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***Finding answers. For life.
À la conquête de solutions.***

How to Plan a Successful Blood Pressure Clinic

- Decide on the time and place of the blood pressure clinic.
- Review possible available material and order in advance. Ideally give yourself 4 weeks.
- Communicate to your target group. Such methods as a newsletter, staff e-mail or paycheck inserts can be useful. Include information regarding the **time** and **place** of the BP clinic. Use the poster provided to advertise your event, ideally 2 weeks in advance.
- Inform your target population of the importance of having one's blood pressure checked and the fact that it doesn't hurt a bit !!!!

High blood pressure (hypertension) is one of the leading causes of death in Canada. High blood pressure can cause strokes, heart attacks, and heart and kidney failure and is related to dementia and sexual problems. These problems can be prevented if high blood pressure is well treated and controlled. (Canadian Hypertension Society, 2006)

- Consider the area in which you will be hosting the blood pressure clinic. A quiet room that is large enough to have a private conversation is ideal.
- If you are aware that a large volume of employees will be attending encourage them to come within a certain time period. Reinforce that they are welcome to come at another time if this does not suit their schedule. You may want to consider using a sign up sheet.
- Set up the area so that the blood pressure can be taken correctly to ensure the most accurate reading. Ideally place a few separate chairs away from the table so that people can sit and relax while they wait to have their blood pressure taken. This allows for some privacy for the individual that is currently having their BP taken. This is a perfect time for individuals to peruse your reading materials.



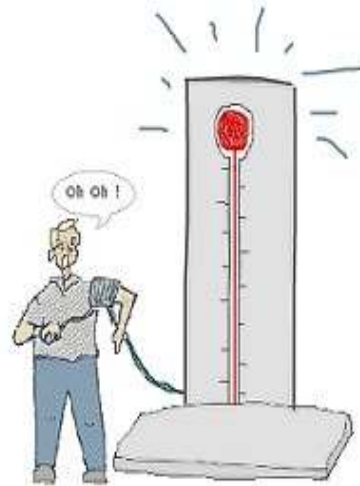
Helpful Blood Pressure Monitoring Hints

- Ask the individual to sit comfortably and relax. Encourage them to sit and relax for 2-5 minutes prior to having their blood pressure taken.
- Blood pressure readings should not be taken immediately following smoking a cigarette or drinking a beverage with caffeine. Avoid taking blood pressure if an individual has a full bladder or has just completed a physical activity.
- An individual should sit beside a table and have their arm resting comfortably on the table, ideally at the level of the heart. Have the individual sit with both feet firmly planted on the floor and their back supported by a chair.
- Never take a blood pressure in an arm with a dialysis catheter or other fistula/shunt, or on the same side as a mastectomy.
- When using a digital machine, note the product instruction sheet for the best placement on the arm to increase the accuracy of the reading.
- To ensure accuracy, blood pressure should be taken on a bare arm.
- An inaccurate reading will result if the incorrect cuff size is used. Most blood pressure machines come with a medium cuff that suits a regular sized adult. It is recommended that you have both small and large sized cuffs; a regular cuff used on an obese individual will give you an inaccurate reading.
- Take the blood pressure three times. Wait at least one minute before repeating a measurement. The average of the second and third reading is the average blood pressure.
- Refer individuals to their family physicians or a local health clinic if you feel their blood pressure needs to be further monitored or addressed. See our blood pressure recommendations on the following page.



Canadian Recommendations for the Management of Blood Pressure

Below you will find the recommended ranges you can use during your clinic. These are for adults ages 18 and older who are not on medication for high blood pressure and do not have a serious illness. If systolic and diastolic pressures fall into different categories, the overall status is the higher category.



