

Hemoglobin C

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.

Hemoglobin C

- In the United States, about 1 in 40 African Americans is born with hemoglobin C trait. It is also found in people from Italy, Greece, Africa, and the Caribbean.

Hemoglobin C Trait (A/C)

- A person born with hemoglobin C trait has inherited one gene for hemoglobin "A" from one parent and one gene for hemoglobin "C" from the other.
- They do NOT need any special medical care or treatment.

Hemoglobin C Disease (C/C)

- When both parents have A/C trait there is a 1 in 4 or 25% chance with each pregnancy that they will have a child with Hemoglobin C Disease.
- A child with Hemoglobin C Disease has inherited a "C" gene from each parent. They may have mild anemia, occasional joint pain, an enlarged spleen, and gallstones.
- A hematologist (blood doctor) should see a child with C Disease if problems occur.

Sickle Hemoglobin C Disease (S/C)

- When one parent has hemoglobin C trait and the other has sickle cell trait (A/S), there is a 1 in 4 or 25% chance with each pregnancy that they will have a child with **Sickle Hemoglobin C Disease**. Children with Sickle C Disease have mild anemia and may experience episodes of pain.
- They should be seen by a hematologist and started on penicillin by 4 months of age to help fight infections.

Do you know your hemoglobin type?

- Ask your health care provider about testing for you and your partner.
- For more information contact: