Carrier Screening for Cystic Fibrosis (CF)

Who: Available to all pregnant women and their partners.

Why: To check whether or not a person carries the abnormal gene that causes cystic fibrosis, an inherited disease that affects breathing and digestion. There is no cure for CF.

When: Before or in early pregnancy.

How: A blood or saliva sample is taken.

Risks: None, except possible bruising or soreness at the needle site. In some rare cases, the test fails to identify a person who has the abnormal gene that causes CF.

Cystic fibrosis (CF) is a genetic (inherited) disease. About 30,000 children and adults in the United States have the disorder. Cystic fibrosis severely affects breathing and digestion. It is caused by an abnormal gene that makes the body produce thick mucus in the lungs. This mucus promotes infections that are often life threatening. In the pancreas, similar thick secretions can lead to serious problems with food absorption. People with CF usually survive into their 30s. Researchers continue to search for more effective CF treatments as well as a cure.

CF carrier testing is a blood or saliva test. It checks to see if parents-to-be have (carry) the abnormal gene that causes CF. The test can help determine if you're at increased risk for having a child with CF.

The only way to get CF is to have two genes that cause CF—one from your mother and one from your father. This means that both parents are CF carriers. A CF carrier has only one CF gene and has no CF symptoms. You could inherit the CF gene from one of your parents and never even know it.

If only one parent from a couple is a CF carrier, none of the children will have CF. But there is a 50-50 chance that each child will be a symptomless carrier.

When both parents carry the CF gene, there is a 25% chance (1 in 4) that their child will have CF. There is a 50-50 chance that the child will be a carrier like the parents. And there is a 25% chance that the baby will not have the gene—not a carrier and not have the disease.

Are You or Your Baby's Father Likely to be a CF Carrier?
Approximately 1 in 30 Americans is a symptomless carrier of the CF gene. If you have a family history of CF, you're more likely to carry the gene than someone from an unaffected family.

The risk is increased if you're of Caucasian background. If so, you have a 1-in-29 chance of carrying the gene, compared to 1-in-46 for people of Latino background, 1-in-65 for African-Americans, and 1-in-90 for Asian-Americans.

Remember that the only way you can pass CF to your baby is if both you and the baby's father have the CF gene. Luckily, this is pretty rare.

If test results show that both parents are CF carriers, your health care provider can test the baby in utero. If the baby has CF, parents can take time before delivery to learn more about the disease and find appropriate specialists.

The American College of Obstetricians and Gynecologists (ACOG) recommends that health care providers make the CF carrier screening test available to all couples. Deciding whether or not to have the test is your own personal choice. Talk it over with your partner and with your health care provider and get as much information as you need to decide what's right for you and your baby.

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