Target Values for Individuals	Systolic BP (mm Hg)	Diastolic BP (mmHg)
Optimal Blood Pressure	≤ 120	≤ 80
With Diabetes	< 130	< 80
With Chronic Kidney Disease	< 130	< 80

Individuals whose blood pressure is in the range of 130- 139mmHg systolic and/or 85- 89mmHg diastolic should be aware that their blood pressure is considered **high normal** and could be a potential problem. They should consider making lifestyle modifications regarding healthy eating habits, salt reduction, alcohol consumption, physical activity, smoking and current weight. It should be recommended that they follow up with their physician or community health center.

Self-monitoring Tools

- Individuals can identify the need to further monitor their blood pressure and begin lifestyle changes by measuring their blood pressure at home.
- Requirements include measuring and recording their blood pressure twice a day, in the morning and evening, for one week. The individual should disregard the measurements from the first day, as this is considered part of the self-learning process.
- Measuring blood pressure at home requires accurate equipment and proper measuring techniques.
- Individuals should insure that they have the right cuff size for their Home Blood Pressure Monitors. Measure the circumference (midpoint between shoulder and elbow) of their bare upper arm to determine the correct size. These measurements need to match those that are provided on the monitor's package or in the instruction manual.
- If blood pressure is higher than 135/85 mmHg when measured at home, following the above method, an individual needs further monitoring. Anyone in this situation or with further questions should contact his or her family physician.
- Encourage individuals who express interest in buying a home blood pressure instrument to purchase instruments that have been approved by the Canadian Hypertension Society (CHS), the Association for the Advancement in Medical Instrumentation (AAMI), the British Hypertension Society (BHS) or the International Protocol (IP). These labels are clearly marked on the box.
- Individuals should compare their home results with their physician's results to ensure that their instrument measures their blood pressure accurately. It is helpful if they bring their Home Blood Pressure Monitor to an appointment at least once per year.

***For extensive details on Home Blood Pressure Monitoring see the following link:
<http://www.hypertension.ca/chep/public/publicEducationva.asp>***

Lifestyle Recommendations

Cardiovascular disease is the leading cause of death for New Brunswick women and men. The information you convey to an individual during a blood pressure clinic may be enough to make that individual take action and make a lifestyle change.

Pamphlets are available which address the various lifestyle challenges that these individuals encounter. Please review our *Materials Order Form*, listing the pertinent pamphlets available.

As a healthcare provider you face the constant challenge of locating current cardiovascular educational material for yourself and the individuals you encounter. Please refer to our website, www.heartandstroke.ca, which displays a host of information on current cardiovascular health, practice guidelines and research.

Smoke-free Environment

Smoking and/or exposure to second-hand smoke increases an individual's risk of developing heart disease and stroke. Smoking contributes to plaque build-up in the arteries, increases the risk of blood clots, reduces blood oxygen levels, and increases blood pressure, therefore causing a person's heart to work harder. Smoking nearly doubles the risk of ischemic stroke.

Refer individuals who have expressed an interest in smoking cessation to the **Smoker's Helpline 1-877-513-5333**. A fax-referral form can be completed giving permission for the Smoker's Helpline to contact the individual. The protocol and the form are included in this kit.

Regular Physical Activity

People who are physically inactive have twice the risk for heart disease and stroke.

Individuals should exercise at a moderate to vigorous intensity for 150 minutes per week, in bouts of 10 minutes or more.

<p>Promote walking as a heart-healthy activity. Walking is one of the easiest and most beneficial forms of exercise. All you need is a good pair of shoes, comfortable clothing, and desire.</p>
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Encourage Stress Management

The relationship between stress and cardiovascular disease isn't completely clear, but some people with high levels of stress or prolonged stress may have higher blood cholesterol, increased blood pressure or be more prone to developing atherosclerosis.

Refer to our 'Coping with Stress' booklet for recommended daily tips for dealing with stress.

Promote Healthy Eating

Almost 60% of Canadian adults are either overweight or obese – which is a growing concern since this is a major risk factor for cardiovascular disease.

Discuss the following topics when encouraging individuals to achieve and maintain a health weight. The pamphlet, *Healthy Weight and Active Living*, displays a BMI chart and discusses pertinent weight issues.

