

Pediatric Sepsis

What is sepsis?

Sepsis is the body's extreme response to an infection. **Sepsis is a life-threatening medical emergency.**

- Sepsis can develop after getting an infection from a bacteria, fungus, or virus. The infection might come from a scrape somewhere on the body, the lungs (pneumonia), the urinary tract (urinary tract infection) or somewhere else. The infection can cause a "chain reaction" of problems throughout your body, causing sepsis.
- If left untreated, sepsis can cause tissue damage and organ failure. When the body's organs (lungs, kidneys, liver) stop functioning, the body can develop **septic shock**. Septic shock is dangerously low blood pressure. Sepsis and septic shock can lead to death.

Who is at risk of developing sepsis?

Children with a weakened immune system caused by chemotherapy, chronic illness, or other complex medical conditions have an increased risk of developing sepsis from an infection. Also, premature babies (babies born early) and infants and children with recent severe illness can be much more likely to develop sepsis.

It is important to get medical help for your child if their infection is not improving or getting worse.

What are the signs of pediatric (child) sepsis?

It can be hard to recognize sepsis in children, because many of the symptoms of sepsis are similar to other illnesses. Some possible signs of sepsis include:

- Fever
- Being tired or more sleepy than normal
- Nausea and vomiting
- Dizziness
- Dehydration
- Less urine (pee) and fewer wet diapers
- Not eating or eating much less than normal
- General pain or discomfort

If your child is at increased risk for developing sepsis, get medical care and advice early and often throughout the course of your child's illness.

If you are concerned your child has sepsis, act fast and get medical help immediately. Call your pediatrician or 911.

If my child has sepsis, how will they be treated?

Once your child arrives at Mott Children's Hospital, they will start receiving care and treatment for sepsis quickly.

- Doctors will place an IV (a needle into your child's vein) to give them fluids and medication as needed.
- Doctors will do tests, including blood work. A blood culture and a lactic
 acid blood sample will be sent to the lab. Lactic acid is a chemical the
 body may make when sick. If the lactic acid level is high, it may be a sign
 of sepsis.
- Doctors may give your child broad spectrum antibiotics. These antibiotics are strong medications that will help treat infections.

- If your child's blood pressure is not normal for them, doctors may give you child other medications to help your child's blood pressure return to normal.
- Your child's care team may order other studies or tests to help them figure out where their infection is coming from.
- The care team may also provide interventions and treatments specific to your child's needs to help them heal. These may be needed to reduce your child's pain or discomfort.
 - o Treatments may or may not include medication.
 - Your child may need breathing support. This may include breathing treatments or a nasal cannula (a tube connected to the nose) to give them oxygen.
- Your child may be transferred to the Pediatric Intensive Care Unit (PICU) for closer monitoring (checking on their health) and treatment.

All of C.S. Mott Children's Hospital pediatric care providers are trained to recognize and treat sepsis early.

What the best ways to prevent and fight sepsis?

You can help to prevent sepsis by:

- Washing your hands and teaching children to wash their hands. Washing hands with soap and water for at least 15 seconds or using hand sanitizer will help reduce the chance of your child getting sick.
- Keeping cuts and wounds clean and covered until they are healed
- Making sure your child's vaccinations up to date. Including the yearly flu vaccine
- Getting medical help if an infection is not getting better

Preventing infection is the best way to fight sepsis. Acting fast is the best way to stop sepsis.

Who should I contact if I have questions or concerns about pediatric sepsis?

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