

Sickle Cell Disease: What You Need To Know

(NAPSA)—Sickle cell disease involves abnormally shaped red blood cells that reduce the flow of blood inside the blood vessels. It is inherited, the same way people inherit the color of their eyes, skin and hair. In the United States, it's estimated that sickle cell disease affects up to 100,000 people, mostly African American. And while sickle cell disease causes severe pain and other complications, with the right treatment and care, it's possible for most people with sickle cell disease to live normal, active lives. Here's what you need to know about sickle cell disease, the populations that are most affected, and how to best manage it and stay as healthy as possible:

1. What is sickle cell disease? Sickle cell disease (SCD) is a serious disorder in which your body makes sickle-shaped red blood cells. "While a normal blood cell looks like a doughnut without the hole, sickle-shaped cells are shaped like a crescent," says Dr. Gary H. Gibbons, director of the National Heart, Lung, and Blood Institute at the National Institutes of Health. "Sickle cells are sticky and stiff. These cells can block blood flow in blood vessels in limbs or organs, causing pain and organ damage, and raising the risk of infection."

2. Who is at risk? Sickle cell disease is most common in people whose families come from Africa, South or Central America (especially Panama), Caribbean islands, Mediterranean countries (such as Turkey, Greece and Italy), India and Saudi Arabia. In the United States, it is estimated that sickle cell disease

- affects 90,000 to 100,000 people;
- occurs among about one out of every 500 black or African-American births; and
- occurs among about one out of every 36,000 Hispanic-American births.



Doctors can help people with sickle cell disease treat their symptoms.

3. What are the symptoms?

Sickle cell disease is present at birth, but many babies don't show any signs until after 4 months of age. The signs and symptoms of sickle cell disease can be hard to pinpoint, but they are mostly related to anemia and pain. Fatigue (feeling tired or weak) is the most common sign of anemia. Sudden pain throughout the body is also a symptom of sickle cell disease—pain is the most common complication of sickle cell disease and the top reason that people with sickle cell disease go to the emergency room or hospital. Other complications can include infection, eye problems, organ damage or strokes.

4. What steps can people with sickle cell disease take to stay healthy? "Most people with sickle cell disease can live normal lives and participate in most of the activities they enjoy," says Dr. Gibbons. Here are some steps you can take to manage your sickle cell disease:

- **Find a good doctor and get regular checkups.** Often, the best choice is a hematologist (a doctor who specializes in blood diseases) working with a team of specialists.
- **Try to avoid getting sick.** Common illnesses, like the flu, can quickly become serious for

people with sickle cell disease, so it's important to avoid infections by practicing good hygiene, like regularly washing your hands and getting an annual flu shot.

- **Stick with healthy habits,** like regularly drinking water and staying active. Try not to get too cold, too hot or too tired.

- **Look for clinical studies.** New research is happening all the time, and by participating in clinical studies, you can help advance science to find better medicines and treatments for the community.

- **Get support from your family or community** and stay updated on advances in sickle cell disease management. Support groups and community-based organizations can be good options to help you get information and assistance.

5. How is sickle cell disease treated? Severe sickle cell disease can be treated with a medicine called hydroxyurea. This medicine leads to increased levels of fetal hemoglobin. In people who have sickle cell disease, fetal hemoglobin helps prevent red blood cells from sickling and improves anemia. Taken daily by mouth, hydroxyurea can reduce how often certain sickle cell complications occur. Sickle cell disease has no widely available cure. However, treatments can help relieve symptoms and treat complications. Mild pain is often treated at home with over-the-counter pain medicines, heating pads, rest and plenty of fluids. More severe pain may need to be treated in a clinic or hospital. Make sure to discuss the potential benefits and risks of any treatment with your health care provider before starting any new medication.

Visit NHLBI's website at www.nhlbi.nih.gov/health/educational/sickle-cell-awareness.htm for more information on sickle cell disease.