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Combined Federal Campaign #0508

American
Kidney Fund

reaching out
giving hope
improving lives

Facts About Kidney Disease



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Facts About Kidney Disease

Nearly 80,000 Americans die with kidney failure each year. It is important to know your risks and take action. This guide will help.

You will learn about:

- Kidneys and what they do
- Common kidney diseases
- Risks for kidney disease
- Symptoms of kidney disease
- Tests for kidney disease
- Treatments for kidney failure
- Prevention of kidney disease



The Kidneys

In most people:

- There are two kidneys.
- The kidneys are located on either side of the spine, just below the rib cage.
- The kidneys are about the size of a fist.
- The kidneys are shaped like “kidney beans.”

Your kidneys are connected to your bladder by tubes called ureters.

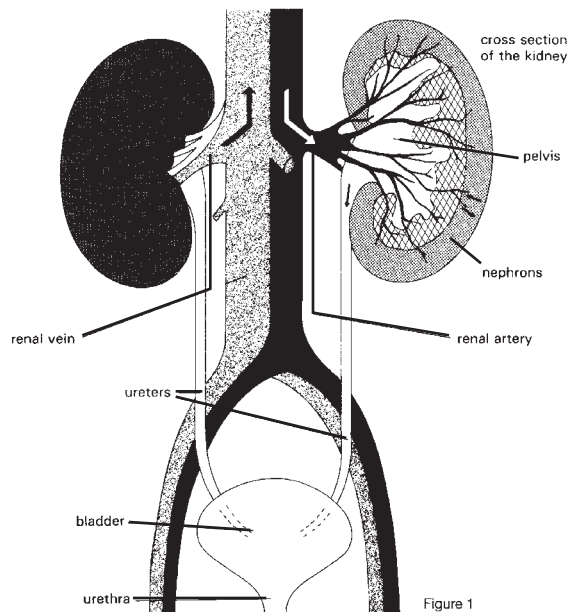


Figure 1

Your Urinary System

What Your Kidneys Do

Think of your kidneys like a pasta strainer or filter. Your kidneys keep some things in your body that you need, and get rid of other things that you don't. The kidneys also do many other jobs that you need to live.

Your Kidneys:

- Make urine.
- Remove wastes and extra fluid from your blood.
- Control your body's chemical balance.
- Help control your blood pressure.
- Help you keep healthy bones.
- Help you make red blood cells.

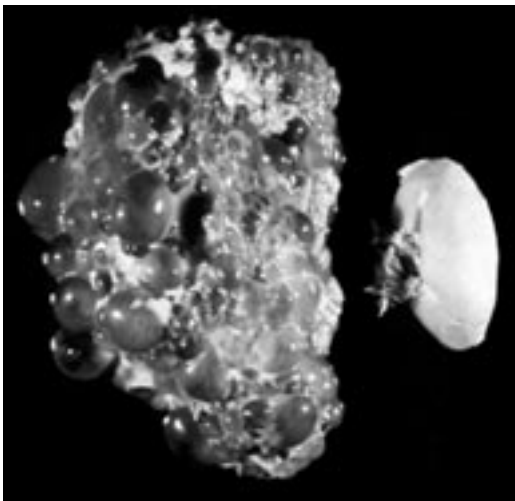
Chronic Kidney Disease

“Kidney disease” refers to many kinds of diseases. A common kidney disease in the U.S. is chronic kidney disease (also called CKD). CKD is the permanent loss of some kidney function. CKD can be caused by many different diseases (diabetes, high blood pressure, some infections, etc.) or a physical injury.

Other Common Kidney Diseases

Kidney stone – A solid piece of material that forms in the kidney out of substances in the urine. Stones can be very painful. Stones can sometimes block your urine flow. Stones can cause you to have blood in your urine. Although stones are common, they rarely cause permanent kidney damage.

Polycystic Kidney Disease (PKD) – A genetic disorder where numerous cysts grow in the kidneys. PKD cysts can slowly replace much of the mass of the kidneys and can lead to kidney failure.



A PKD kidney (left) compared to a normal kidney (right).

Photo courtesy of Polycystic Kidney Disease Foundation

Kidney infections – Also called Pyelonephritis. Kidney infections are usually caused by bacteria that spread from the bladder.

Simple Kidney Cysts – Abnormal pouches of fluid in the kidneys. Unless the cysts cause pain, bleed or become infected, they usually do not require treatment. Some cysts may need to be closely watched by your doctor.

Kidney Cancer – A disease where one or multiple tumors form in the kidney.

Nephrotic Syndrome – This condition is not itself a disease, but can be the first sign of another disease that damages the kidneys. Signs include protein in the urine, low blood protein, and swelling.

Remember! If any kidney disease is left untreated, future kidney damage can result. Kidney damage can lead to kidney failure.