Attain/maintain a healthy BMI (18.5 – 24.9 kg/m²).

Attain/ Maintain a waist circumference (< 102cm for men and < 88cm for women or < 40in for men and < 35in for women)

Limit alcohol consumption: Less than or equal to 2 drinks per day, to a weekly maximum of nine for women and 14 for men is recommended. It is recommended that individuals avoid drinking excessively on one evening.

Follow Canada's Food Guide: A diet high in fresh fruits and vegetables, low fat dairy products, dietary and soluble fibre, whole grains, protein from plant sources and low in saturated fat, cholesterol and salt.

Monitor fat intake: It is recommended that women consume 45-60 grams of fat a day and men 60-90 grams of fat a day. All foods high in fat can raise blood cholesterol, increasing the risk of heart disease. Individuals should be encouraged to limit fat intake and consider the quality of fat as well as the quantity. Healthy fats, such as monosaturated and polyunsaturated fats should be chosen most often while saturated and trans fats should be limited. The *Dietary Fat and Cholesterol* pamphlet further discusses the important differences regarding these fats.

Monitor sodium intake: Excess dietary sodium is a significant cause of hypertension. Individuals need to be educated to select foods low in sodium, aiming to decrease sodium intake to less than 2300mg/ day. For individuals who are hypertensive the DASH Eating Plan is recommended.

The Canadian Hypertension Society has adopted the DASH Eating Plan as a lifestyle recommendation for the prevention and treatment of hypertension.

The DASH Eating Plan is very similar to Canada's Food Guide but recommends a sodium restriction of 1500mg/day.

If an individual has high blood pressure, reducing sodium in their daily diet to 1500mg of sodium can reduce their systolic blood pressure by approximately 5.8 mmHg and diastolic pressure by 2.5 mmHg.

Please have individuals contact their family physician or a dietician to learn more about the DASH diet.

High Sodium Foods	
	Milligrams
Chicken Dinner (fast food)	2243
Table Salt, 1 tsp (5 ml)	2300
Tomato Sauce, 1 cup	1498
Garlic Salt, 1 tsp (5 ml)	1300
Ham, 3 oz	1114
Dill Pickle, 1 medium	833
Hot Dog, no bun	700
Tomato Juice, ½ cup (125ml)	441

(National Heart Lung and Blood Institute, 2006; Canadian Hypertension Education Program, 2006; Heart & Stoke Foundation of Canada, 2006; Health Canada, 2007)

References

Canadian Cardiovascular Society

www.ccs.ca

Telephone: (613) 569-3407 Toll Free: (877) 569-3407

The CCS is the national voice for cardiovascular physicians and scientists. The CCS mission is to promote cardiovascular health and care through professional development, and leadership in health policy and knowledge translation, including dissemination of research and encouragement of best practices.

Health Canada

www.hc-sc.gc.ca

Health Canada is the Federal department responsible for helping Canadians maintain and improve their health, while respecting individual choices and circumstances.

Health Check

www.healthcheck.org

Telephone: (613) 569-4361 ext. 324

The Health Check program has been designed by the Heart and Stroke Foundation of Canada to help individual's grocery shop for wise food choices. To learn more about the Health Check program, visit the site.

Heart and Stroke Foundation of New Brunswick

www.heartandstroke.ca

Telephone: 1-800-663-3600

The Heart and Stroke Foundation provides information on heart disease and stroke in general, based on the best science available today.

The Canadian Hypertension Society

info@hypertension.ca

The mission of The Canadian Hypertension Society is to promote the prevention and control of hypertension through research and education.

New Brunswick Anti-Tobacco Coalition

<http://www.nbatc.ca>

Telephone: (506) 372-1199

The New Brunswick Anti-Tobacco Coalition (NBATC) strives to work collaboratively with stakeholders to change attitudes, behaviors and environments towards tobacco products and their use in order to build support for anti-tobacco initiatives.