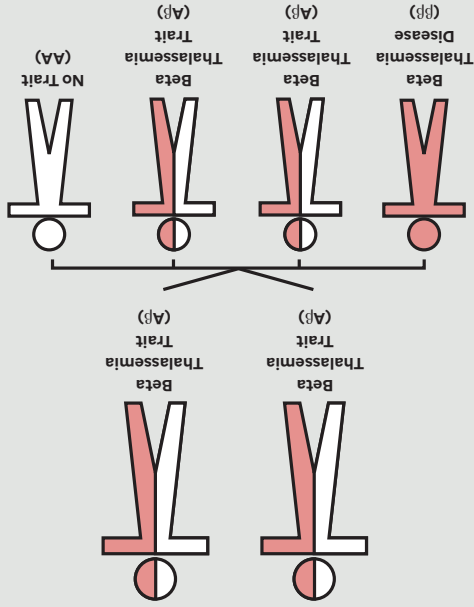


## FACT SHEET

# Beta Thalassemia Trait



## What if both parents have beta thalassemia trait?

- If both parents have beta thalassemia trait, there is a 25 percent (1 in 4) chance **with each pregnancy** of having a child with beta thalassemia **disease**.
- The amount of hemoglobin produced determines whether a person has:
  - Beta thalassemia intermedia or
  - Beta thalassemia major disease.

- Beta thalassemia major is also called Cooley's anemia.
- Beta thalassemia disease is a lifelong illness that can cause serious health problems. People with this disease need medical treatment.

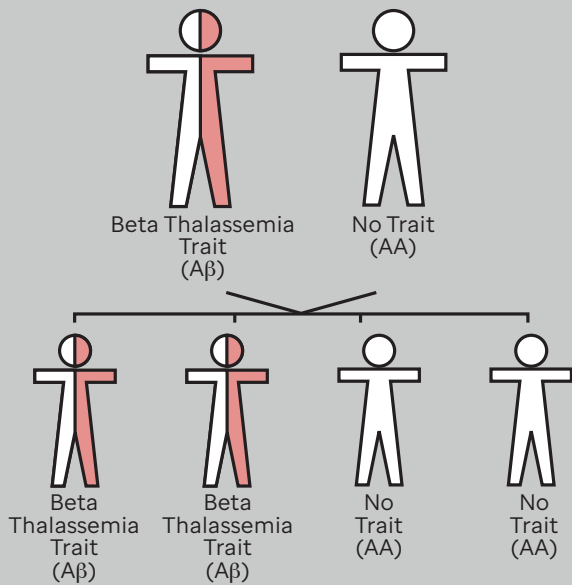
## What is beta thalassemia trait?

- Beta thalassemia is a condition that affects the red blood cells.
- Your red blood cells contain hemoglobin, which carries oxygen from the lungs to all parts of your body. People with normal hemoglobin have only one (1) type, hemoglobin A.
- People with beta thalassemia trait have both normal hemoglobin A and abnormal beta thalassemia ( $\beta$ ) hemoglobin in their red blood cells.
- People with beta thalassemia do not make enough hemoglobin.
- People with beta thalassemia trait do not develop beta thalassemia disease or sickle cell disease later in life.

## Who can have beta thalassemia trait?

- Beta thalassemia trait is common in people whose ancestors came from Africa, Asia, the Middle East, or the Mediterranean region. It is possible for a person of any nationality to have beta thalassemia trait.



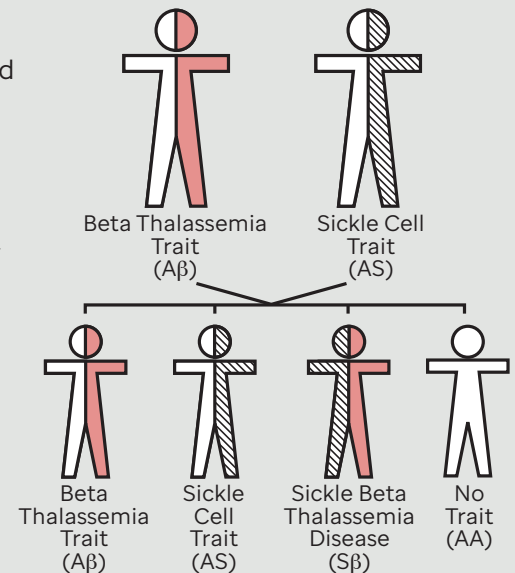
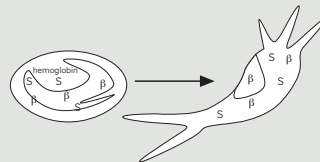


## Why should I know if I have beta thalassemia trait?

- You can pass on beta thalassemia trait to your children, like you would hair or eye color.
- If one (1) parent has beta thalassemia trait and the other parent has normal hemoglobin A, there is a 50 percent (1 in 2) chance with each pregnancy of having a child with beta thalassemia trait.
- Normally, beta thalassemia trait does not cause any health problems.
- Beta thalassemia trait is also known as beta thalassemia minor.

## What if one (1) parent has beta thalassemia trait and the other parent has sickle cell trait?

- If one (1) parent has beta thalassemia trait and the other parent has sickle cell trait, there is a 25 percent (1 in 4) chance **with each pregnancy** of having a child with sickle cell **disease**.
- Depending on the amount of hemoglobin produced, this type of sickle cell disease is called:
  - Sickle beta plus thalassemia or
  - Sickle beta zero thalassemia disease.
- A person with sickle cell disease has red blood cells that can sickle or become banana shaped. Under certain conditions, these cells can keep blood from circulating freely.
- Sickle cell disease is a lifelong illness that can cause serious health problems. People with this disease need medical treatment.



This document is not intended to replace counseling by a trained health care professional or genetic counselor. Questions about personal health concerns or treatment should be discussed with your doctor. For more information about sickle cell disease, visit our Web site at [www.stjude.org/sicklecell](http://www.stjude.org/sicklecell).

Funds for reproduction of this document were provided by St. Jude Children's Research Hospital, ALSAC, and a grant from the Plough Foundation.