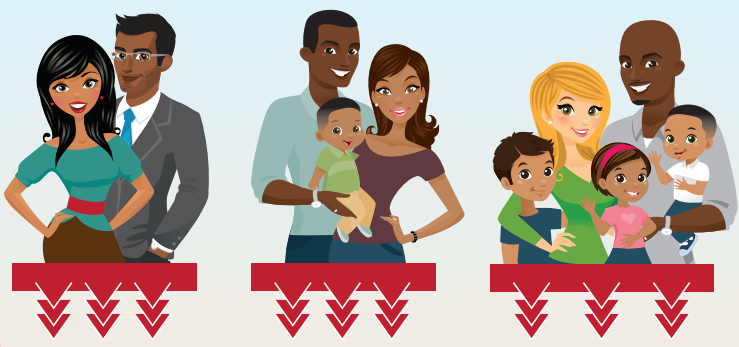
GET SCREENED FOR SICKLE CELL TRAIT

KNOW YOUR STATUS.

Did you know there's more than one way to inherit Sickle Cell Disease?

If you don't have a health care provider, visit our Sickle Cell Disease National Resource Directory at **www.cdc.gov/ncbddd/sicklecell**



SICKLE CELL DISEASE

TYPES

There are many types of Sickle Cell Disease (SCD), determined by the types of abnormal hemoglobin (Hb) a person makes. Hb protein in red blood cells carries oxygen from the lungs to the rest of the body. People with SCD have abnormal Hb, which doesn't carry oxygen well, causing some of the medical problems of SCD. The most common types of SCD are:

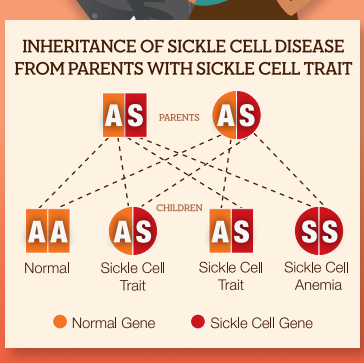
HbSS
People with this type of SCD inherit a sickle cell gene ("S") from each parent. This is commonly called sickle cell anemia.

HbSC
People with this type of SCD inherit a sickle cell gene ("S") from one parent and from the other parent a gene for an abnormal Hb called "C".

HbS beta-thalassemia
People with this type of SCD inherit one sickle cell gene ("S") from one parent and one gene for beta-thalassemia, another type of anemia, from the other parent. There are two types of beta-thalassemia: "zero" and "plus".

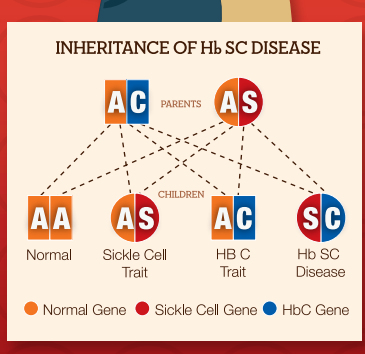
Sickle Cell Trait (SCT or HbAS)
People with sickle cell trait inherit one sickle cell gene ("S") from one parent and one normal gene ("A") from the other parent. People with SCT usually don't have signs of the disease and live a normal life, but they can pass the sickle cell gene on to their children. However, SCT is not a mild form of sickle cell disease.

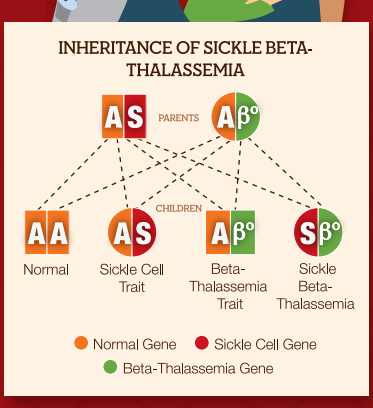
FAMILY STORIES



Newlyweds Maria and Saanjh each have sickle cell trait, and want to start a family. The couple has one chance in four that their child will have normal hemoglobin, one chance in four that their child will have sickle cell anemia, a form of sickle cell disease, and a 50-50 chance their child will have sickle cell trait.

Kwame and Nancy have been married for five years and already have one child. Kwame has hemoglobin C trait (HbC trait) and his wife Nancy has sickle cell trait. Their first born inherited two normal genes and doesn't have sickle cell disease or sickle cell trait. The couple has one chance in four that any future child they have will have the two normal genes, sickle cell trait, hemoglobin C trait or hemoglobin SC disease (a form of sickle cell disease).





Nia, who has beta-thalassemia trait, and Kiano, who has sickle cell trait, have been married for 10 years and have three children. Nia just learned she is pregnant with the couple's fourth child. The couple has one chance in four that their child will have normal hemoglobin, one chance in four that their child will have sickle cell trait, one chance in four that their child will have beta-thalassemia trait, and one chance in four that their child will have inherited the genes both for sickle hemoglobin and for beta-thalassemia; in this last case, the child will have sickle beta-thalassemia (a form of sickle cell disease).

AMERICAN SOCIETY OF HEMATOLOGY
SCDAA "Break The Sickle Cycle"
CDC Centers for Disease Control and Prevention
National Center on Birth Defects and Developmental Disabilities
CS245901