Your kidneys remove waste and extra water from the blood in your body. This waste and water then leave your body as urine. Without the kidneys, the waste would keep building up and, over time, you would die.

When the kidneys are not healthy, they have a hard time removing waste from the blood. Chronic kidney disease moves slowly from early stages (stages 1 and 2), which usually have no symptoms, to advanced stages (stages 3, 4, and 5). Stage 5 is called “end-stage kidney disease.” This is because the kidneys can no longer be saved.

**Making decisions about care**

Usually, people with chronic kidney disease also have other health problems. The most common are diabetes and high blood pressure. Anemia (low iron in the blood), bone disease, and heart disease are also common.

Because kidney disease can cause so many other problems, getting the right care can be complicated. You may need to see many specialists, and for many years. Your disease might get worse even if you are getting careful treatment. You may need treatments such as hemodialysis or a kidney transplant when your disease has reached an advanced stage.

If you or a family member have chronic kidney disease, it may not be easy or clear how to choose among the many tests and treatments that are available. You may not even want or need some of them.

This brochure explains four treatments that are offered for chronic kidney disease. You, your family, and your doctor should carefully talk through the benefits and risks of each.
Anemia drugs

One important decision you may have to make is whether to treat anemia. Anemia is common in people with kidney disease.

Anemia is when you do not have enough red blood cells. Red blood cells carry oxygen to your body. Without enough red blood cells, your body does not get enough oxygen. You will likely feel tired and may have a hard time breathing.

Red blood cells contain hemoglobin. This is a protein with a lot of iron that gives your blood its red color. Your doctor learns if you have anemia and how serious it is by measuring your hemoglobin level.

If a blood test shows that you have anemia, you will need to decide if you should take drugs to help your body make new red blood cells. These drugs are called erythropoiesis-stimulating agents (ESAs).

ESAs are sometimes used to raise the number of red blood cells to normal, even when a patient does not have severe anemia or symptoms. But research shows that the drugs do not help people with chronic kidney disease live longer. And when they are used aggressively, they can actually raise the risk of death by causing heart failure, heart attack, or stroke.

ESAs also cost hundreds of dollars for each dose. Your co-payments could be more than $1,500 a year, even if you have insurance or Medicare.

**Bottom line:** You should consider an ESA only if you have symptoms of anemia, such as feeling tired or short of breath, and you also have a very low hemoglobin level. Very low is under 10g/dl.

If you and your doctor decide to try an ESA, you should take the lowest dose that relieves your symptoms and keeps your hemoglobin level just high enough that you do not need blood transfusions. Tell your doctor all your symptoms and talk about how they will improve.

Intravenous catheters

Another important decision you may have to make is how to treat other health problems you have. For example, if you are in the hospital for another condition, a doctor or nurse may want to give you a “peripherally inserted central catheter” or PICC. This is when a catheter, or thin tube, is inserted in your inner elbow and threaded up a vein until it reaches your heart. The PICC makes it easier to draw blood for tests and to give drugs and fluids through an IV.

However, a PICC can lead to problems if you have chronic kidney disease. This is because it is important to protect the veins in your arms in case you need hemodialysis if your kidney disease becomes advanced. However, when a PICC is inserted in a vein, it causes scarring. A scarred vein cannot later be used for hemodialysis. (See Hemodialysis section below.)

**Bottom line:** For certain treatments, like getting chemotherapy for cancer, a doctor or nurse will have to insert a PICC. But if your kidney disease reaches stage 3 or higher and a doctor suggests a PICC in your arm, ask for a second opinion from a doctor who specializes in kidney diseases. Often, you can have the PICC put in a vein in your neck instead. This saves the veins in your arms for use with hemodialysis.
Hemodialysis

Whether to have hemodialysis, is another important decision you may have to make. This is something you may have to consider if your kidneys get close to failing.

Dialysis takes over some of the things your kidneys normally do, like removing waste and keeping a safe balance of water and salts in your blood. But hemodialysis is not a good idea for everyone with advanced kidney disease.

In some cases, hemodialysis does not relieve your symptoms. And it may not help you do your normal activities, stay independent, or live longer. That is especially true the older you are, and if you also have a heart disease or another condition that can shorten your life. In one study of more than 3,000 nursing home residents, more than half died within a year of starting hemodialysis. Of the people who survived, most felt a sudden drop in their ability to do routine tasks on their own.

Also, there is no benefit to starting hemodialysis when your kidney disease is at an early stage. This practice has become common, but it may not help you live longer or feel better.

The last issue to keep in mind is that hemodialysis is hard on a person. You usually have to go a hemodialysis center at least three days a week, and each treatment session lasts three to five hours. Common side effects of hemodialysis include headaches, nausea, and feeling tired.

In surveys of older adults on long-term hemodialysis, over half of them say they wish they had not started the treatment. Many say they only chose hemodialysis because their doctors wanted them to.

**Bottom line:** You should talk with your doctor, your family, and any other caregivers you have before you decide if long-term hemodialysis is the right choice for you. Ask your doctor to tell you all the benefits and risks of hemodialysis. Ask how well hemodialysis will manage your symptoms and how it will affect your lifestyle. And ask how your symptoms would be managed if you do not start hemodialysis.

Cancer screenings if you are on hemodialysis

Routine screenings like colonoscopies, mammograms, and Pap smears can save lives by finding cancer early on. But if you are on hemodialysis, you may want to focus on more immediate health problems, like heart disease and infections, and skip the cancer screenings. That is because, for most people on hemodialysis, other health problems have higher risks and need more attention than a possible cancer.

Another reason is that advanced kidney disease can change the body in ways that make cancer screenings less accurate. For example, kidney disease can cause hardenings in the breast that look like possible tumors on a mammogram. Those test results could lead to more tests, like biopsies, that are not needed. The results can also cause stress and worry.

Having a colonoscopy also has risks if you are on hemodialysis. To prepare for a colonoscopy, you have to fast and take a pill or liquid that empties your bowels. Doing these things can dehydrate you and make problems you may already have with nutrition worse.

**Bottom line:** Before you decide whether to have routine cancer screenings, consider your risk factors for cancer, any symptoms you have, and how long hemodialysis is expected to keep you alive.

For example, screening could be a good idea if you have a family history of colon cancer and you are waiting for a kidney transplant that will help you live longer. If you are a young woman and you do not have any serious problems from hemodialysis, you may want to have routine Pap smears.