

# High Blood Pressure And Chronic Kidney Disease

## High Blood Pressure

Blood pressure is the pressure of the blood against the walls of your blood vessels. High blood pressure (also called “hypertension”) is the second leading cause of kidney disease. Hypertension forces the heart to work harder and damages blood vessels in the kidneys and throughout the body.

## What Do The Numbers In A Blood Pressure Reading Mean?

Blood pressure is measured in two numbers. The first number measures the pressure of the artery walls as the heart contracts. This is called systolic pressure. The second number measures the pressure of the artery walls when the heart relaxes between beats. This is called diastolic pressure. Normal blood pressure is usually no higher than 120/80 mm Hg, but check with your healthcare provider to determine what blood pressure is best for you.

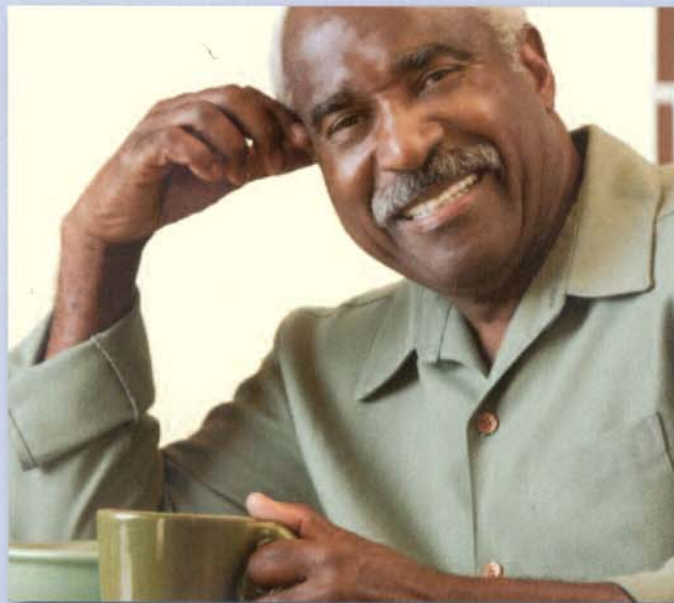
## How Does High Blood Pressure Lead To Kidney Damage?

Your kidneys act as a filtering system to get rid of excess water and wastes in the blood. High blood pressure forces the heart to work harder and damages blood vessels and nephrons (filtering units) in the kidneys. The damaged nephrons can't do their job of filtering out all of the wastes and excess fluids from your blood. The wastes and excess fluids that remain in your bloodstream put extra pressure on the walls of your blood vessels. This raises your blood pressure even more. The extra pressure, in turn, leads to further kidney damage, or may cause heart problems, like left ventricular hypertrophy (LVH).

## What Are The Functions Of The Kidneys?

In addition to filtering waste in your body, kidneys perform a variety of other important functions to help keep the body healthy. Some other important functions that the kidneys perform include:

- Help control blood pressure
- Help make red blood cells
- Produce the active form of vitamin D that promotes healthy bones





## Some Risk Factors For High Blood Pressure

- Ethnicity (Hispanic/Latino, African American, Native American, Pacific Islander)
- Heredity
- Age
- Obesity
- Salt sensitivity
- Drinking too much alcohol
- Lack of exercise
- Stress
- Tobacco use

Source: American Heart Association, 2009

## How Can You Manage Your Blood Pressure?

- **Bring your blood pressure under control.** It is very important that you monitor your blood pressure. Normal blood pressure is usually under 120/80mm Hg, but check with your doctor to determine what blood pressure is best for you.
- **Take your blood pressure medications as prescribed.** Some types of blood pressure medicines may work to help protect your kidneys. Your doctor will determine which blood pressure medicine is right for you.
- **Eat the right foods for your condition.** Follow your doctor's instructions about your diet, because it's important that you eat enough of the right foods to meet your nutritional needs.
- **Talk to your doctor before taking medication.** Some medicines may harm your kidneys. Before you take any medicine or food supplement, speak with your doctor.
- **Exercise regularly, if you can.** Even moderate exercise, like walking, can help. Talk to your doctor before you start any new exercise routine.

Source: American Heart Association, 2009

This guide does not replace advice from your doctor. Talk to your doctor about your symptoms and any health or treatment questions that you may have.

Brought to you by



© Centocor Ortho Biotech Inc. 2010 3/10 08PNDA09049D

**The Kidney and Hypertension Center**  
2123 Auburn Ave, Suite 404  
Cincinnati, OH 45219  
P: 513/241-5630