



Monthly Labs Are Important

Why do I need to have regular blood tests?

Blood tests tell you and your healthcare team how you are doing. Different blood tests check different things. Your blood will be tested at the beginning of every month or more often if needed. The information we get helps us keep track of your health. Some of these lab values are important for your doctor when it comes to making needed changes to your dialysis prescription. Also, normal labs for people with end-stage renal disease are different from that of people who have normal kidney function. It is important to know what those values are and how you can make sure you're staying in the normal range.

You will have the following blood tests regularly:

Albumin

Albumin is a type of body protein. It comes from the food you eat. If you have a low albumin, it could mean that you are not eating enough protein. You need protein to keep your body healthy and to fight infections.



Target: >4.0 g/dl

Signs of Low Albumin

- Swelling
- Trouble fighting infection
- Being tired
- Poor wound healing
- Muscle weakness

Calcium (Ca)

Calcium comes from dairy products. It is important to have enough calcium for strong bones and teeth. Calcium also helps keep your nervous system working well.



Target: 8.4-10.2 mg/dl

Signs of Low Calcium

- Muscle weakness and fatigue
- Cramping
- Hair loss
- Seizures
- Tingling around the mouth

Phosphorus

When your kidneys fail, phosphorus builds up in your body. A high phosphorus level in your blood can cause itchy skin and bone problems. People with kidney problems should limit foods high in phosphate such as chocolate, nuts and processed cheese.

You may be taking medicines called phosphate binders with meals to help remove the extra phosphorus in your blood. We need to check your levels to make sure that your body has the right balance of phosphorus.



Target: 3.0-5.5mg/dl

Signs of High Phosphorus

- Changes in lab values, including low calcium and high PTH levels
- Bone pain and/or fractures
- Itching that can't be relieved
- Muscle weakness
- Red eyes
- Joint pain and stiffness
- Skin bumps that are hard and sore

Parathyroid Hormone (PTH)

A poor balance of calcium and phosphate in your body can lead to high levels of PTH. High PTH causes calcium to leave your bones. This can lead to bone disease.



Target: 150-600 pg/ml

Signs of High PTH

- Joint and bone pain
- More frequent urination and thirst
- Muscle aches, weakness, cramping and/or twitches
- Fatigue
- Depression and/or memory loss
- Decrease in appetite
- Nausea and vomiting
- Constipation

Potassium (K⁺)

You need potassium for your heart and muscles to work well. Too little or too much potassium may cause heart problems that can be fatal. We monitor your levels to make sure that your body has the right balance of potassium.

 Target: 3.5-5.0 mEq/l

Signs of Low Potassium

- Constipation
- Feeling of skipped heartbeats or palpitations
- Fatigue
- Muscle damage
- Muscle weakness or spasms
- Tingling or numbness

Signs of High Potassium

- Abdominal (belly) pain and diarrhea
- Chest pain
- Heart palpitations or arrhythmia (irregular, fast or fluttering heartbeat)
- Muscle weakness or numbness in limbs
- Nausea and vomiting

Hemoglobin (Hgb)

Hemoglobin is the part of red blood cells that carries oxygen to all cells in the body. Patients in the later stages of kidney disease are at risk for low hemoglobin, because damaged kidneys can no longer make a hormone called erythropoietin. You need this hormone for red blood cell production.

 Target: 11-12 g/dL

Signs of Low Hemoglobin

- Fatigue
- Weakness
- Pale skin and gums
- Shortness of breath
- Fast or irregular heartbeat

Urea Reduction Ratio (URR) and Kt/V

The urea test measures the amount of urea in your blood. Urea is waste left over from the protein you eat. It is normally removed by your kidneys. Urea levels in your blood tell us if you are getting enough dialysis and eating enough protein.

 Target URR: At least 65%
Target Kt/V:

- Hemodialysis Patients: ≥ 1.2
- Peritoneal Dialysis Patients: ≥ 1.7

Signs of Inadequate Dialysis

- Anorexia
- Loss of taste
- Nausea/vomiting
- Fatigue
- Pruritus
- Neuropathy
- Sleep disturbances
- Restless legs

Ferritin and Iron Saturation

Both of these tests measure your iron levels in different ways. It is important for you to have enough iron to keep your hemoglobin levels up.



Target Ferritin: Greater than 200 ug/L
Target Iron Saturation: Greater than 20%

Signs of Low Ferritin/TSAT

- Extreme fatigue
- Weakness
- Pale skin
- Chest pain, fast heartbeat or shortness of breath
- Headache, dizziness or lightheadedness
- Cold hands and feet
- Inflammation or soreness of your tongue
- Brittle nails

Knowing your lab tests can help you understand what is going on in your body. Sometimes you may need blood tests that are not listed here. Your doctor or nurse can tell you about other blood tests. Ask one of them if you have any questions.

Lab Results Tracker

Lab Test	Target Range	My Results	My Results	My Results	My Results
		Date: / /	Date: / /	Date: / /	Date: / /
Albumin	>4.0 g/dl				
Calcium (Ca)	8.4-10.2 mg/dl				
Phosphorus	3.0-5.5 mg/dl				
Parathyroid Hormone (PTH)	150-600 pg/ml				
Potassium (K+)	3.5-5.0 mEq/l				
Hemoglobin (Hgb)	11-12 g/dL				
Urea Reduction Ration (URR)	at least 65%				
Kt/V	hemodialysis patients ≥ 1.2 peritoneal dialysis patients ≥ 1.7				
Ferritin	>200 ug/L				
Iron Saturation	>20%				

Take your lab results with you to your other care provider visits.

For more information or to file a grievance, please contact:

ESRD Network 10
911 E. 86th St., Suite 30
Indianapolis, IN 46240
Toll-Free: (800) 456-6919

ESRD Network 12
2300 Main St., Suite 900
Kansas City, MO 64108
Toll-Free: (800) 444-9965

