What is Sickle Cell Disease (SCD)?

- SCD is a group of inherited conditions that affect hemoglobin, a protein that allows red blood cells (RBC) to carry oxygen to all parts of the body.
- Healthy RBC are round, and they move through small blood vessels to carry oxygen to all parts of the body. In SCD, the RBC become hard and sticky and look like a C-shaped farm tool called a “sickle.”
- These cells can get stuck in the blood vessels and block the normal flow of oxygen throughout the body. This leads to a variety of health problems.

There were approximately 6,200 people with SCD living in California in 2004-2008:
- 43% younger than 18 years
- 21% 18-29 years
- 25% 30-50 years
- 11% 51 years and older

There were 486 babies born with SCD in California in 2004-2008:
- 89% were Black
- 8% were Hispanic
- 5% were Other

Note: There is overlap between the race and ethnicity categories

SCD affects all races and ethnic groups. In California, SCD occurs among approximately 1 out of every
- 8,000 births
- 500 Black, African-American, or African descent births
- 99,000 Hispanic-American births

Number of Newborns with SCD, 2004-2008

- Alameda 32
- Kern 31
- Los Angeles 166
- Orange 45
- San Bernardino 82
The number of hospital admissions and emergency room visits rises dramatically after age 18.

Over 50% of people with SCD in each age group received at least one transfusion during the five years.

Pneumonia/Acute Chest Syndrome (ACS) was the most common complication across all ages.

Among all people with SCD who died during 2004-2008,
- 24% were 30 years old or under
- 61% were between 31-60 years old
- 15% were older than 60 years

**Healthcare utilization by people with SCD, 2004-2008**

**Most common medical treatments and procedures provided to people with SCD on Medi-Cal, 2004-2008**

- **Emergency Room visits**
- **Hospital admissions**

- **RBC transfusion**
- **6+ RBC transfusions in 1 year**
- **Cholecystectomy**
- **Transcranial Doppler**
- **Central line insertion**

**Most common complications among people with SCD on Medi-Cal, 2004-2008**

- Pneumonia/ACS
- Asthma
- Renal Failure
- Avascular Necrosis
- Iron Overload

**Age at death for people with SCD, 2004-2008**

- 0-10 years: 4%
- 11-20 years: 5%
- 21-30 years: 15%
- 31-40 years: 17%
- 41-50 years: 23%
- 51-60 years: 21%
- >60 years: 15%

This data was collected through the Registry and Surveillance System for Hemoglobinopathies (RuSH). RuSH was a pilot project that was implemented by the Centers for Disease Control and Prevention (CDC) in collaboration with the National Institutes for Health (NIH), National Heart, Lung, and Blood Institute (NHLBI).

For more information, please visit
[www.cdc.gov/ncbddd/sicklecell](http://www.cdc.gov/ncbddd/sicklecell) and [http://casicklecell.org/](http://casicklecell.org/)

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