

# ANATOMY OF ANEMIA

Understanding anemia and its impact can empower people with kidney disease to work with their care team and take proactive steps to stay healthy.

**Symptoms of Anemia** include fatigue, weakness, shortness of breath, dizziness, pale skin, cold hands and feet, difficulty concentrating.

**Red blood cells** (RBCs) carry oxygen from the lungs to the rest of the body.

**Hemoglobin**, a protein in RBCs, binds to oxygen and delivers it to tissues.

Healthy kidneys produce **erythropoietin (EPO)**, a hormone which signals the bone marrow to make RBCs.

People with **kidney failure** produce little or no EPO, leading to anemia (low RBC count).

## Treatments to Help Increase Red Blood Cell Production

- Erythropoiesis-stimulating agents (ESAs), subcutaneous injection or IV
- Iron supplements, Oral or IV
- Hypoxia-inducible factor prolyl hydroxylase inhibitors, oral
- Blood transfusions via IV

## Proactive Steps to Take

**Know Your Numbers** Check your labs and know your hemoglobin levels.

**Work with Your Care Team** Your nephrologist will adjust treatments based on your labs.

**Stay on Track** Don't miss a dialysis treatment or a prescribed medication dose.

**Speak Up** Say something to your healthcare team if you have symptoms.