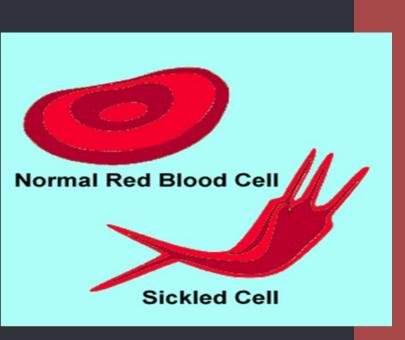
# Georgia Sickle Cell Education, Awareness & Advocacy Program NATIONAL BLACK CHURCH INITIATIVE



Dr. Lakiea Bailey
Sickle Cell Consortium





### SICKLE CELL DISEASE

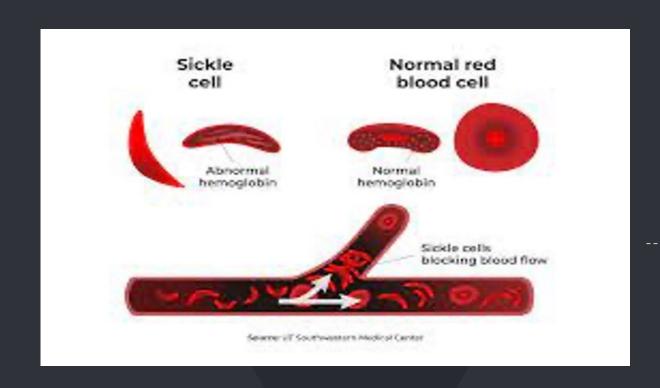
- •SCD is a genetic disease affecting 70,000 100,000 Americans, primarily of African descent <sup>1</sup>
  - Most common genetic disease among blacks
  - •SCD occurs in 1 of every 500 black births
- •1:1,100 Hispanics (eastern states)
- •1:32,000 Hispanics (western states)
- •SCD occurs in many other ethnic groups, including Northern Europeans and those that live in the Middle Eastern Countries
- •1:12 African-Americans are carriers (trait) for the disorder

## SCD COMMON GENOTYPES

<b>K</b> 7	GENOTYPE	APPROXIMATE % OF US PATIENTS
K 7	•Sickle cell anemia (SS, most severe form)	65 %
	•Sickle/Hb C disease (SC, lesser severity, but can still have pain episodes, and lifethreatening complications)	25 %
	•Sickle/Beta plus thalassemia (Sβ <sup>+</sup> thalassemia, similar to SC)	8 %
	•Sickle/Beta zero thalassemia (Sβ° thalassemia, similar to SS)	2 %

## Prolonged Sickling of RBC's





- •After recurrent episodes of sickling
  - •membrane damage occurs
  - •cells not capable of resuming biconcave shape upon reoxygenation
- Sickle-Cell Anemia Normal red blood cell section Normal red blood cell Abnormal sickle red blood cell section RBCs flow freely whitin blood vessel Sickle cells blocking blood flow Sticky sickle cells

•Deformed sickle cells stick to other blood cells and blood vessels

### Acute and Chronic Manifestations



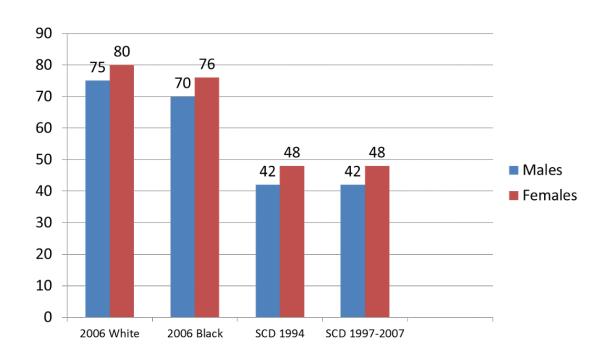
#### **Acute Manifestations**

- Bacterial sepsis or meningitis\*
- •Recurrent vaso-occlusive pain (dactylitis, musculoskeletal or abdominal pain)
- Splenic sequestration\*
- Aplastic crisis\*
- Acute chest syndrome\*
- •Stroke\*
- Priapism
- Hematuria, including papillary necrosis

#### **Chronic Manifestations**

- Anemia
- Jaundice
- Splenomegaly
- Functional asplenia
- Cardiomegaly and functional murmurs
- •Hyposthenuria and enuresis
- Proteinemia
- Cholelithiasis
- Delayed growth and sexual maturation
- •Restrictive lung disease\*
- Pulmonary hypertension\*
- Avascular necrosis
- Proliferative retinopathy
- Leg ulcers
- Transfusional hemosiderosis\*





