High blood pressure and your kidneys

The foundation of kidney care.
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What is blood pressure?

Blood pressure measures the force of blood pumped by your heart on the walls of your arteries (blood vessels). It is described with two numbers.

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

For example, with a blood pressure of 130/85 mm Hg, 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 several readings taken by your doctor over a few weeks or months. Hypertension is defined as resting blood pressure readings that are 140/90 mm Hg or more. Resting blood pressures are measurements taken after five minutes of rest while seated in a quiet place.
In people with diabetes or chronic kidney disease, resting blood pressure should be 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 who have high blood pressure. An unhealthy lifestyle also contributes significantly to high blood pressure. These factors include:

- A diet too low in fresh fruits and vegetables, fiber 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)
- 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. Cigarette smoking, or just being around tobacco smoke, increases the damage that hypertension causes.

How do you know if you have high blood pressure?

High blood pressure is a silent disease. It does not show signs or symptoms until it has caused damage to your organs after many years.

To find out if your blood pressure is high, you must have it checked by a healthcare provider. Because blood pressure readings can vary quite a lot, a single high reading does not always mean that you have high blood pressure. If you have had a high reading, make sure that you have it rechecked. You should have your blood pressure checked regularly, and know what your blood pressure numbers are.
Why is it important to control high blood pressure?

Blood pressure that isn’t well controlled increases the risk of having serious problems such as heart attack, stroke, heart failure, kidney disease and kidney failure, as well as damage to the blood vessels.

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

How are high blood pressure and kidney disease related?

Kidney disease can lead to high blood pressure in many people. The opposite is also true: having high blood pressure increases the risk of developing kidney disease.

High blood pressure damages the kidneys. This leads to salt retention, which in turn increases blood pressure further. Treating high blood pressure is the most important method of delaying or preventing the progression of kidney disease, and thus reducing the need for dialysis or transplantation.
What can you do about high blood pressure?

Know what your blood pressure numbers are, and what your blood pressure goal should be. This means that both your systolic and diastolic blood pressure must be at the target level.

A healthy lifestyle is the cornerstone of blood pressure control. In most people with kidney disease, medications will be needed to achieve blood pressure goals. Often more than one medication is needed.

Here are some lifestyle changes to help you control your blood pressure:

- Eat a diet low in saturated fat and sodium (salt); you may wish to seek advice from a renal (kidney) dietitian concerning your overall diet.
- Be physically active on a regular basis.
- Maintain a healthy body weight.
- Watch or moderate alcohol intake (no more than two standard drinks per day).
- Don’t smoke.
- Reduce stress through relaxation techniques.
Will I need to take medication?

If your blood pressure stays above the target or goal, you will probably need to take medication, and this is often for life. 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 takes a team effort and you are the most important person on the team. Be sure to see your doctor regularly. *Do not stop taking your blood pressure medication without talking to your doctor.* Proper control of high blood pressure can reduce the chance of future health problems. A healthy lifestyle and the right medications can help you reach your goal of good blood pressure control.
The Kidney Foundation

OUR MISSION

The Kidney Foundation of Canada is the national volunteer organization committed to reducing the burden of kidney disease through:

- funding and stimulating innovative research;
- providing education and support;
- promoting access to high quality healthcare; and
- increasing public awareness and commitment to advancing kidney health and organ donation.

Since 1964, our fundraising campaigns have allowed us to contribute millions of dollars to research, and to provide services to individuals living with chronic kidney disease and related conditions.

For further information, or if you wish to help us in our efforts, please contact The Kidney Foundation of Canada office in your area. You can also visit our Web site at www.kidney.ca.

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