For more information on any of the above diseases or any other kidney condition, contact the Fund's HelpLine at 800.638.8299 or HelpLine@kidneyfund.org.

Risks for Kidney Disease

Anyone can develop kidney problems, but you are at a higher risk if you:

- Have diabetes
- Have high blood pressure
- Have a family member with kidney disease
- Are African American, Hispanic, Native American, or Asian
- Are over 60 years old

Preventing Kidney Disease

Diabetes and high blood pressure are the two leading causes of kidney failure. It is important that your blood glucose (sugar) and blood pressure are checked often, and treated correctly.

Other Healthy Behaviors:

- Regular check-ups with your doctor
- Taking medicines prescribed by your doctor
- Regular exercise
- A low-fat diet
- Avoiding tobacco use
- Drinking alcohol only in moderation

Symptoms of Kidney Disease

Most kidney problems have no symptoms until the disease is very far along! Your best protection is to know if you are at risk and to get tested (see next page).

Some symptoms can include:

- A sick feeling in your stomach often
- A tired or dizzy feeling often
- Swelling in your feet, hands, or face
- Back pain
- Bloody, foamy, or dark-colored urine
- Unexplained high blood pressure
- A change in how often you urinate (more or less often)



Tests for Kidney Disease

Many kidney diseases often have no symptoms. Tests from your doctor are the only way to find out if you have kidney disease. Ask your doctor about these tests:

GFR – (Glomerular Filtration Rate)

- Tells your doctor how well your kidneys clean your blood.
- Your doctor will test your blood for “creatinine.” Then, your doctor will put the result from the test into a formula to get your estimated GFR.
- A normal GFR is between 90-130, but the average GFR drops as you get older.

Urine Test –

- Kidney damage can cause protein to leak into your urine. This protein is called “albumin.”
- Your doctor may test your urine in their office or ask you to collect your urine for 24-hours at home.

Blood Pressure –

- High blood pressure can cause kidney disease.
- Kidney disease can also cause you to have high blood pressure.
- A normal blood pressure is *less than* 120/80 (120 over 80).

Blood Glucose (Sugar) Test –

- Diabetes is the leading cause of kidney failure.
- You need to know if you have diabetes.
- This test shows how much glucose (sugar) is in your blood.
- If your blood sugar is too high, it may be a sign of diabetes.
- Ask your doctor what your blood sugar should be.

Kidney Biopsy –

- Your doctor looks at a tiny piece of your kidney tissue under a microscope.
- The doctor puts you to sleep or numbs an area on your back.
- The doctor inserts a needle through your skin into the back of the kidney and removes a tiny sample.
- The sample will help the doctor find problems at the microscopic level.

Imaging Tests –

- Tests that take pictures of your kidneys.
- Some examples are: ultrasounds, CT (computed tomography) scans, and MRI (magnetic resonance imaging).



Treatments for Kidney Failure

Kidney disease can sometimes lead to kidney failure (also called End-Stage Renal Disease). There is no cure for kidney failure. A person with kidney failure needs to have one of these treatments to live:

Hemodialysis –

- A way of cleaning wastes and extra fluid from the blood artificially.
- The person's blood is pumped out of the body through an artificial kidney machine for cleansing and then returned back into the body.



- Usually, hemodialysis treatments are needed three or four times a week, and each treatment lasts around four hours.
- Hemodialysis patients must follow a restricted diet and must take a variety of medicines and vitamin supplements.

Peritoneal Dialysis (PD) –

- A second way of cleaning wastes and extra fluid from the blood artificially. A permanent, soft tube called a catheter is used to fill the abdomen with a cleansing liquid called dialysis solution.
- The walls of the abdominal cavity are lined with a membrane called the peritoneum. The peritoneum lets wastes and extra fluid pass from your blood into the dialysis solution.
- Wastes and fluid then leave your body when the dialysis solution is drained. This is called an “exchange.”
- These “exchanges” happen several times a day.
- PD patients also have diet restrictions.
- PD diets are usually not as strict as hemodialysis diets.

Kidney Transplant –

- A procedure that places a healthy kidney from another person into the body.
- The new kidney takes over the work of the two failed kidneys.
- The donated kidney may come from a living donor, or from someone who has just died.

Where to Find More Help

We are here to help! The Fund's HelpLine at 800.638.8299 and helpline@kidneyfund.org responds to hundreds of questions each month. The HelpLine is staffed by health educators and experienced social workers that offer information, support and resource referral. HelpLine services are also available in Spanish at 866.300.2900.

You can also find health information and order free brochures on our website at www.kidneyfund.org



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The American Kidney Fund provides direct financial assistance to kidney patients in need and education for those with and at risk for kidney disease.

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For more information on the Fund's programs, or to find more information on kidney disease and its treatment, contact us at:

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