# Comparison of Life Expectancy US Population vs. Sickle Cell Disease



# THE POWER OF THE COLLECTIVE



#### SICKLE CELL CONSORTIUM

#### **MISSION**

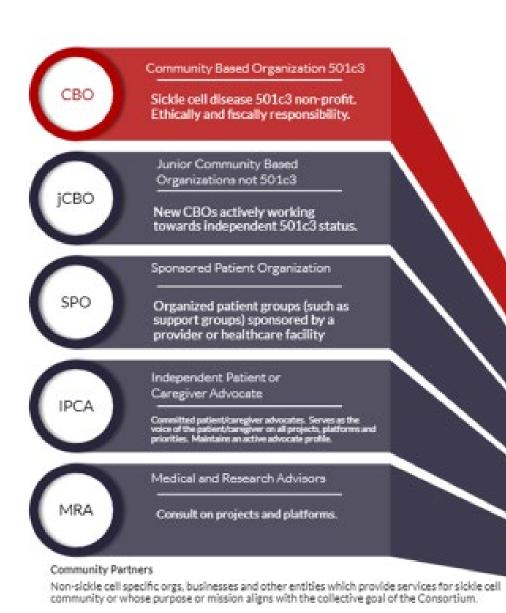
The Sickle Cell Community Consortium is a national collaborative of sickle cell Warriors, caregivers, community-based organizations (CBOs), community partners and medical/research advisers working collectively to equip and empower the sickle cell community to be full participants, and lead the charge, in sickle cell advocacy, education, research, legislation and policy.

### SICKLE CELL CONSORTIUM



#### **CORE GOALS**

- To provide sickle cell community-based organizations (CBOs) with the necessary infrastructure, support, training and resources to build and maintain strong, effective CBOs.
- To provide a platform to harness and amplify the sickle cell patient voice through Collective Impact to enable sickle cell patients and stakeholders to identify and address needs and gaps and implement collaborative, multi-stakeholder-directed solutions through patient powered and patient-centered projects, research and outcomes









### PARTNERS



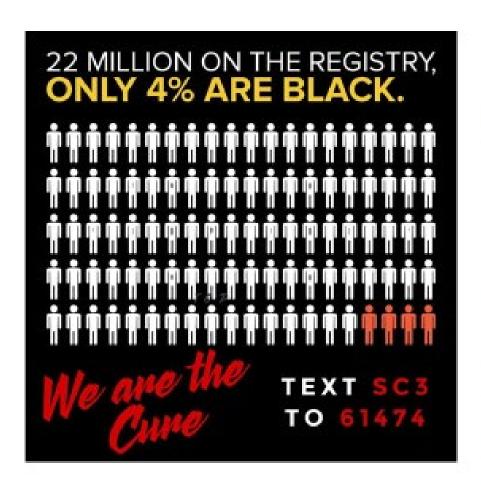


# Patient, Caregiver, CBO Agenda for Georgia



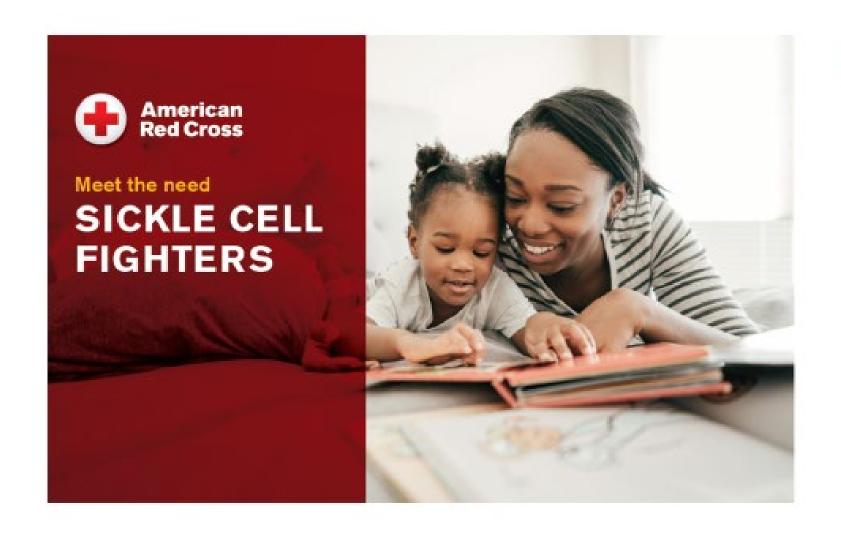
- 1.Blood & Marrow Donation
- 2. Emergency Department Discrimination & Access to Care
- 3. Legislative Action in GA Schools and GA Jobs
- 4. Mental Health Awareness, Support & De-stigmatization
- 5. Sickle Cell Education

