

# What is **Sickle Cell Disease (SCD)**?

SCD is a lifelong blood disorder that occurs when a person inherits a sickle cell gene and another abnormal hemoglobin gene, one from each parent.<sup>1</sup>

In people with SCD, red blood cells (RBCs) lose their normal disc shape and become sickle-shaped and rigid.<sup>2</sup> Sickle-shaped RBCs get stuck in small blood vessels and block the flow of blood and oxygen to the body.<sup>3</sup>

## Incidence of SCD



**MOST COMMON AMONG AFRICAN AMERICANS AND HISPANIC AMERICANS<sup>4</sup>**

**1 in 365**  
AFRICAN AMERICAN BIRTHS

**1 in 16,300**  
HISPANIC AMERICAN BIRTHS

## The Effects of Hemolytic Anemia

Hemolytic anemia is caused by destruction of red blood cells and is one of the most serious consequences of SCD.<sup>5,6</sup>



Destruction of red blood cells **damages blood vessels**



Damaged blood vessels **reduce blood flow to organs** in the body



Reduced blood flow permanently **injures key organs**

# Clinical Study Participation

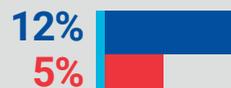
Current treatment options for SCD are limited, increasing the need for clinical studies that may lead to new medicines that can improve the quality of life for those living with SCD.

Clinical studies are designed to evaluate whether a medication is safe and improves the health of people before it becomes available to the public.

Unfortunately, racial disparities in clinical study participation have contributed to the slow arrival of new SCD treatment options. Expanding minority participation in clinical studies is important, since more needs to be done to bring SCD treatments to market.

## CLINICAL STUDY PARTICIPATION RATES AMONG AFRICAN AMERICANS AND HISPANIC AMERICANS <sup>7</sup>

### African Americans



### Hispanic Americans



● Share of U.S. population

● Share of clinical study participants



## Advocacy: Solutions and Support

Global Blood Therapeutics (GBT) supports the SCD advocacy community and its work to create resources that address the challenges patients face.

GBT is committed to advancing the science and transforming the treatment of SCD to provide patients with a way to manage their health and improve their overall quality of life. To accomplish this, GBT strives to maintain an open dialogue with the SCD community to understand their needs and listen to their perspectives.

## Resources

To learn more about current research related to SCD and to access a network to receive information about clinical care, health services and more, visit: [sicklecelldisease.org/get-connected-patient-powered-registry](http://sicklecelldisease.org/get-connected-patient-powered-registry)

To learn more about GBT and our commitment to the SCD community, visit: [gbt.com](http://gbt.com)

You can also follow us on  at [GBT\\_news](https://www.youtube.com/channel/UCGtN8v8v8v8v8v8v8v8v8v8) or  [@GBT\\_news](https://twitter.com/GBT_news)



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