

Sickle Cell Trait-For Physicians

As part of routine newborn screening all babies are tested for sickle cell disease and other hemoglobinopathies. Screening of all specimens is done by isoelectric focusing (IEF). Results are then confirmed by IEF and citrate agar electrophoresis.

Your patient has tested positive for sickle cell trait. Sickle cell trait is not sickle cell disease and is not associated with anemia or other sickle cell disease medical issues.

Although sickle cell trait does not have immediate clinical significance, this information is important for future reproductive decisions of the child and other family members. Also follow up testing is recommended to confirm the child is only a carrier of a hemoglobin trait.

Possible Newborn Screening Results:

	Hemoglobin
F	Fetal hemoglobin, present in declining amounts until 6 months after birth
A	Normal adult hemoglobin
S	Hemoglobin S (sickle hemoglobin)
B	Hemoglobin Bart's

FA: Normal newborn hemoglobin pattern

FAS: Sickle cell trait

FASB: Sickle cell trait with Hemoglobin Bart's (see separate Hemoglobin Bart's information sheet)

Precautions for the healthy sickle cell trait carrier

When oxygen levels are low, such as flying in an unpressurized aircraft above 10, 000 feet and deep sea diving, the red blood cells might sickle. Also trait carriers should take precautions against dehydration and extreme fatigue during strenuous physical activity over a prolonged period of time, such as basic training for the military.

Follow Up Recommendations:

The baby should be referred to a genetic counselor for follow up testing and genetic counseling.

If you have any further questions, please contact the New Hampshire Newborn Screening Program at (603) 271-4225.

Please give the enclosed parent fact sheet to your patient.

The parent fact sheet is also available in Spanish. Please contact us at (603) 271-4225 if you would like us to send you a copy of the fact sheet in Spanish.