

# Hemoglobin C



## Does this test have other names?

Hemoglobin C blood test

## What is this test?

Hemoglobin C is a blood test used to find out if you have hemoglobin C disease, a blood disorder passed on to you from your parents. The disease causes your red blood cells to have hemoglobin C instead of the hemoglobin A found in most people. In the blood, hemoglobin C forms crystals and makes the blood cells less flexible. This causes your blood to not flow as well. Hemoglobin C also causes your red blood cells to break more easily, and they don't live as long as they should.

Hemoglobin C causes a form of hemolytic anemia, much like sickle cell anemia. This means the red blood cells are destroyed and removed from the bloodstream before their normal life span is over. This can lead to a lower-than-normal number of red blood cells in your blood.

## Why do I need this test?

You may need this test because in the U.S. most states have mandatory screening for sickle-type hemoglobin disorders in newborns, so many people know whether they have one of these diseases. Still, hemoglobin C disease often has no symptoms, and some people are not diagnosed until adulthood.

Symptoms of this disorder may include joint pain, gallstones, and symptoms related to anemia, such as tiredness, muscle and joint pain, irregular heartbeat, and other heart problems. In these cases, a healthcare provider may test for the disease.

## What other tests might I have along with this test?

Along with a hemoglobin electrophoresis, which identifies the type and amount of hemoglobin in your blood, a healthcare provider may do other blood tests. These may include a complete blood cell count, or CBC, and iron tests.

## What do my test results mean?

Test results may vary depending on your age, gender, health history, and other things. Your test results may be different depending on the lab used. They may not mean you have a problem. Ask your healthcare provider what your test results mean for you.

## How is this test done?

The test is done with a blood sample. A needle is used to draw blood from a vein in your arm or hand.

## Does this test pose any risks?

Having a blood test with a needle carries some risks. These include bleeding, infection, bruising, and feeling lightheaded. When the needle pricks your arm or hand, you may feel a slight sting or pain. Afterward, the site may be sore.

## What might affect my test results?

In some cases, it can be difficult to tell if a person has hemoglobin C disease or both hemoglobin C disease and another blood disorder called thalassemia. In these cases, blood testing of both parents may be needed to help with diagnosis.

## How do I get ready for this test?

You don't need to prepare for this test. Be sure your healthcare provider knows about all medicines, herbs, vitamins, and supplements you are taking. This includes medicines that don't need a prescription and any illegal drugs you may use.

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