

Sickle cell disease (SCD): fever and infection



What is a fever?

- A fever for children with sickle cell disease is when the body temperature is 101°F (38.3°C) or higher. It is measured by using a thermometer.
- A fever is often the first sign of an infection. **Infections must be treated quickly.**

What is an infection?

An infection is when germs (bacteria or virus) grow or travel to any part of the body. Infections are a big danger to children with sickle cell disease. Children with sickle cell disease:

- Have a higher chance of getting infections than those who do not have sickle cell disease.
- Can have any infection at any time during their lives.
- **Can die from infections caused by bacteria if they are not treated in time.**

What type of infection could my child have?

Your child can have an infection in the:

- Lungs (pneumonia)
- Blood (bacteremia or sepsis)
- Bowel (gastroenteritis)
- Bladder or kidneys [urinary tract infection (UTI) or pyelonephritis]
- Bone (osteomyelitis)
- Brain (meningitis)
- Ear and throat

Why is my child at higher risk for infection?

- The spleen is one of the organs in the body that helps to fight infection. In sickle cell disease, the spleen does not work as it should. This is due to damage from the sickle red blood cells.
- When there is damage to the spleen, it cannot fight off infections well.
- Damage to the spleen starts when a child is younger than 1 year old.
- Children with HbSS and HbS beta zero thalassemia have much lower spleen function.

What should I do if my child has a fever?

- Take your child's temperature anytime they act or look sick.
 - **Have a thermometer at home, and know how to use it.**
 - Make sure that others taking care of your child know how to use it, too.
 - If your child has a fever of 101°F (38.3°C) or higher, call your child's doctor **right away**.
- **Fever is a medical emergency.** Do not wait until the next day to call the clinic or your primary care doctor. Call the on-call doctor if needed.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

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- Be ready to take your child to the emergency department (ED) or clinic.
- If your child has a fever, do **NOT** give them acetaminophen (Tylenol or less costly store brand), ibuprofen (Motrin, Advil or less costly store brand), or any other medicines that have acetaminophen or ibuprofen in them.
 - These medicines can bring down the fever, but they do not treat the cause of the fever.
 - **Always** check your child’s temperature before giving them pain medicine.



What other symptoms could my child have?

If your child has a fever, they may also have 1 or more of these:

- Cough
- Chills
- Cold symptoms like a stuffy or runny nose
- Body aches
- Does not want to eat or play
- Feels weak or tired
- Headache
- Vomiting (throwing up) or diarrhea (loose stools)

What is the treatment for a fever?

Most often, fever is a sign of infection. Infections caused by bacteria can be very serious. **Getting treatment for your child right away can help to save their life.**

If your child has a fever, take them to see a doctor **right away**. Your child will need:

- A complete physical exam.
- Blood tests (labs) to check their blood count and find out if they have any germs in their blood (a culture).
- Other tests that depend on your child’s symptoms. These tests may include a chest X-ray and a urine test.

What happens if my child has to stay in the hospital?

Your child may have to stay in the hospital for more care. Most often, children younger than 6 months old with fever have to stay for at least 1 day. If your child’s tests show they have an infection, they will need to stay longer.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

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In the hospital, your child may need:

- Strong antibiotics given through a vein (I.V.) or into the muscle (a shot) to help fight the infection
- I.V. fluids
- Medicines to help treat their fever
- Vital signs (temperature, pulse, breathing rate and blood pressure) and oxygen level checks
- A physical exam each day
- Blood tests

Your child may go home when they:

- Are feeling better.
- Have no fever.
- Have blood tests that show no signs of an infection.

What happens when my child goes home?

Make sure you understand and follow all of your child's discharge instructions.

- **Take your child to the clinic for follow-up care as advised by the doctor.**
- If your child is still taking antibiotic medicines, give them for the full time prescribed, even if they feel better.
- Ask your child's doctor about whether it is OK to give acetaminophen (Tylenol or less costly store brand) or ibuprofen (Motrin, Advil or less costly store brand) for fever.

DO NOT:

- Give your child more than 5 doses of acetaminophen in a 24-hour period.
- Give acetaminophen to babies younger than 3 months of age without a doctor's order.
- Give ibuprofen to babies younger than 6 months of age without a doctor's order.

How can I help prevent fever and infections?

To help prevent infection, follow these guidelines:

- Your child's doctor may order an antibiotic to help prevent infections caused by bacteria (germs).
 - It does **not** prevent all infections.
 - **Give the medicine as your child's doctor directs. This is very important.**
- Have your child get immunizations (vaccines) to help protect their body from harmful germs.
 - Keep your child's vaccines up-to-date.
 - Your child will also need other vaccines as advised by their sickle cell doctor.
- Clean your hands often. Wash them well with soap and water for at least 20 seconds, or use an alcohol-based hand gel or foam. Teach your child and anyone who cares for them to clean their hands often, too.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

SCD: fever and infection, continued

What should I do if my child is sick?

- Follow the doctor's advice for what you should do.
- Call your child's doctor anytime your child has a fever of 101°F (38.3°C) or higher and is sick. Your child will need to see a doctor **right away**.
- When the clinic is closed, call the hematologist on call. They will tell the emergency department (ED) and help with your child's care. The clinic is closed:
 - From 5 p.m. to 8 a.m. during the week
 - On weekends
 - On holidays
- **ALWAYS** tell the ED doctors and staff that your child has sickle cell disease. Also tell them which sickle cell clinic they visit.

For more details on sickle cell disease and services, visit the Children's Healthcare of Atlanta website at choa.org/sicklecell.

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.

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