

# ANEMIA AT A GLANCE

Anemia is the most common blood disorder in the United States. It happens when your blood has lower-than-normal amounts of red blood cells or hemoglobin. There are many types of anemia, and it can develop in people of all ages, races, and ethnicities.

## SIGNS AND SYMPTOMS

If you have anemia, your body does not get enough oxygen-rich blood, which can cause you to feel tired or weak. Speak to a healthcare professional if you're experiencing any of the signs or symptoms of anemia.

### 1 Mild Anemia

- Tiredness, weakness, or pale or yellowish skin

### 2 Moderate Anemia

- Faintness or dizziness
- Increased thirst, sweating, weak and rapid pulse, or fast breathing

### 3 Severe Anemia

- Lower leg cramps while exercising
- Shortness of breath
- Abnormal heart rhythms, called arrhythmias
- Heart murmur
- Enlarged heart
- Heart failure
- Sadness, low energy, and changing moods

## CAUSES

Anemia has three main causes:

1

### Lack of blood cell production

To produce healthy blood, your body needs a proper balance of hormones—especially erythropoietin, which is a hormone that boosts red blood cell production. Your body also needs iron, vitamin B12, folate (another B vitamin), small amounts of other vitamins and minerals, and protein. You get these nutrients from the foods you eat, which is why it's so important to have a balanced diet rich in these nutrients.

2

### Blood cell destruction

Sometimes your body destroys red blood cells before they reach the end of their natural life. This process, called hemolysis, can be caused by something that happens to you, like an infection, or because you inherit it from a relative.

3

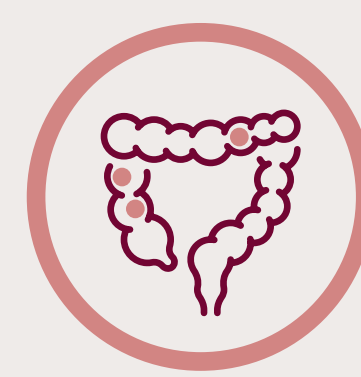
### Loss of too many blood cells

The loss of red blood cells also leads to low levels of iron. Without enough iron, your body will make fewer red blood cells than it needs. Injuries, surgery, frequent nosebleeds, ulcers, and certain cancers are the leading causes of blood cell loss.

## Common Conditions That Can Lead to Anemia



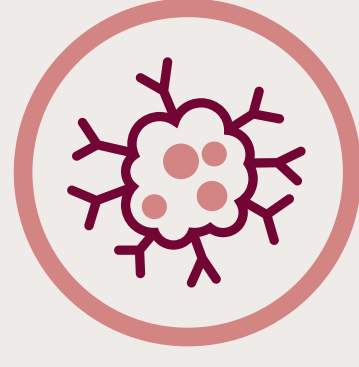
DIETS DEFICIENT in iron, folic acid, or vitamin B12



COLON POLYPS (abnormal clumps of cells that grow inside the body)



PREGNANCY



CANCER



ULCERS (open sores inside or outside the body)

## DIAGNOSIS

If you have any signs or symptoms of anemia, your doctor can diagnose the condition through blood tests. Sometimes anemia may be found during a test for another condition or when you donate blood.



## TREATMENT AND PREVENTION

Iron-deficiency anemia and vitamin B12 deficiency (also called pernicious anemia) are generally treated through dietary changes and supplements. Other types of anemia are treated with medicines, procedures, surgery, or lifestyle changes.

### Make healthy food choices

Eat nutritious foods and limit sugars, saturated fats, and refined grains. Foods that are high in iron include lean red meat, iron-fortified cereals, and dried beans.

### Talk with your family

Some types of anemia can be inherited. Talk with your family members about their risk for developing anemia.

### Avoid factors that can trigger anemia

Certain toxins in the environment, such as pesticides or chemicals in the air, can cause some types of anemia. Other types of anemia can be triggered by certain foods or cold temperatures.

### Explore treatment options

Speak with your doctor about the best options for you. These may include dietary changes, medication, or surgery.

For more information about anemia, please visit [www.nhlbi.nih.gov/blood](http://www.nhlbi.nih.gov/blood).



National Heart, Lung, and Blood Institute

Blood Diseases & Disorders Education Program