High Blood Pressure and Your Kidneys

What Is Blood Pressure?
When your heart beats, it pushes blood through your arteries to the rest of your body. Blood pressure is a measurement of the force of the blood on the walls of your blood vessels. It’s described with two numbers:

- **systolic** blood pressure (the top of the pressure wave after your heart beats)
- **diastolic** blood pressure (the bottom of the pressure wave in between heartbeats)

For example, a blood pressure of 130/85 mm Hg means that the systolic pressure is 130 and the diastolic pressure is 85. Both numbers are important.

What Is High Blood Pressure?
High blood pressure is also called *hypertension*. The diagnosis is usually based on multiple readings taken by your doctor over a period of weeks or months. For people that are otherwise healthy, a good resting blood pressure is a reading of 120-139/80-89 mm Hg.

*Model(s) are a depiction of people with kidney disease.*
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Resting blood pressure is a measurement taken after five minutes of rest while seated in a quiet place. Readings that are higher than the target is called hypertension.

In people with diabetes or chronic kidney disease, resting blood pressure should be even lower, less than 130/80 mm Hg. However, blood pressure goals vary for each person. Discuss your blood pressure goal with your doctor.

What Causes High Blood Pressure?
In Canada, one in five adults has high blood pressure. Estimates suggest that more than 90% of Canadians will develop hypertension if they live an average lifespan.

A major risk factor for developing hypertension is having parents with hypertension. An unhealthy lifestyle is also an important risk factor. Key lifestyle factors include:

- A diet too low in fresh fruits and vegetables, fibre and low-fat dairy products
- A diet with too much sodium (salt) and saturated fat
- Lack of physical activity
- Being overweight
- Too much alcohol (more than two standard drinks per day for women, or three standard drinks for men)
- Excessive stress

Hypertension is much more common as people get older. Also, if you are of African descent, you have a greater chance of developing high blood pressure. Smoking cigarettes and second-hand smoke increase the damage that hypertension causes.

How Do You Know If You Have High Blood Pressure?
High blood pressure is a silent disease. It doesn’t show signs or symptoms until it’s been causing damage to your organs for many years.

To find out if your blood pressure is high, have it checked by a healthcare provider or at places such as pharmacies. Because blood pressure readings can vary, a single high reading doesn’t always mean that you have hypertension. If you’ve had a high reading, make sure that you have it rechecked by a healthcare provider. You should know what your blood pressure is and have it checked regularly.

Why Is It Important to Control High Blood Pressure?
Blood pressure that isn’t well controlled increases the risk of serious health problems such as heart attack, stroke, heart failure, kidney disease and kidney failure, as well as damage to your blood vessels.

If you have kidney disease and diabetes as well as high blood pressure, you need to be especially careful about maintaining good blood pressure control. Controlling blood pressure is one of the most important things you can do to help slow the progression of kidney disease.

How Are High Blood Pressure and Kidney Disease Related?
High blood pressure is the second leading cause of kidney failure in Canada. At the same time, kidney disease can cause high blood pressure.

The kidney damage caused by high blood pressure can lead to salt retention, which increases blood pressure further. Treating high blood pressure is the most important way to delay or prevent the progression of kidney disease.
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What Can You Do About High Blood Pressure?

Know what your blood pressure numbers are, and what your blood pressure goal should be. Both your systolic and diastolic blood pressure should be at your target level.

A healthy lifestyle is key to blood pressure control. Here are some lifestyle changes that will help you control your blood pressure:

- Eat a diet low in sodium (salt)
- Choose fresh and unprocessed foods more often
- Eat fruit and vegetables every day
- Be physically active on a regular basis
- Maintain a healthy body weight
- Limit your alcohol intake (Canada’s Low-Risk Alcohol Drinking Guidelines recommends no more than 2 drinks a day, 10 per week for women, and no more than 3 drinks a day, 15 per week for men, and not drinking on some days each week)
- Don’t smoke
- Reduce stress through relaxation techniques
**Diabetes and Kidney Disease**

**High Blood Pressure and Your Kidneys**

**OUR VISION**
The Kidney Foundation of Canada is committed to achieving excellent kidney health, optimal quality of life, and a cure for kidney disease.

**OUR MISSION**
The Kidney Foundation of Canada is the national volunteer organization committed to eliminating the burden of kidney disease through:

- Funding and stimulating innovative research for better treatments and a cure;
- Providing education and support to prevent kidney disease in those at risk and empower those with kidney disease to optimize their health status;
- Advocating for improved access to high quality healthcare;
- Increasing public awareness and commitment to advancing kidney health and organ donation.

For further information, or to help us in our efforts, please contact The Kidney Foundation office in your area. You can also visit our website at kidney.ca.

The Kidney Foundation would like to acknowledge and thank the members of the Kidney Foundation’s National Programs & Public Policy committee for their contributions and professional expertise in the development of this resource.

**This material is available in accessible formats upon request by contacting info@kidney.ca or calling 1-800-361-7494.**

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**Will I Need to Take Medication?**

If your blood pressure stays above the goal established by your doctor, you’ll probably need to take medication. Most people with kidney disease do. There are many types of blood pressure medication and, since everyone’s needs are different, your doctor will decide which one is best for you.

Controlling high blood pressure is a team effort and you’re the most important person on the team. Be sure to see your doctor regularly and take your medications as prescribed.

*Never stop taking your blood pressure medication without talking to your doctor.* Proper control of high blood pressure can reduce the risk of future health problems. A healthy lifestyle and the right medications can help.