

## *Fast Facts*

# ***Beta Thalassemia***

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**Hemoglobin** is a protein responsible for carrying oxygen and giving blood its red color. Worldwide, there are hundreds of different hemoglobin types. The kind of hemoglobin you have depends upon your genetic inheritance.

**Genes** are units of inheritance passed on from your parents. These messengers determine characteristics such as skin, eye, and hair color. They also determine hemoglobin type.

**Thalassemia** is the medical term for one kind of inherited anemia.

**Thalassemia Minor or Thalassemia Trait** are terms used interchangeably to describe people who have inherited one gene for normal adult hemoglobin "A" and one gene for the limited production of beta chains.

## **The Healthy Carrier**

People born with beta thalassemia trait are healthy. Physicians often mistakenly diagnose iron deficiency in people with beta thalassemia trait because their red blood cells are often small and pale in color. However, taking iron supplements cannot cure this inherited anemia. As a matter of fact, individuals with thalassemia trait should be careful not to over supplement their diets with medicinal iron.

## **Precautions**

When both partners carry the beta thalassemia trait, there is a 25% chance with each pregnancy that they may have a child with a serious blood disease called Cooley's anemia. Untreated, Cooley's anemia can result in heart failure from severe anemia, enlargement of the liver and spleen, and changes in the bones.

## **Sickle Beta Thalassemia**

When one partner has beta thalassemia and the other has the sickle cell trait, there is a one in four, or 25% chance with each pregnancy that they may have a child with **Sickle Beta Thalassemia**.

These children may have many different complications, however the most common are:

- Severe anemia (low blood) that can result in delayed physical growth and development
- Increased risk for life threatening bacterial infections.
- Periodic episodes of severe pain
- Tissue, organ, and bone damage

## **Are you at risk for having a child with sickle thalassemia?**

Awareness is the key. Ask your health care provider about testing for you and your partner. The test is called **HEMOGLOBIN ELECTROPHORESIS**.

**For more information contact:**

**The Virginia Sickle Cell Awareness Program (VASCAP)  
Phone: (804) 864-7769**