

Anemia Fact Sheet for People with End-Stage Renal Disease

What Are Red Blood Cells, and Why Are They Important?

Red blood cells are made in your bone marrow with other kinds of blood cells (white cells and platelets), and live three to four months. Red blood cells are important because they take oxygen throughout your body. Without oxygen, the cells in your tissues and organs do not do their jobs as well as they should.

What Is Anemia?

Anemia is a medical problem that happens when the number of red blood cells is less than normal, and/or when red cells do not work right. When this happens, less oxygen is sent to your body's cells.

In End-Stage Renal Disease (ESRD), anemia may be caused when:

- The chemicals in your body that help make red blood cells don't work well;
- There is not enough iron to help your red blood cells to carry oxygen around the body; or
- You lose too many red blood cells.

How Is Anemia Diagnosed?

A blood test is done to look at:

- The number, shape, and size of your red blood cells;
- Your hemoglobin level; and
- The hemoglobin level in each of your red blood cells.

You may also need other tests, including bone marrow tests.

Why Is Anemia Common in People with Kidney Disease and People Who Use Dialysis?

People with advanced kidney disease and people who use dialysis may have problems getting what they need to make red blood cells from what they eat. You may need to take Vitamin B-12, folate, or other supplements to help your body make red blood cells.

Your kidneys make chemicals that tell your bone marrow to make red blood cells. When your kidneys are not functioning properly, your body may not make enough of these chemicals and you may need to take medication to replace them.

People with advanced kidney disease and people who use dialysis may lose blood for a few reasons. Normally, kidneys remove toxins from your blood, such as urea. When kidneys can't remove toxins, red blood cells may not live as long or you may bleed more easily. When you lose blood and can't store or take in iron from your food, you may become anemic. Blood

diseases that happen when red blood cells are not shaped correctly (such as Sickle cell disease) may also make you lose red blood cells.

How Is Anemia Treated?

Before anemia is treated, it is important for your doctor to find the cause. You may need to take Vitamin B-12, folate, iron, and/or erythropoiesis stimulating agents (ESAs). If you can't take iron tablets, then it may be put into your blood during your dialysis treatment. ESAs can be given as a shot under your skin or right into your blood during dialysis.

How Does Medicare Help to Make Care Better for People with End-Stage Renal Disease?

Medicare has put in place the ESRD Quality Incentive Program (QIP). In this program, each outpatient ESRD facility is measured on the quality of the care it gives. Facilities that don't give care that meets Medicare's standards are paid less.

Anemia management is one important ESRD QIP quality of care performance measure. ESRD facilities earn an anemia management score that is based on a calculated formula. While some quality of care performance measures may change from year to year, the main goal of paying dialysis facilities for how well they give care stays the same.