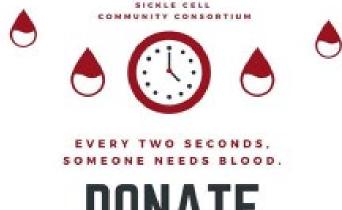
#### **BLOOD AND MARROW DONATION**





#### **BLOOD AND MARROW DONATION**





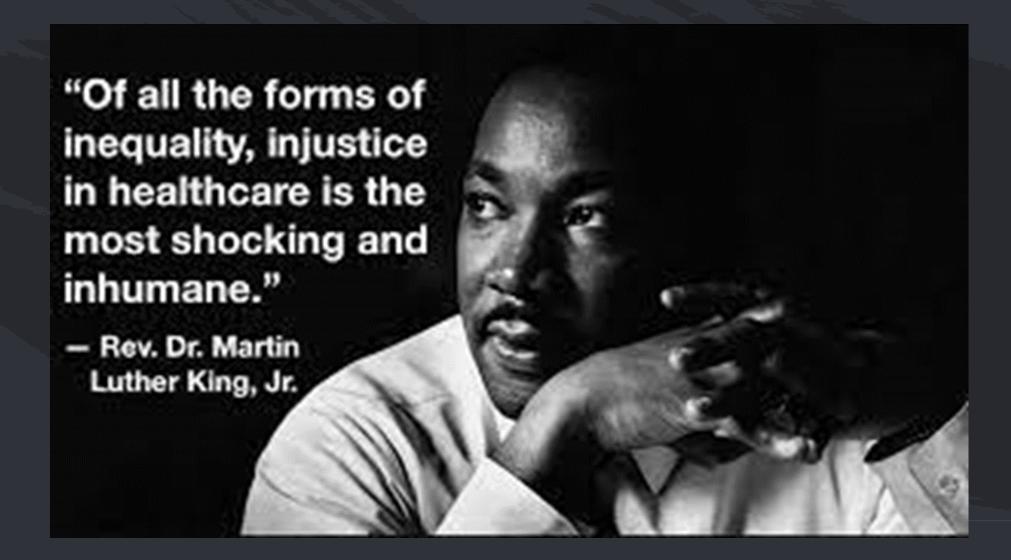
# DONATE BLOOD & SAVE LIVES

CHECK YOUR LOCAL BLOOD BANK



# EMERGENCY DEPARTMENT DESCRIMINATION







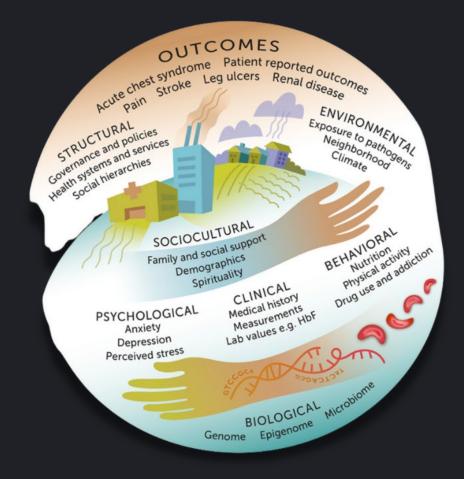
# GEORGIA JOBS & SCHOOLS





# Mental Health Awareness, Support & Destigmatization





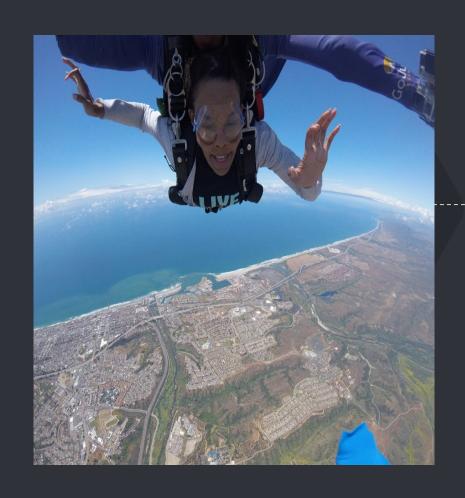
# Sickle Cell Education







# SKYDIVING





# THANKYOU