

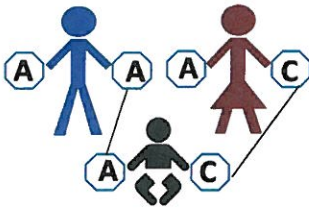
# Hemoglobin C Trait

## What is Hemoglobin C Trait?

Hemoglobin is the part of the red blood cell that carries oxygen. The usual type of hemoglobin is called hemoglobin A. There are many different types of hemoglobin. Hemoglobin C trait means that your child inherited one gene for the usual hemoglobin (A) and one gene for hemoglobin C.

## How did my child get hemoglobin C trait?

When we are born half of our genes came from our mother and the other half from our father. These genes carry instructions for making our body and determine our features. In this case one parent provided the A hemoglobin gene and one parent provided the C hemoglobin gene. It is important to remember one parent also carries the hemoglobin C gene and has passed one on just like hair color or eye color.

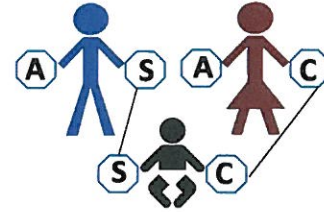


**Hemoglobin C trait is not an illness or health problem. It will not change into a disease.**

## Why was my child tested for hemoglobin C?

The state tests all newborns for hemoglobin disorders because when infants are born with no hemoglobin A they may have problems.

For instance, if one parent provides hemoglobin C trait and one parent provides sickle cell trait the baby has Sickle C disease. Sickle C disease is a serious illness requiring regular medical care.



Your child does not have Sickle C disease but you may want testing for you and your partner to see if a future pregnancy could be at risk.

## How do I get tested?

Tell your doctor you would like a hemoglobin electrophoresis and a complete blood count for you and your partner so you will both know your hemoglobin status.

**If both parents carry the hemoglobin C gene their child may get two hemoglobin C genes (CC) and have hemoglobin C disease. This is not a sickling disease but may cause low blood counts or mild anemia.**

## For more information:

<http://medschool.ucdenver.edu/sicklecell>  
"Newborn Screening Program"

**Colorado Sickle Cell  
Treatment and Research Center  
Newborn Screening Follow-up Program  
13121 East 17<sup>th</sup> Ave., C-222, Aurora, CO 80045**

**303-724-9075**

**[Donna.Holstein@ucdenver.edu](mailto:Donna.Holstein@ucdenver.edu)**

2/2012