

# TRAIT Result:

## Blood Spot Screen Result Notification



### FAC - Hemoglobin C Trait

#### What was found on the newborn screen?

The newborn screen that was collected at birth found that your baby has fetal hemoglobin (F), adult hemoglobin (A), and abnormal hemoglobin (C).

#### What does this mean?

This means your baby likely has hemoglobin C trait (AC). The fetal hemoglobin goes away as babies get older.

#### What is hemoglobin C trait?

Hemoglobin C trait is not a disease and can never become a disease. Hemoglobin C trait does not cause health problems. You may have hemoglobin C trait and not know it. People with hemoglobin C trait will always have it; you cannot grow out of it.

Hemoglobin C trait is common and can occur in any race or ethnicity. It is most common in people who are African American or from West Africa. You may have heard of sickle cell trait before. While not exactly the same, sickle cell trait and hemoglobin C trait are similar. Hemoglobin C trait is an inherited condition that affects the hemoglobin in your red blood cells. Hemoglobin is a protein in red blood cells. The job of hemoglobin is to carry oxygen throughout the body. Red blood cells with normal hemoglobin (A) are flexible and doughnut shaped. Red blood cells with abnormal hemoglobin (C) are more rigid than normal.

More information about trait can be found on our website: [www.health.state.mn.us/people/newbornscreening/families/trait.html](http://www.health.state.mn.us/people/newbornscreening/families/trait.html).

#### How do you know if your baby actually has hemoglobin C trait?

A simple blood test called a hemoglobin electrophoresis can tell if your baby has hemoglobin C trait. This test will likely be performed when your baby is between nine and twelve months of age. Talk with your baby's doctor about plans for testing and any questions you have about it.

#### Why is it important to know?

When a baby has hemoglobin C trait, we know that at least one parent has it too. Trait is passed on from parent to child like other genes for eye color and height. If only one parent has trait, it is not a problem. However, if one parent has hemoglobin C trait and the other has hemoglobin C trait or sickle cell (S) trait, each pregnancy can result in the child having sickle cell disease. Sickle cell disease is a lifelong illness that can result in serious health problems. Learning about trait is important for your baby AND for you and your partner too.



### Resources

**Newborn Screening Genetic Counselors**  
(651) 201-3548  
[health.newbornscreening@state.mn.us](mailto:health.newbornscreening@state.mn.us)

**Sickle Cell Foundation of Minnesota**  
[www.sicklecellmn.org](http://www.sicklecellmn.org)

**Sickle Cell Disease Association of America, Inc**  
[www.sicklecelldisease.org](http://www.sicklecelldisease.org)