



Red blood cell transfusions for sickle cell disease

“The doctors said my son Jorge needs regular red blood cell transfusions, called chronic transfusions. He has to get one each month for the next few years. The doctor said our son will get the blood from people who donate their blood. It was good to know the blood is tested well to make sure it is safe to give to another person. We know that transfusions will not cure sickle cell disease. Still—they help our child stay healthy.”

Red blood cell transfusions can help your child

Some children with sickle cell disease need to get red blood cell transfusions to stay healthy and live well. Transfusions can:

- Improve oxygen in the body
- Help prevent blocking of blood vessels by sickle cells
- Reduce the need for your child’s body to make new red blood cells. Transfused red blood cells live longer in the body than sickle cells.
- Lower the chance of stroke and other complications of sickle cell disease

What to expect

Before the transfusion:

- The red blood cells are taken out of the donated blood.
- These cells are stored in a bag in a lab refrigerator until needed.

During the transfusion:

- Your child will either go to the hospital or to an outpatient unit. In most cases, your child will be able to go home right after the transfusion.
- Your child may get the red blood cells through an IV placed in the vein or through a central line. Talk to your child’s doctor about central lines.

Your child may get a simple transfusion or an exchange transfusion.

In a **simple (or straight)** transfusion, healthy red blood cells are added to the patient’s blood. In an **exchange** transfusion, most of the patient’s sickle cells are removed and replaced with healthy red blood cells.





Transfusions may be **short-term** or **ongoing**

Short-term transfusions for sickle cell disease

- Sometimes, your child may need to get one or several transfusions over a short period of time. These may be done during an illness or before surgery to treat or prevent complications of the disease.

Ongoing (or chronic) transfusions for sickle cell disease

- Your child may get transfusions once a month over several years. These help prevent complications of the disease.

Chronic transfusions are used in high-risk patients:

- To **lower** the chance of first or **repeat stroke**. A stroke results from brain damage caused when blood flow to the brain is blocked.
- To **lower** the chance of repeat **acute chest syndrome (ACS)**. ACS is caused by sickle cell damage or infection of the lungs.

Side effects of chronic transfusions

While red blood cell transfusions can save lives, they can also have side effects. Your child may get transfusion reactions, an infection, or—over a long term—iron overload. To learn more about iron overload, ask the SCDA for the fact sheet called *Sickle Cell and Iron Overload*.

How can I learn more about red blood cell transfusions?

- Talk to your child's doctor.
- Contact the SCDA (Sickle Cell Disease Association of America) at **800- 421-8453**. Or, go to our website: **www.sicklecelldisease.org**

