

What is Hypertension?

Hypertension is the medical term for high blood pressure. Blood pressure refers to the force of blood against the blood vessel walls. Normally a person's blood pressure rises and falls during the day. However, when blood pressure constantly stays higher than normal (140/90 mm Hg or higher), a person is considered to have hypertension.

What Causes Hypertension?

For about 90-95% of people with mildly elevated blood pressure, sedentary lifestyle, smoking, excess abdominal weight, a fatty diet, alcohol consumption and stress contribute to the condition. For the other 5-10% of people, there may be a serious underlying cause of high blood pressure that requires urgent medical attention.

Risk factors for developing hypertension that you cannot change are:

- family history of hypertension or cardiovascular disease
- age of 45 or older (men) or 55 or older for women.

Risk factors for developing hypertension that you can control include lifestyle choices such as:

- smoking
- excessive alcohol consumption
- physical inactivity
- excess weight and high fat diet

How do I know if I have high blood pressure?

Unfortunately, a person with high blood pressure usually sees or feels no clearly identifiable symptoms of hypertension. That is why you should have your blood pressure measured by your physician, using a blood pressure measuring device. Hypertension is confirmed if blood pressure falls in the following 3 stages of severity.

Severity of Hypertension	Systolic Pressure	Diastolic Pressure
Stage 1	140 to 159 mm Hg	90 to 99 mm Hg
Stage 2	160 to 179 mm Hg	100 to 109 mm Hg
Stage 3	180 mm Hg or higher	110 mm Hg or higher

What are the Complications of Hypertension?

Hypertension can lead to a number of potentially life-threatening conditions if it is not controlled or treated. The higher your blood pressure, the greater your risk of developing the following problems:

- **Heart Disease:** Hypertension is a major risk factor for heart attack, and the number one risk factor for congestive heart failure (CHF).
- **Stroke:** Hypertension is the leading risk factor for stroke. Very high blood pressure can make a weakened blood vessel rupture and bleed into the brain causing a stroke. A blood clot blocking a narrowed artery can also cause a stroke.
- **Chronic Kidney Disease (CKD):** Hypertension is the second leading cause of chronic kidney disease (diabetes is its leading cause). Hypertension not only causes kidney disease, but it also speeds the deterioration of kidney function to the point where life-saving measures such as dialysis or kidney transplant are needed.
- **Retinopathy (eye damage):** Hypertension can cause small blood vessels to burst or bleed. This can lead to impairments such as blurred vision, or even blindness.

How Can I Control my Blood Pressure?

You can reduce your blood pressure and control hypertension. The following lifestyle choices can help you prevent and control hypertension:

✓ *Maintain a healthy body weight*

Excess abdominal fat can lead to hypertension. It is also a major cause of diabetes. Waist circumference should be less than 102 cm for men and less than 88 cm for women. Body-mass index can also be used to assess risk, but this measure is not as good as waist circumference for assessing the risk of developing complications of hypertension. Body-mass index (BMI) can be determined by dividing your weight in kilograms by the square of your height in metres. For example, $61 \text{ kg} / 1.5\text{m} \times 1.5 \text{ m} = 27$. The best way to control weight is through diet and exercise.

✓ *Exercise regularly*

Exercise is one of the best things you can do for your health. Exercise at least 20 minutes per day. Build physical activity into your daily routine by walking wherever and whenever you can, stretching and moving around frequently, taking the stairs instead of the elevator, and participating in activities that you enjoy. Canada's Physical Activity Web Site contains advice on how to increase your physical activity and reduce your weight.

✓ *Eat a well balanced diet*

Eat a healthy diet low in saturated fat, cholesterol and salt. Eating well doesn't have to mean giving up the foods you love. It simply means choosing wisely from a variety of foods and choosing lower fat and less salty foods more often. Call Dial-a-Dietitian at their toll free line 1-800-667-3438 or visit their web site at: <http://www.dialadietitian.org/index.html>.

✓ *Reduce salt intake*

The average daily salt intake in North America is about 8.7 grams per day. Salt intake should be 4 grams per day or less. Reducing salt intake can prevent hypertension and lower elevated blood pressure. Dial-a-dietitian has a toll free line 1-800-667-3438 and a web site with information on managing your diet and reducing salt intake to control hypertension. <http://www.dialadietitian.org/rdownloads/resources/handouts/low-na-3.pdf>

✓ *Stop smoking*

Smoking is a key risk factor for hypertension, heart attack and stroke. Call quitnow by phone: 1 877 455-2233 (toll-free in B.C.) Available 7 days a week, 24 hours a day.

✓ *Limit alcohol consumption*

Talk to your doctor about your alcohol intake. Moderate alcohol consumption for most adults is no more than 1 drink a day and no more than 7 drinks a week. More than 4 drinks on any one occasion or more than 14 drinks in a week are considered a risk to your health and safety (taken from Health Canada).

✓ *Medications*

Medications can be very effective in keeping your hypertension under control. Discuss the benefits and risks of taking medication for your hypertension with your doctor .

British Columbia Internet Resources:

The BC Ministry of Health Chronic Disease Management web site has more detailed information about the management of diseases such as hypertension and diabetes:
<http://www.hlth.gov.bc.ca/cdm/patients/index.html>

The BC HealthGuide Online provides detailed information on managing hypertension:
<http://bchealthguide.org/kbaltindex.asp>

The Heart and Stroke Foundation of Canada offers excellent materials for the control of lifestyle factors that contribute to hypertension, heart disease, stroke and kidney disease. This includes a body mass index calculator, a risk factor calculator and specific dietary information: <http://www.heartandstroke.ca/>
BC/Yukon division office call Toll free 1-888 473-4636.