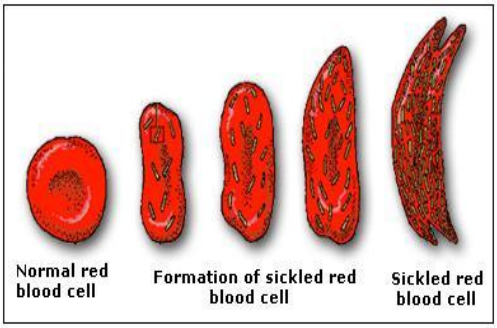
Sickle cell anaemia

Sickle cell anaemia is a genetic (inherited) blood disorder that mostly affects people of African ancestry, but also occurs in other ethnic groups, including people who are of Mediterranean and Middle Eastern descent.



With sickle cell anaemia the red blood cells which carry oxygen around the body develop abnormally, rather than being round and flexible, the cells become shaped like a crescent (or sickle shaped).

These abnormal red blood cells can then clog sections of blood vessels leading to episodes of pain which can be severe. These episodes are called a **sickle cell crisis**. They can last from a few minutes to several months, though on average most last five to seven days. The abnormal blood cells have a shorter life-span and are not replaced as quickly as normal; this leads to a shortage of red blood cells, called anaemia.

Episodes of pain during a sickle cell crisis are one of the most common and upsetting symptoms of the condition. A sickle cell crisis is triggered when the abnormal blood cells block the small blood vessels that supply the body's tissues. This causes the cells in the affected tissue to be damaged, resulting in swelling (inflammation) which irritates nearby nerve endings.

During a sickle cell crisis, **younger children may develop painful swelling in their hands or feet**. This is often the first noticeable symptom. As a child grows older, pain can affect any area of the body, although the most common areas are: Ribs, spine, pelvis, abdomen, sternum (breastbone), long bones in the legs and arms.

People with sickle cell anaemia describe the pain as **aching, throbbing, sharp and shooting, penetrating, or burning.**

A sickle cell crisis can often occur for no apparent reason, though there are certain triggers, such as:

- Sudden changes in body temperature; either the result of an infection causing a high temperature or a change in the outside environment.
- Dehydration (a lack of water in the body).
- The body suddenly becoming short of oxygen as a result of exercise, sudden exertion or stress.

If a child in your care has sickle cell anaemia it is **essential that you have an agreed plan of action**. In the event of a sickle cell crisis staff must follow the plan which will probably include **contacting the parents/ carers.**

Thalassaemia is the name given to a group of inherited blood disorders that affect the body's ability to create red blood cells. In cases of thalassaemia, the bone does not produce haemoglobin, causing anaemia and reduced oxygen-carrying capacity. If your body does not receive enough oxygen, you will feel **tired, breathless, drowsy and faint.** The most serious types of thalassaemia can cause other complications, including **organ damage, restricted growth, liver disease, heart failure and death.**

For more information contact:

- Sickle Cell Society, United Kingdom Thalassaemia Society
- NHS Choices