



[Home](#) → [Medical Encyclopedia](#) → Fetal scalp pH testing

URL of this page: //medlineplus.gov/ency/article/003408.htm

Fetal scalp pH testing

Fetal scalp pH testing is a procedure performed when a woman is in active labor to determine if the baby is getting enough oxygen.

How the Test is Performed

The procedure takes about 5 minutes. The mother lies on her back with her feet in stirrups. If her cervix is dilated at least 3 to 4 centimeters, a plastic cone is placed in the vagina and fit snugly against the scalp of the fetus.

The scalp of the fetus is cleansed and a small blood sample is taken for examination. The blood is collected in a thin tube. The tube is either sent to the hospital lab or analyzed by a machine in the labor and delivery department. In either case, results are available in just a few minutes.

If the woman's cervix is not dilated enough, the test cannot be done.

How to Prepare for the Test

Your health care provider will explain the procedure and its risks. There isn't always a separate consent form for this procedure because many hospitals consider it part of the general consent for delivery form you signed at admission.

How the Test will Feel

The procedure should feel like a long pelvic exam. At this stage of labor, many women have already had epidural anesthesia and may not feel the pressure of the procedure at all.

Why the Test is Performed

Sometimes fetal heart monitoring doesn't provide enough information about the well-being of a baby. In these cases, testing the scalp pH can help your provider decide whether the fetus is getting enough oxygen during labor. This helps determine whether the baby is healthy enough to continue labor, or if a forceps delivery or cesarean birth (C-section) might be the best route of delivery.

Although the test is not uncommon, most deliveries do not involve fetal scalp pH testing.

This test is not recommended for mothers with blood infections such as HIV/AIDS or hepatitis C.

Normal Results

Normal fetal blood sample results are:

- Normal pH: greater than 7.25
- Borderline pH: 7.20 to 7.25

The examples above are common measurements for results of these tests. Normal value ranges may vary slightly among different labs. Some labs use different measurements or test different samples. Talk to your provider about the meaning of your specific test results.

What Abnormal Results Mean

A fetal scalp blood pH level of less than 7.20 is considered abnormal.

In general, low pH suggests that the baby is not getting enough oxygen. This may mean that the baby is not tolerating labor very well. The results of a fetal scalp pH sample need to be interpreted for each labor. Your provider may feel that the results mean the baby needs to be delivered quickly, either by forceps or by C-section.

Fetal scalp pH testing may need to be repeated a few times during a complicated labor to keep checking on the baby.

Risks

Risks include the following:

- Continued bleeding from the puncture site (more likely if the fetus has a pH imbalance)
- Infection
- Bruising of the baby's scalp

Alternative Names

Fetal scalp blood; Scalp pH testing; Fetal blood testing - scalp; Fetal distress - fetal scalp testing; Labor - fetal scalp testing

References

Acharya KK, Sprecher AJ, Cohen SS. The fetus. In: Kliegman RM, St. Geme JW, Blum NJ, et al., eds. *Nelson Textbook of Pediatrics*. 22nd ed. Philadelphia, PA: Elsevier; 2025:chap 117.

Cahill AG, Frey HA. Intrapartum fetal evaluation. In: Landon MB, Galan HL, Jauniaux ERM, et al, eds. *Gabbe's Obstetrics: Normal and Problem Pregnancies*. 9th ed. Philadelphia, PA: Elsevier; 2025:chap 17.

Review Date 7/7/2024

Updated by: John D. Jacobson, MD, Professor Emeritus, Department of Obstetrics and Gynecology, Loma Linda University School of Medicine, Loma Linda, CA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

Learn how to cite this page



Health Content
Provider
06/01/2028

A.D.A.M., Inc. is accredited by URAC, for Health Content Provider (www.urac.org). URAC's [accreditation program](#) is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s [editorial policy](#), [editorial process](#), and [privacy policy](#).

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Links to other sites are provided for information only – they do not constitute endorsements of those other sites. No warranty of any kind, either expressed or implied, is made as to the accuracy, reliability, timeliness, or correctness of any translations made by a third-party service of the information provided herein into any other language. © 1997-2025 A.D.A.M., a business unit of Ebix, Inc. Any duplication or distribution of the information contained herein is strictly prohibited.



National Library of Medicine 8600 Rockville Pike, Bethesda, MD 20894 U.S. Department of Health and Human Services

National Institutes of Health