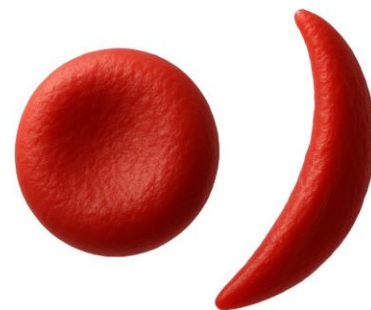


CELEBRATING 50 YEARS OF SCREENING FOR SICKLE CELL DISEASE IN NEW YORK STATE

SEPTEMBER IS SICKLE CELL AWARENESS MONTH

NEW YORK STATE LEADS THE WAY

New York State's Newborn Screening Program began in 1965. At that time, one health condition was screened. In 1975, New York became the first state in the nation to add screening for sickle cell disease. 2025 marks the 50th anniversary of screening for sickle cell disease. Today, over 50 conditions are screened from a few drops of blood at birth. The goal remains the same: improving health outcomes for newborns.



Typical red blood cell Sickle cell

WHAT IS SICKLE CELL DISEASE?

Sickle cell disease is a genetic blood disorder. It affects the red blood cells that carry oxygen throughout the body. Red blood cells are typically flexible and disc-shaped. Sickle cell disease causes cells to take on a hard, sickle-like crescent shape. These cells are sticky, break down faster, and can block blood flow. This can cause:

Anemia Painful Episodes Infections Stroke/Blood Clots Organ Damage

A LIFE-CHANGING DIAGNOSIS

Screening newborns for sickle cell disease allows for early diagnosis. Early diagnosis and treatment can change health outcomes. Treatments now include:



Healthy habits and preventive health care



Blood transfusions



Vaccines and antibiotics to prevent infection



Bone marrow or stem-cell transplant



Medications to help manage pain and make healthier cells

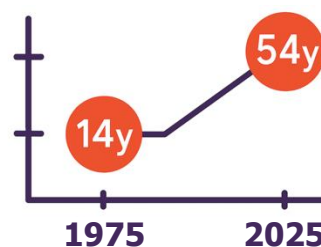


Gene therapy

LIFE EXPECTANCY

THEN...

In the 1970s, most people with sickle cell disease did not live past 20 years old.



...NOW

With early treatment, people with sickle cell disease can live into and beyond their 50s.

KNOW YOUR SICKLE CELL STATUS

- A person who is a carrier for sickle cell disease is said to have sickle cell trait. Sickle cell trait usually does not cause health problems. Sickle cell trait does not turn into sickle cell disease.
- Two people with sickle cell trait can have a child with sickle cell disease.
- People of all races and ethnicities can have sickle cell trait and sickle cell disease.
- It is important to know your sickle cell status. Knowing your status helps you understand your chances of having a child with sickle cell disease. Ask your healthcare provider about screening for sickle cell trait and hemoglobin disorders.

(Red blood cell photo adapted from: vrogue.co)

For more information, visit: wadsworth.org/nbs



Department of Health
Wadsworth Center

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Before 1900

Sickle cell disease originates in Africa thousands of years ago; symptoms of sickle cell disease are noted in African tribal records

1960s

Blood transfusions are first used to treat sickle cell disease

1980s-90s

Hydroxyurea medication, penicillin antibiotic, and bone marrow transplantation are used to treat sickle cell disease

2025

50th anniversary of newborn screening for sickle cell disease in New York State

1910

Sickle cell disease is discovered in Western medicine by a Chicago physician who describes sickle-shaped cells

1975

New York State is first to begin universal screening for sickle cell disease in the United States

2023

FDA approves the first gene therapies for sickle cell disease

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