

Name of Child: _____ Date: _____

Sepsis

What is sepsis?

Germs cause infection. There are many different types of germs, including: bacteria, viruses, fungi, and parasites. When germs attack, the body fights germs by:

- finding the germ
- moving the germ to a place where it can easily be killed (such as a lymph node in the groin or behind the ear)
- killing the germ
- remembering the germ so next time one like it comes into the body, it can be killed quickly

This is all done by the body's immune system. It is called the **inflammatory response**.

When the body loses this fight and the germs start to win, the germs get into the blood. When these germs in the blood are bacteria, it is called **bacteremia**.

Sometimes, when the infection is bad, the body may work very hard to fight the germs. The body may fight so hard, it gets out of control, and hurts its own tissues. This is called **sepsis**. Another name for sepsis is **septicemia**. Sepsis could cause harm to the organs (**shock**), permanent body damage, or death.

A child who has sepsis is very sick and needs treatment right away.

What causes sepsis?

Sometimes, babies' bodies cannot fight germs well because their immune systems are too young. Some older children have trouble fighting off germs because of illnesses or treatments. When a child's body has trouble killing germs, there is a risk the germs could spread into the blood.

An infection from any kind of germ can lead to sepsis. In **severe sepsis**, the child's organs, like the heart or kidneys, fail.

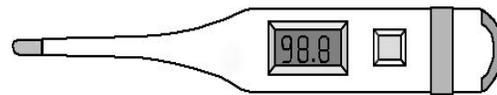
Sepsis in babies is usually caused by bacteria. The most common bacteria that causes sepsis in newborn babies is GBS (**Group B streptococcus**). This may be passed from the mother to her baby at birth. Pregnant women can be tested for this bacteria before they give birth. Antibiotics may be given to the mom to help keep this bacteria from passing from the mother to the baby.

In children, sepsis is often caused by the germ **Streptococcus pneumoniae** (**pneumococcus**) or Haemophilus influenzae type b. Baby shots (**vaccines** or **immunizations**) help prevent this type of infection.

How do you know if my child has sepsis?

A baby or child with sepsis may:

- not want to eat
- have trouble eating
- have fever over 100.4° F
- have a temperature that is too low
- seem too sleepy or tired
- be cranky or hard to calm
- have skin that is pale, mildly blue, or yellow (**jaundice**)
- breathe very fast
- have trouble breathing
- stop breathing for more than 12 seconds (**apnea**)
- have a very fast heart rate or a very slow heart rate
- be floppy or stiff
- have a full or bulging soft spot (**fontanel**) on the head
- just not look or act right



One sign of sepsis is fever.

These signs may be seen in many different illnesses. To know if the child has sepsis, the doctor needs to do some tests. These tests can look for infection in the blood, urine, spinal fluid, and lungs. If your child has a shunt or other medical devices, the doctors may check for germs there, too. Together, these tests are called a **sepsis work-up**.

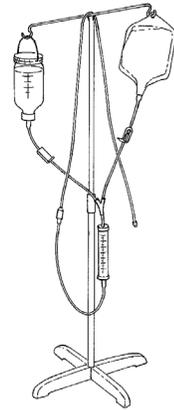
It may take several days for the test results to show which germ is causing the infection. Sometimes the cause is not found.

For more information, ask your nurse or doctor for the handout: **How to Take Your Child's Temperature**, #533.

For more information, ask your nurse or doctor for the handout: **Spinal Tap or Lumbar Puncture**, #178.

How is sepsis treated?

If the doctor thinks your child may have sepsis, treatment may begin right away. Since germs cause sepsis, your child will get medicine to kill the germs, called **antibiotics**. High doses of these antibiotics are given through a small, plastic tube in your child's vein (**intravenous** or **IV**). If these high doses were given by mouth, they could give your child a stomach ache, nausea, or cause your child to throw up.



For more information, ask your nurse or doctor for the handout: **IVs**, #107.

For more information, ask you nurse or doctor for the handout, **Antibiotic Use**, #1701.

High doses of antibiotics are given by IV.

When the test results (**blood culture studies**) come back, they may show what germ is causing the infection. If so, the doctor will know if the infection can be treated with the medicine your child is now getting. The treatment may change, stay the same, or your child may not need medicine at all.

When sepsis is not treated or the treatment does not work, a child can get **severe sepsis**. In severe sepsis, the child's organs may fail. The child can get heart or lung problems, kidney failure, hearing problems, or brain damage. Babies and children with severe sepsis may die.

When to Call Your Child's Doctor:



A baby or child with sepsis may not look right. If your child has any of the signs of sepsis, call your child's doctor or go to the emergency room right away.

Now that you've read this:

- Tell your child's nurse or doctor what sepsis is, and how a child with sepsis looks. (Check when done.)
- Tell your child's nurse or doctor how sepsis is treated. (Check when done.)



If you have any questions or concerns,

- call your child's doctor or
- call _____

If you want to know more about child health and illness,
visit our library at The Emily Center at Phoenix Children's Hospital
1919 East Thomas Road
Phoenix, AZ 85016
602-933-1400
866-933-6459
www.phoenixchildrens.org
Facebook: facebook.com/theemilycenter
Twitter: [@emilycenter](https://twitter.com/emilycenter)
Pinterest: pinterest.com/emilycenter

Disclaimer

The information provided at this site is intended to be general information, and is provided for educational purposes only. It is not intended to take the place of examination, treatment, or consultation with a physician. Phoenix Children's Hospital urges you to contact your physician with any questions you may have about a medical condition.

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#350 • Written by Fran London, MS, RN • Updated by Nicki Mitchell, MSN, RN
Illustrated by Dennis Swain and Cynthia Larkin

Sepsis

Name of Health Care Provider: _____

Date returned: _____ db

Family Review of Handout

Health care providers: Please teach families with this handout.

Families: Please let us know what you think of this handout.

Would you say this handout is hard to read? Yes No

easy to read? Yes No

Please circle the parts of the handout that were hard to understand.

Would you say this handout is interesting to read? Yes No

Why or why not?

Would you do anything differently after reading
this handout? Yes No

If yes, what?

After reading this handout, do you have any
questions about the subject? Yes No

If yes, what?

Is there anything you don't like about the drawings?

Yes

No

If yes, what?

What changes would you make in this handout to make it better or easier to understand?

Please return your review of this handout to your nurse or doctor or send it to the address below.

The Emily Center
Health Education Specialist
Phoenix Children's Hospital
1919 East Thomas Road
Phoenix, AZ 85016-7710

602-933-1395

Thank you for helping us!