

Understanding the Child with Sickle Cell Disease

A guide for school nurses
Virginia Department of Health

Pretest

- What are the common symptoms of a sickle cell crisis?
- What steps should be taken during a crisis in a school setting?
- Identify at least one community resource available to families of children with SCD

About Sickle Cell Disease

- **Definition**: Inherited blood disorder causing red blood cells to sickle and block blood flow.
- **Common Forms**:
  - Hemoglobin SS (severe)
  - Hemoglobin SC (milder)
- **Key Challenges**:
  - Pain episodes
  - Chronic anemia
  - Frequent medical care

Signs & Symptoms

Warning Signs:

- **Fever**: Over 101°F → Emergency contact
- **Pain**: Chest, arms, legs → Notify guardian/nurse
- **Breathing Issues**: Call 911
- **Swelling**: Hands, feet, joints

Common Complications

- **Organ Involvement: Brain**: Stroke, headaches, learning delays
- **Bones**: Pain in arms, legs, back
- **Lungs**: Pneumonia, asthma
- **Kidney**: Frequent urination
- **Spleen**: Abdominal pain

Recognizing a Sickle Cell crisis

- **Severe pain** (commonly in bones, chest, or joints)
- **Fatigue or weakness** due to anemia
- **Fever** or signs of infection
- **Swelling** in hands or feet
- **Breathing difficulties** (requires immediate medical attention)

Immediate Actions

- Offer **hydration** (water is crucial to prevent further complications).
- Provide a **quiet, comfortable space** for rest.
- Administer prescribed pain medication as outlined in the student's Individual Health Plan (IHP).

Call **911** if the student has:

- Chest pain or breathing trouble.
- High fever or severe lethargy.

Accommodations for Students with SCD

- **Hydration:** Allow carrying water bottles.
- **Restroom Access:** Provide frequent bathroom breaks.
- **Temperature Sensitivity:** Exempt from outdoor activities in extreme heat or cold.
- **Physical Activity:** Modify P.E. to avoid strenuous exercises; provide frequent breaks.
- **Classwork Flexibility:** Offer extended deadlines or reduced assignments after absences.

Resources for Parents

- The Virginia Department of Health has the following resources for parents:
- Free testing
- Test results and genetic counseling
- Newborn screening
- Referrals to care centers and education support

Post test

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Additional Resources

- CDC Sickle Cell Disease: www.cdc.gov/ncbddd/sicklecell
- Sickle Cell Info Center: www.scinfo.org
- Comprehensive Pediatric Centers in Virginia.

References

Virginia Department of Health. (2020). *Sickle cell school handbooklet*. Virginia Department of Health. https://www.vdh.virginia.gov/content/uploads/sites/65/2020/10/Sickle-Cell-School-Handbooklet-2020WEB.pdf