# Positive Result:

Blood Spot Screen Result Notification

Minnesota Newborn Screening Program



# Hemoglobin C, no A (hemoglobin C disease)

#### What was found on the newborn screen?

The newborn screen that was collected at birth found that your baby had only hemoglobin C and was missing normal hemoglobin (hemoglobin A).

#### What does this mean?

When only hemoglobin C is found, it is likely that your baby has a mild condition called hemoglobin C disease.

### What happens next?

Your baby's doctor or a specialist (pediatric hematologist) familiar with hemoglobin C disease will help arrange for more testing.

## What is hemoglobin C disease?

Hemoglobin C disease is a disorder which affects the hemoglobin/blood. Hemoglobin is a protein in the red blood cells. The job of hemoglobin is to carry oxygen throughout the body.

Red blood cells containing normal hemoglobin (hemoglobin A) are round and flexible. People with hemoglobin C have red blood cells that contain no normal hemoglobin. Their red blood cells become rodshaped with straight edges.

Abnormal red blood cells can get trapped in blood vessels and block blood flow. Tissues and organs that do not get normal blood flow can become damaged. While usually without symptoms, this can be painful and cause health problems.

#### What health problems can it cause?

Hemoglobin C disease is different for each child. This disease is a lifelong condition that may result in a mild condition similar to sickle cell disease. If untreated, it is possible for it to cause:

- · A sudden drop in red blood cell count
- Anemia (low hemoglobin)
- Enlarged spleen
- Gallstones

Children with hemoglobin C disease can benefit from discussion with a specialist and understanding of when treatment may be needed.

### What treatment options are available?

Hemoglobin C disease is often without symptoms and may not require any regular treatment.

Children with hemoglobin C disease should see their regular doctor and a doctor who specializes in blood disorders.

Resources

Genetics Home Reference: http://ghr.nlm.nih.gov

Save Babies Through Screening Foundation: www.savebabies.org

Baby's First Test: www.babysfirsttest.org



