For parents of babies with sickle cell trait or another hemoglobin trait

If a newborn screening result showed that your baby has a hemoglobin trait, either sickle cell trait, hemoglobin C trait, or hemoglobin D trait:

Having a hemoglobin trait means that your baby's red blood cells have a different type of hemoglobin along with the usual hemoglobin A.

A hemoglobin trait is not a disease.
It will not change into a disease. It will not go away, either. Most babies with a hemoglobin trait do not have any health problems caused by the trait.

In California, all babies are screened for hemoglobin diseases shortly after birth. The screening method also identifies babies with hemoglobin traits.

Because the results show that your baby has a trait, it is important to know that at least one of the parents has a hemoglobin trait or disease. **If both parents have a trait, this can result in a future baby having a hemoglobin disease, such as sickle cell disease.**

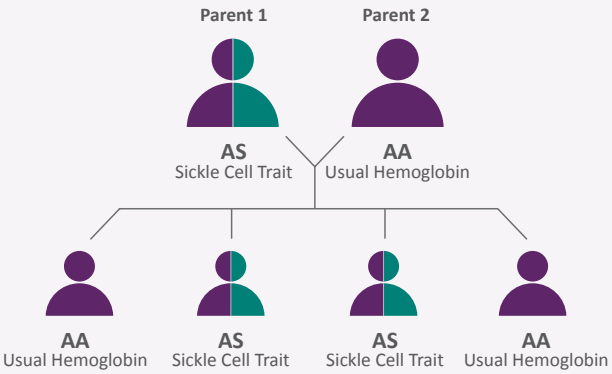
Call now to learn more

You can learn more about hemoglobin traits and free, voluntary parent and family testing by calling the **Newborn Screening Hemoglobin Trait Follow-up Program** at 1 (866) 954-2229, Monday – Friday, 9 am – 5 pm.

What is hemoglobin?

Hemoglobin is a protein found in red blood cells of all people. It gives blood its red color and carries oxygen to all parts of the body. There are many types of hemoglobin. Hemoglobin A is the most common. People with sickle cell trait have hemoglobin A and S.

Example:
When one parent has sickle cell trait



If one parent has the most common hemoglobin A and the other parent has sickle cell trait, they have a 1 in 2 chance (50%) with each pregnancy of having a baby with sickle cell trait.

A = usual hemoglobin A
S = sickle cell

California Department of PublicHealth

California Department of Public Health
Newborn Screening Program (www.cdph.ca.gov/NBS)

What is a hemoglobin trait?

Hemoglobin traits are passed down from parent to child in genes.

Genes are in the body's cells. They carry information that sets the traits passed on to you from your parents.

One parent must have a gene for the usual hemoglobin A and one parent must have a gene with a different hemoglobin type for a baby to have a hemoglobin trait. Different hemoglobin types can be sickle cell or hemoglobin C or D, for example.

Anyone can have sickle cell or hemoglobin C or D trait. Hemoglobin traits are more often found in people whose families came from Africa, Mexico, Central America, India, the Middle East and parts of Europe and Asia.

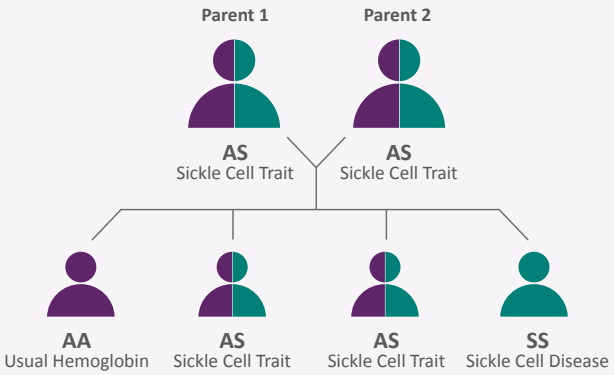
What is sickle cell disease?

Both parents must have a hemoglobin trait for a baby to get sickle cell disease. People with sickle cell disease usually require follow up and long-term medical management.

If the baby does not have a disease, why are you being offered parent testing?

Parent testing is offered because many parents do not know they have a hemoglobin trait. Blood tests can tell parents about their hemoglobin type. Knowing about your own trait is important information for you and your doctor.

Example:
When both parents have sickle cell trait



If both parents have sickle cell trait, they have a 1 in 4 chance (25%) with each pregnancy of having a baby with sickle cell disease.

A = usual hemoglobin A
S = sickle cell

For more information

- Call the **Newborn Screening Hemoglobin Trait Follow-up Program** at 1 (866) 954-2229, Monday through Friday, 9 am – 5 pm for more trait information and parent or family testing. All trait services are voluntary, free, and confidential.
- Ask your baby's doctor about trait services and parent testing at your next appointment.
- Visit the CDC trait web page (https://www.cdc.gov/ncbddd/sicklecell/traits.html)