

Fast Facts About

Sickle Hemoglobin

What is Hemoglobin?

- Hemoglobin is a protein found in red blood cells. There are hundreds of hemoglobin types; the most common is hemoglobin “A”. You inherit your hemoglobin type from your parents through genes. **Genes** are messengers that tell your body how to grow.

Sickle Cell Trait (A/S)

- In the United States, about 1 in 10 African Americans is born with sickle cell trait. It is also found in people from South and Central America, the Middle East, Italy, and Greece.
- A person born with sickle cell trait has inherited one gene for hemoglobin “A” from one parent and one gene for sickle hemoglobin “S” from the other.
- Usually red blood cells are soft and round. Too much sickle hemoglobin causes red blood cells to become long, hard and twisted, like a farmer’s sickle.
- People born with sickle cell trait have a small amount of sickle hemoglobin in their red blood cells **but not enough to make the cells change shape.**
- **A person with sickle cell trait (A/S) is healthy.**
- **A person with sickle cell trait does not need any special medical care or treatment.**
- **Sickle cell trait will NOT turn into sickle cell anemia.**

Why is it so important to know about sickle cell trait?

- When a baby is born with sickle cell trait, we know that at least one parent carries the trait.
- If both parents have sickle cell trait there is a 1 in 4, or 25% chance with each pregnancy that they will have a baby with sickle cell anemia, a serious blood disease.

Sickle Cell Anemia (S/S)

- A baby born with sickle cell anemia has inherited a sickle “S” gene from both parents.
- They have a high risk for life threatening infections
- They have episodes of severe pain that can result in tissue, organ, and bone damage.
- Children with sickle cell anemia should be followed by a **hematologist** (blood doctor) and started on penicillin by 2-3 months of age to help fight infections.

Are you at risk for having a baby with sickle cell anemia?

Ask your health provider about testing for you and your partner.

For more information contact:

The Virginia Sickle Cell Awareness Program (804) 864-7769