Congratulations on the birth of your new baby! As part of the routine newborn screen, Utah tests all babies for sickle cell disease and other serious inherited hemoglobin problems. Sometimes, in the process of looking for serious problems, we find babies who are carriers of unusual abnormal hemoglobin types. On your baby’s newborn screening test a different kind of an abnormal hemoglobin fraction was found. It is called Hemoglobin S. This is a TRAIT, not a disease. This guide will help answer some of your questions. It should not take the place of an informed discussion with your medical home/medical provider.

Is my baby sick?
No. Sickle cell trait is not an illness. Your baby is healthy.

How did my baby get sickle cell trait?
Sickle cell trait, like hair color and height, is passed down in the family through genes. Sickle cell trait occurs when a baby gets one normal hemoglobin gene from one parent, and one sickle hemoglobin gene from the other parent.

What is the difference between sickle cell trait and sickle cell disease?
Sickle cell trait occurs when a baby gets only one sickle cell hemoglobin gene. One hemoglobin gene does not cause any health problems.

Sickle cell disease is a disease of red blood cells. Normally the red blood cell is soft and round, but in sickle cell disease, with too much Hemoglobin S in the red blood cells, they can become hard and pointed. This causes the cells to break down, which can cause anemia, pain, and many other problems. Sickle cell disease occurs when a baby gets two sickle cell hemoglobin genes, one from each parent. Together these two genes cause sickle cell disease.

Can sickle cell trait turn into sickle cell disease?
Never. Your baby’s hemoglobin gene will not change. It remains the same for life.

Is sickle cell trait and sickle cell disease more common in certain ethnic or racial groups?
Although any family can pass down sickle cell genes, it is more common in people whose ancestors came from Africa.

Is there anything a person with sickle cell trait should do?
We encourage you to discuss this with your child’s medical provider. You may also want to have a genetic consultation for your family to see how sickle cell trait might affect future children, or your grandchildren.