Screening for Carriers of Cystic Fibrosis

What is Cystic Fibrosis?

Cystic fibrosis is a genetic disease. Genes for this disease are inherited from the parents. Persons with the gene for cystic fibrosis are carriers. Both parents would need to be carriers to pass this disease to their child. When both the father and mother are carriers, the baby has a 1 in 4 chance of having cystic fibrosis.

Cystic fibrosis causes the body to produce very thick and sticky mucus. This thick mucus in the lungs can cause problems with breathing. The mucus can also affect the pancreas, blocking enzymes that help digest food. Treatment is available but there is no cure. Persons with cystic fibrosis often have shortened life spans.

Most common among Caucasians, other races and ethnic groups may have less risk for cystic fibrosis. European Caucasians have the highest rate with 1 in 29 having the cystic fibrosis gene. It has been estimated that one in 31 Americans carry the gene for cystic fibrosis without knowing it.

Who should have the screening done?

This screening is offered to couples planning pregnancy or those seeking prenatal care. The decision to be screened is a personal one. Talk to your doctor about your concerns or questions.

- Think about your risk. Do you have cystic fibrosis in your family? Are you in a racial or ethnic group that is at higher risk?
- Are you concerned about having a baby with cystic fibrosis?
- Why would I do the screening? What will I do with the information from the results?
- Will insurance cover some or all of the cost of the screening?

The screening may not detect all carriers. The accuracy of the testing is better in certain groups because there have been more tests done to compare results. Having a negative screening result will reduce your risk of being a carrier, but it doesn’t guarantee that you are not a carrier.

How is the screening done to check if I am a carrier?

A blood sample is needed to screen for the carrier gene. The blood is sent to a lab and tested to see if the gene is present. The results of your test will be shared with you. Your consent will be needed for your test results to be given to anyone else. Please ask your doctor if you have any other questions about the screening.

If you would like more written information, please call the Center for Health Information at (614)293-3707. You can also make the request by e-mail: health-info@osu.edu.

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Obstetrics & Gynecology Clinic
The Ohio State University Medical Center

Upon request all patient education handouts are available in other formats for people with special hearing, vision and language needs, call (614) 293-3191.