleep apnea, for example with [STOP-Bang](#)¹.

2. PHARMACOLOGICAL THERAPY MAY BE ADDED, IF INDICATED.

Blood pressure	High risk of cardiovascular disease	Adopting healthy lifestyle habits	Pharmacological treatment
≥ 140/90 mm Hg	With and without	✓	✓
Systolic 130 to 139 mm Hg	With	✓	✓
Systolic 130 to 139 mm Hg	Without	✓	✗

CONDITIONS ASSOCIATED WITH A HIGH RISK OF CARDIOVASCULAR DISEASE

- Age 75 years or older
- Established cardiovascular disease – e.g., coronary artery disease, heart failure, atrial fibrillation, cerebrovascular disease, or aneurysm
- Type 1 or type 2 diabetes
- Chronic kidney disease (eGFR less than 60 ml/min/1.73 m² or urine albumin-to-creatinine ratio of 3 mg/mmol or greater)
- 10-year Framingham risk score* of 20% or more



* Cardiovascular risk assessment may be performed, for example, using the [INESSS RCV Calculator](#), which is based on the Framingham risk score.

The prescription of antihypertensive therapy should preferably involve shared decision-making that includes:



- a discussion of the risks and benefits of various treatment options;
- establishment of treatment goals that take into account the individual's cardiovascular risk, comorbidities and frailty.



[Click here to consult all the scientific publications on this subject.](#)

PHARMACOLOGICAL TREATMENT

TREATMENT STRATEGY

- In most cases², initiate combination therapy with two classes of antihypertensive agents.
- Prefer a single-pill combination.
- Adjust treatment or add medication every 3 to 4 weeks until target is achieved.
- Avoid therapeutic inertia and aim to achieve target within 3 to 6 months.

2. Monotherapy may be preferred in certain cases (eg, high risk of symptomatic hypotension).



Systolic BP less than **130 mm Hg**

The target may be adjusted in certain situations (e.g., frailty, risk of falls) based on clinical judgment.

NOTE : There is no need to target a specific diastolic BP value if the systolic BP target has been achieved.

CHOICE OF PHARMACOLOGICAL TREATMENT³

1st STEP OF TREATMENT

- Initiating and optimizing
 - Angiotensin-converting enzyme inhibitor (ACEI) or angiotensin II receptor blocker (ARB)
 - AND
 - Thiazide or thiazide-like diuretic

2nd STEP OF TREATMENT

- Add and optimize
 - Dihydropyridine calcium channel blocker (DHP-CCB)

3rd STEP OF TREATMENT

- Add and optimize
 - Spironolactone⁴
 - AND/OR
 - Refer the person to a specialist

 β -blockers are no longer recommended for the treatment of uncomplicated hypertension. However, they may be used in individuals with specific indications (e.g., angina or heart failure).

3. Treatments generally recommended. The choice of therapy should be adjusted according to the individual's clinical situation.

4. Request aldosterone and renin tests prior to initiating spironolactone.

INFORMATION TO BE PROVIDED

Importance of healthy lifestyle habits	→ Provide or review recommendations on healthy lifestyle habits. → Explain that these measures may delay the need for medication or be used in combination.
Choice of antihypertensive agents and adverse effects	→ Briefly explain the medication classes and the rationale behind treatment selection (efficacy, comorbidities, interactions, simplicity of the regimen). → Describe common adverse effects and those requiring medical consultation.
Origin and possible causes of hypertension	→ Identify individual-specific factors (e.g., family history, menopause, stress, medical conditions, diet, use of natural health products).
Consequences of uncontrolled hypertension	→ Explain in simple and direct terms the risks associated with uncontrolled hypertension (e.g., stroke, myocardial infarction, kidney failure, heart failure). → Emphasize the chronic nature of the condition and the importance of treatment adherence.
Non-pharmacological alternatives and supplements	→ Clarify the risks associated with the use of natural health products (e.g., potential interactions, presence or absence of evidence of efficacy and safety).

ADDITIONAL RESOURCES

- Québec's National Medical Protocol No. 628002 – [Adjustment and monitoring of antihypertensive medication](#).
- Information on the management of adults with hypertension by the [Société québécoise d'hypertension artérielle](#) (in French only).

The recommendations were developed through a systematic process and are supported by scientific literature as well as by the knowledge and experience of Quebec clinicians from various specialties and fields of expertise. For more information, consult [inesss.qc.ca](https://www.inesss.qc.ca).

For more details, including references, please refer to the **report associated** with this reminder.

For any questions relating to clinical tools, write to info-outils.cliniques@inesss.qc.ca.