

HYPERTENSION CARE FLOW SHEET

This Flow Sheet is based on the Hypertension Guideline
Web site: <http://www.bcguidelines.ca>

NAME OF PATIENT	SEX <input type="checkbox"/> M <input type="checkbox"/> F	DATE OF BIRTH	AGE AT DIAGNOSIS
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CARE OBJECTIVES	SELF MANAGEMENT (Discuss with patient)												
<p>RISK FACTORS AND CO-MORBID CONDITIONS (NOTE: if patient also has DM and/or CHF, use respective flowsheet instead)</p> <p><input type="checkbox"/> Obesity</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:15%;">DATE</th> <th style="width:15%;">BMI (kg/m²)</th> <th style="width:70%;">TARGET</th> </tr> <tr> <td></td> <td></td> <td>Normal: 18.5-24.9 Overwt: 25-30 Obese: ≥30</td> </tr> <tr> <th>DATE</th> <th>WAIST CIRC.</th> <th>Male (cm) Caucasian ≤ 102 Asian ≤ 90 Female (cm) Caucasian ≤ 88 Asian ≤ 80</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p> <input type="checkbox"/> CVD _____ <input type="checkbox"/> Dyslipidemia _____ <input type="checkbox"/> Kidney _____ <input type="checkbox"/> Review BP: <input type="checkbox"/> <140/90 no co-morbid conditions <input type="checkbox"/> 130/80 DM, renal disease or end organ damage <input type="checkbox"/> Other: _____ </p> <p> <input type="checkbox"/> Smoker _____ <input type="checkbox"/> Alcohol (assess/discuss) _____ <input type="checkbox"/> Gout _____ <input type="checkbox"/> Asthma _____ <input type="checkbox"/> Allergy: (e.g. ASA) _____ </p>	DATE	BMI (kg/m ²)	TARGET			Normal: 18.5-24.9 Overwt: 25-30 Obese: ≥30	DATE	WAIST CIRC.	Male (cm) Caucasian ≤ 102 Asian ≤ 90 Female (cm) Caucasian ≤ 88 Asian ≤ 80				<p> <input type="checkbox"/> Explain the consequences of hypertension <input type="checkbox"/> Review meds & adverse effects <input type="checkbox"/> Smoking cessation: <i>Quit Now</i> Phone toll free in BC: 1 877 455-2233 <input type="checkbox"/> Refer to guideline & patient guide <input type="checkbox"/> Set goals with patient (See reverse): • Promote weight loss & exercise • Avoid excessive alcohol • Reduce salt intake & improve diet <input type="checkbox"/> Copy of Flow Sheet to patient if appropriate <input type="checkbox"/> Other: _____ </p>
DATE	BMI (kg/m ²)	TARGET											
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VISITS (3 TO 6 MONTHS)				
DATE	BP	WEIGHT Lbs Kg	NOTES (REVIEW RISK FACTORS, GOALS, & CLINICAL STATUS.)	BP MEDICATION NOTES
				BASELINE (Note allergies, side effects & contraindications) *Consider low dose ASA if age 50-70 & ≥ 20% CHD risk
				<input type="checkbox"/> NO CHANGE
				<input type="checkbox"/> NO CHANGE
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REMINDERS: 1) CONSIDER END ORGAN DAMAGE: EYES, HEART, CIRCULATION, KIDNEYS
2) SEE REVERSE FOR LIFESTYLE MANAGEMENT & TREATMENT RECOMMENDATIONS

ANNUALLY (UNLESS NOT CLINICALLY INDICATED)

LIPIDS				FRAMINGHAM 10-YR RISK
DATE	TC	LDL	TC/HDL	%
TARGETS		< 3.5 < 2.5	<5.0 <4.0	MOD < 20% HIGH ≥ 20%

KIDNEY		
DATE	ACR	eGFR
TARGETS		M: < 2.0 F: < 2.8
		> 60

VACCINATIONS (if ≥ age 65 or has other risk factors)

Annual Flu: DATE

Pneumovax: DATE

CONSIDER TESTING EVERY SECOND YEAR IF LESS THAN 10% CHD RISK

Lifestyle Management for Patients with Hypertension

Suggestions for the following lifestyle changes should be offered and reviewed at each visit:

Smoking cessation

Recommend complete cessation of smoking and exposure to second hand smoke.
BC Smokers Helpline: 1-877 455-2233 (toll-free in B.C.) 10 AM-6 PM, and www.quitnow.ca.

Physical activity

Prescribe 30-60 minutes of moderate intensity dynamic activity (such as walking 2 miles in 30 minutes once per day, or 1 mile in 15 minutes two times per day, jogging, cycling or swimming) 4-7 days per week. Recommend getting a pedometer for immediate positive feedback.

Weight reduction

All overweight patients with hypertension should be advised to lose weight. Weight loss strategies should be long-term and employ a multidisciplinary approach that includes dietary education, increased physical activity, and behavioural intervention. Target: body mass index (BMI) 18.5-24.9 kg/m², waist circumference <102 cm for men and <88 cm for women.

Dietary recommendations

Advise a diet high in fruits, vegetables, low-fat dairy products, dietary and soluble fibre, whole grains and protein sources reduced in saturated fats and cholesterol (Dietary Approaches to Stop Hypertension (DASH) diet). Reduce consumption of trans-fats and increase intake of fish that is high in omega 3 fatty acids.

Reduce salt intake

Recommend reduced dietary sodium intake of $\leq 1,500$ milligrams per day (approximately 1 tsp of table salt).

Alcohol consumption

Limit to two drinks or less per day, and consumption should not exceed 14 standard drinks per week for men and 9 standard drinks per week for women.

Potassium, calcium and magnesium intake

Supplementation of potassium, calcium and magnesium is not recommended for the prevention or treatment of hypertension.

Pharmacologic Treatment without Co-morbid Conditions

The benefits of pharmacologic treatment in people with mild hypertension (average BP between 140/90 and 160/100), and a 10-year coronary heart disease risk of less than 20%, are unclear. Use clinical judgment when recommending therapy for this patient group.

Pharmacologic treatment, in addition to lifestyle modification is recommended for patients with an average BP $\geq 160/100$, even in the absence of other major cardiovascular risk factors.

Consider monotherapy with a low-dose thiazide diuretic as first-line treatment.

If BP is not controlled, use combination therapy by adding 1 or more of:

- ACEI or ARB if ACEI intolerant
- Long-acting dihydropyridine calcium channel blockers (CCB (DHP))

Note:

- Long-acting CCB (DHP) are preferred 2nd line treatment for patients at risk for, or with a history of, stroke
- Beta blockers may no longer be a first line treatment option, with some exceptions (guideline under revision)
- Alpha blockers are not a 1st line treatment option

Consider addition of low-dose ASA therapy if Framingham risk score is $\geq 20\%$ and patient is between 50 to 70 years-of-age. Avoid using ASA in patients with a history of hemorrhagic stroke. Exercise extreme caution if blood pressure is not controlled.

See hypertension guideline for pharmacologic management if co-morbid conditions exist.