

A Teacher's Guide to Sickle Cell Disease

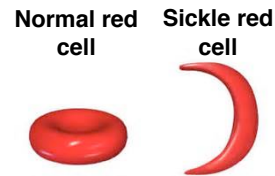
What is Sickle Cell Disease (SCD)?

SCD is an inherited blood condition which affects about 1:150 children born in Jamaica. It affects the red, oxygen-carrying protein, haemoglobin (Hb), in the red cells. Most people have Hb A but when you have SCD most of your haemoglobin is Hb S. This causes the red cell to change shape.

(See "What is Sickle Cell Disease?" for more information.)

What are the symptoms?

- Rapid destruction of red cells causes anaemia (weak blood). Your student may tire more easily especially during PE classes. This increased break down of red cells also causes jaundice or yellowing of the eyes.
- The sickle shaped cells may also block blood vessels in the body which can lead to pain, breathing difficulties and strokes in children.



Can a child with SCD participate in school activities?

Absolutely! They should be encouraged to participate in all school activities **BUT** to their personal limit. They should be allowed to stop if they start having pains or feel short of breath. Additionally, they should be encouraged to drink extra fluids as dehydration can cause sickle cell problems.

Getting cold and wet can occasionally bring on pains, so swimming may be a problem in some children but everyone is different. In general, they should not play in water for long periods, and should dry off quickly and change into warm dry clothes ASAP.

There are two exceptions where children should not be allowed to participate in sports:

- Avascular necrosis (AVN) of the hip – this is damage to the hip joint from poor blood flow. Children with AVN should not weight bear and should use crutches at **all** times when moving about, to help their hip to heal.
- Leg ulcers – these sores about the ankle are a common problem, especially in adolescents and they may take a very long time to heal. They are not infectious. Keeping the foot elevated is one of the most important ways to promote healing.

Is there anything you can do?

1. Watch out for teasing. Children can be unkind to other children who are different. Children with SCD tend to be smaller than average, have yellow eyes (jaundice), may use crutches or may have sores on their leg. Protect them from this by explaining the disease to other children.
2. Children with SCD are encouraged to drink a lot of water and they do not concentrate their urine well. You should therefore allow more frequent bathroom breaks.
3. Children with SCD miss more school than average as they may have routine clinic or doctor's appointment or because they are unwell at home or have been admitted to hospital. To make up for these absences, they should be given encouragement, extra help and remedial help. Although there are many people with SCD who have achieved academically, SCD can affect the ability to learn quickly in some children. Falling behind or increasing difficulty with learning may be a sign that the child has had a mild stroke. You should discuss these changes with the parents so they can talk to their doctors. You should also refer for educational assessment, where available, if required. Patience and guidance are essential if the child is to achieve his/her true potential.
4. Look out for signs of new medical problems. If the child looks paler than usual or has a high fever – seek medical help immediately. If they complain of pain, allow them to lie down, give them extra fluids to drink and a pain killer like paracetamol.

You can help prevent or minimise many of the problems of this disease so that the child can grow up to be a productive member of society.