

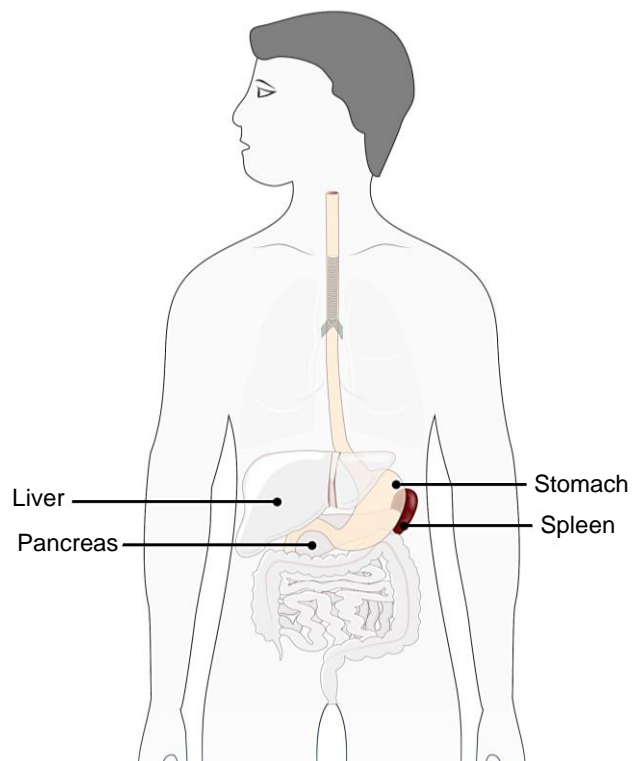


Sickle Cell Disease and Spleen Crisis

The spleen is a small organ that is in the upper left side of the belly, usually under the ribs (Picture 1). The spleen's job is to prevent serious infections by filtering out any germs that get into the blood. When someone has sickle cell disease (SCD), the spleen does not work like it should.

With SCD, your child is at higher risk of infections. These problems with the spleen can also occur:

- **Poor function:** Sickled blood cells are hard, sticky, and banana-shaped. Repeated sickling in the spleen causes scarring, making the spleen not work very well.
- **Spleen crisis: This is a medical emergency.** It is also called splenic sequestration (seh-kwuh-stray-shun). This is when red blood cells get trapped in the spleen, causing severe anemia.



Picture 1 The spleen is on the left side of the body. It is under the ribs and close to the stomach.

Spleen Crisis

Red blood cells can become clogged in the spleen and get trapped. These stuck cells cause the spleen to grow and fill up with blood.

- Trapped blood in the spleen keeps blood from flowing to other parts of the body. This means there isn't as much oxygen carried to other parts of the body, like the brain, lungs, and heart. This is a medical emergency.
- A spleen crisis mostly happens in younger children with an enlarged spleen. This means their spleen is bigger than it should be.

Spleen Size

The sickle cell team will teach you how to feel for your child's spleen during clinic appointments. You can also refer to Picture 1 on page 1.

- Some children with SCD will have a big spleen. This may be normal for them. Talk to the doctor or health care provider to know what size is normal for your child.
- **It is very important to feel for your child's spleen when they're sick.** Their body breaks down more blood cells when they're sick. There is a higher chance of blood cells clogging in the spleen.

Treatment

A spleen crisis is a medical emergency and should be treated in a hospital. It's usually treated with a blood transfusion. Your child will need to be watched closely by the health care team.

- If your child has had one episode of spleen crisis, they are at a higher risk of having a second episode.
- Some children may need to have their spleen surgically removed. If your child has more than two spleen crisis episodes, the Sickle Cell team will talk to you about possibly having surgery to remove the spleen.

When to Call the Doctor

Call your child's doctor or health care provider if their spleen is larger than usual.

- **Check your child's spleen size regularly if they have any of these signs of a spleen crisis:**
 - Pale skin
 - Yellow eyes
 - Belly pain
 - Fever
 - Fast heartbeat
 - Problems breathing
 - Fussy or irritable
 - More tired than usual
- If your child gets sick during the day, call the sickle cell nurses at (614) 722-8914 Monday through Friday, 8 a.m. to 4:30 p.m.
 - If they are not available, please call the Sickle Cell Clinic at (614) 722-3250.
 - On evenings, weekends, and holidays, call (614) 722-2000 and ask for the hematologist on call.