

# Managing High Blood Pressure

Managing high blood pressure also protects kidney health. Get started with these tips:



**Take** medication exactly as directed by the doctor. To help remember, try a labeled pillbox and/or a cellphone alarm.



**Eat** a balanced diet. Read labels, check the serving size and ask a nutritionist for help with healthy choices.



**Learn** to take blood pressure measurements at home. Keep a record of the measurements to show the doctor at the next office visit.



**Include** regular exercise in a daily routine. Yes, chores and walking count too!



**Avoid** alcohol and smoking. Talk to the doctor about making a plan to reduce use.

# Kidney Education

High Blood  
Pressure  
& CKD



UNC  
KIDNEY CENTER

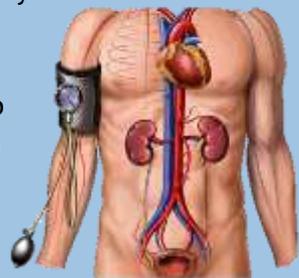
**HEY DOC, HOW ARE MY KIDNEYS?™**  
Kidney Education Outreach Program



# CKD and High Blood Pressure

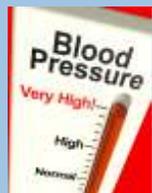
The kidneys help control blood pressure, remove extra fluid and waste, make red blood cells, and help maintain healthy bones.

When the kidneys are damaged or not able to work as well for at least three months, then a person is considered to have Chronic Kidney Disease (CKD).



## What Is Blood Pressure?

Blood pressure is the force of blood on the walls of blood vessels as the heart pumps blood through the body.



## What is High Blood Pressure?

High blood pressure is an increased strain on the blood vessels. High blood pressure often has no symptoms.

## High Blood Pressure can be both

- **Cause CKD.** When the blood vessels are strained by high pressure, less blood goes to the kidneys and other organs. High pressure can also damage the delicate filters (*nephrons*) in the kidney. If the kidneys' filters are damaged, then its ability to work may be reduced.
- **Result from CKD.** Kidneys are important in maintaining healthy blood pressure levels. When kidneys are damaged they are not as able to filter out waste and extra fluid from the blood. The extra fluid in the blood can build up and raise blood pressure levels.

# Measuring Blood Pressure

High blood pressure often has no symptoms. The only way to know if a person has high blood pressure is to measure it.

Blood pressure is measured as two numbers and is written as:

$$\frac{120}{80} = \frac{\text{Pressure when the heart beats (systolic)}}{\text{Pressure when the heart rests (diastolic)}}$$

Measurements are read as “120 over 80.” Generally the numbers mean:

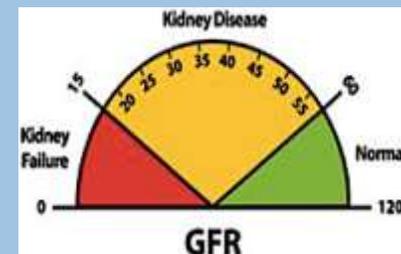


- A score of less than 120/80 is healthy.
- A score of 120-139/80-89 indicates a higher risk of developing high blood pressure.
- A score of 140/90 is high for most adults.
- For a person with CKD or diabetes, a score of 130/80 is considered high.

## How Well Are Kidneys Working?

### Glomerular Filtration Rate (GFR)

GFR is the best number to know how well a person's kidneys are working. It is the percentage of kidney function. For example, a GFR of 30 suggests that the kidneys are working at 30 percent.



**GFR score of 60 or higher is a normal score**

**GFR score below 60 may mean kidney disease**

**GFR score of 15 or lower may mean kidney failure**

**GFR cannot usually be raised, but it is important to take steps to try and keep it from getting lower.**