Sickle Cell Disease in California

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

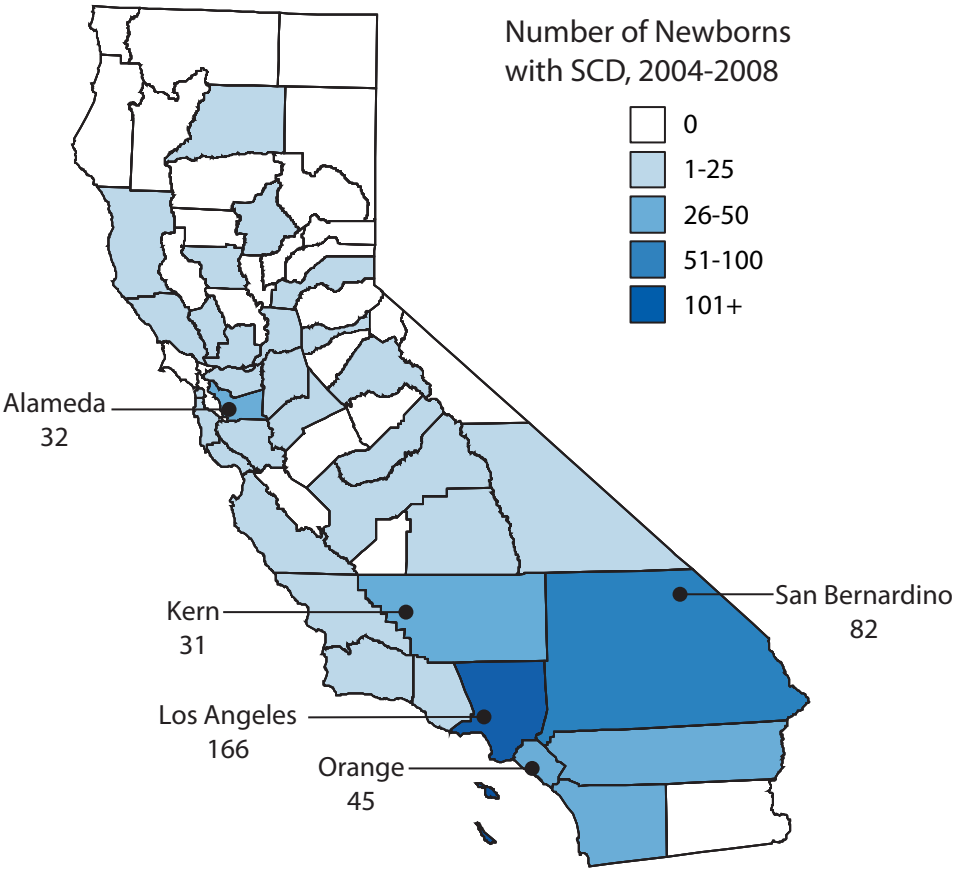
Note: There is overlap between the race and ethnicity categories

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

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.



National Center on Birth Defects and Developmental Disabilities
Division of Blood Disorders

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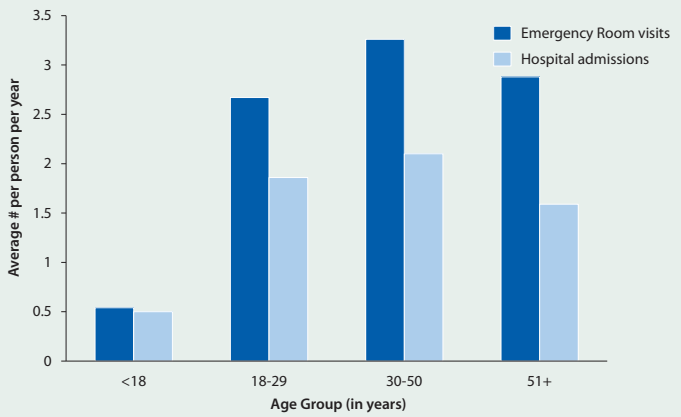
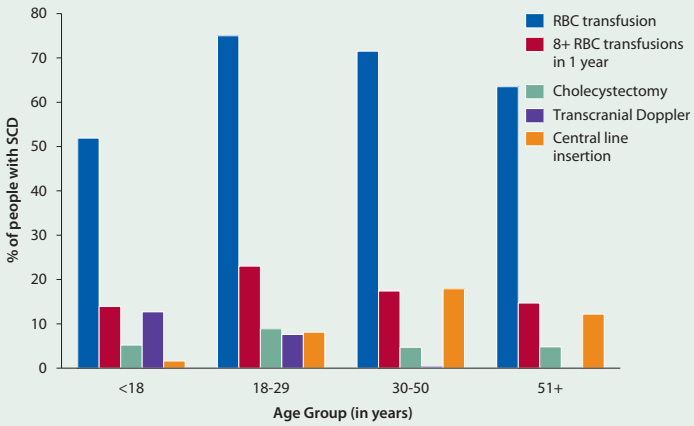
Healthcare utilization by people with SCD, 2004-2008



