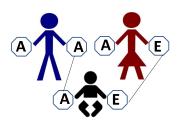
# **Hemoglobin E Trait**

# What is Hemoglobin E 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 E trait means that your child inherited one gene for the usual hemoglobin (A) and one gene for hemoglobin E.

### How did my child get hemoglobin E 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 E hemoglobin gene. This means that at least one parent carries the E gene and passed it on just like eye color and hair color.

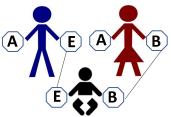


Hemoglobin E trait is not an illness or health problem. It will not change into a disease.

#### Why was my child tested for hemoglobin E?

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 E gene (E) and one parent provides Beta Thalassemia gene (B) the baby has E Beta Thalassemia disease. This can be a serious illness requiring regular medical care.



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

If both parents carry the hemoglobin E gene their child may get two hemoglobin E genes (EE) and have hemoglobin E disease.

This does not cause serious health problems but most people will have low blood counts or mild anemia.

## 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.

#### For more information:

https://medschool.cuanschutz.edu/sickle-cell-program/about-us/newborn-screening-program

University of Colorado Sickle Cell Program Hemoglobinopathies Newborn Screening Follow-Up Program

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