

# What is Sickle Cell Disease?

## Sickle cell disease (SCD)

is an inherited blood disorder that causes a protein in your blood, called hemoglobin, to be misshapen.

The misshapen, or sickled, blood cells can get stuck in your blood vessels, which damages your organs and tissues.

When your blood vessels get blocked by the sickled blood cells, you can have severe pain, infection, strokes and other serious health problems.

# Sickle red blood cells, blocking the blood flow Healthy red blood cell

### **HOW MANY PEOPLE ARE AFFECTED?**

**SCD affects over 100,000 people in the U.S.** Symptoms and complications can be mild to severe. For most people, the disease gets worse over time.

### WHO DOES IT AFFECT?

In the U.S., SCD is more common among Black or African Americans



### **HOW CAN IT BE TREATED?**

SCD affects each person differently, so there is no "best treatment" for everyone with SCD. **There are several medicines** approved by the U.S. Food and Drug Administration (FDA) to help lower the amount of pain crises or SCD complications people experience. They include:

- Crizanlizumab
- Hydroxyurea
- L-glutamine
- Voxelotor

Other options to reduce SCD symptoms include:

- Pain medicine
- Blood transfusions
- Medicines to prevent blood clots
- Antibiotics

### IS THERE A CURE?

A blood or marrow transplant (BMT) is the only known cure for SCD. BMT is a treatment that uses healthy blood-forming cells donated by someone else to replace your unhealthy bloodforming cells. The cells are given to you through an intravenous (IV) infusion.

### WHAT OTHER TREATMENTS ARE AVAILABLE?

Doctors and researchers are studying new treatments for SCD. One possible cure is called gene therapy. Right now, gene therapy is only available through a clinical trial. Learn more about gene therapy and other treatments for SCD at **CTSearchSupport.org**.