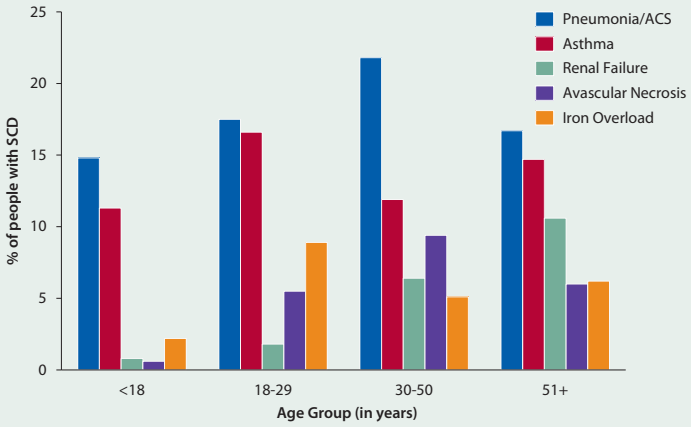
- The number of hospital admissions and emergency room visits rises dramatically after age 18

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



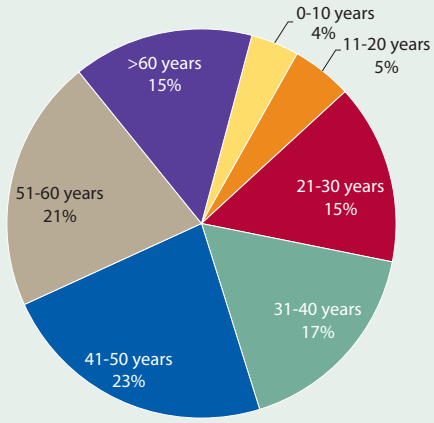
- Over 50% of people with SCD in each age group received at least one transfusion during the five years

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



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

Age at death for people with SCD, 2004-2008



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

- **Asthma:** A disorder that causes the airways of the lungs to swell. Symptoms include wheezing, shortness of breath, chest tightness, and coughing.
- **Avascular Necrosis**: Reduced blood supply causes death of bone cells, most often in the hip and shoulder.
- **Central Line Insertion**: Insertion of a long-term access point to a vein, allowing easy blood tests and administering of medication, especially for patients who may have weak veins.
- **Cholecystectomy**: Removal of the gall bladder by surgery. Gall stones are a common complication of SCD, beginning in children as young as toddlers.
- **Iron Overload**: Iron builds up in the body as a result of multiple transfusions, and can harm organs such as the heart and liver.
- **Pneumonia and/or Acute Chest Syndrome**: Pneumonia is lung infection caused by a virus or bacteria that can be life-threatening in people with SCD. Acute chest syndrome is similar to pneumonia, with different diagnostic criteria.
- **RBC Transfusion**: Transfusion (putting in through the vein) of one or more units (about a pint each) of healthy RBC from a donor to lessen the symptoms of SCD.
- **Renal failure**: Includes significant forms of kidney disease, whether acute or chronic.
- **Transcranial Doppler**: This simple and painless test looks for evidence of risk of stroke in young patients with SCD, using sound or Doppler waves. As people get older, the test is less effective, so most are done on children and teens.

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 and http://casicklecell.org/
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