

MATERNAL SERUM SCREENING

AFP

What is Alpha-Fetoprotein (AFP)

Alpha-fetoprotein (AFP) is a protein produced by a growing fetus. It is present in amniotic fluid, fetal blood, and, in smaller amounts, in the woman's blood. The AFP test is offered at 15-20 weeks of pregnancy in most cases.

What is the purpose of screening?

This test is used for screening only purposes. The screening process requires a small amount of blood to be drawn from the mother's arm which, when positive, will help identify those pregnancies that may be at increased risk for fetal abnormalities known as neural tube defects and Down's syndrome. **This test is optional and is up to you whether you are tested.** If you would like to be tested, please discuss this with your physician.

What is Down's syndrome?

Formerly called mongolism, this disorder is characterized by the presence of an extra chromosome, varying degrees of mental retardation, and an increased risk for physical defects.

Women of any age can give birth to a baby with Down's syndrome, though the risk does increase with the woman's age. More than 95% of couples who have a child with Down syndrome have no family history of the condition.

Risk of Having a Live Baby with Down Syndrome

Mother's Age	Risk of Down Syndrome
20	1/1,667
25	1/1,250
30	1/952
35	1/378
40	1/106
41	1/82
42	1/63
43	1/49
44	1/38
45	1/30

What is a neural tube defect?

This term includes spina bifida (open spine) and anencephaly. Spina bifida results from a failure of the spinal column to fully close. The problems associated with spina bifida will vary with the size, location, and nature of the opening in the spine. Problems range from mild backaches to severe mental retardation, paralysis, bowel and bladder control problems and leg deformities. Generally speaking, serum screening detects the more severe forms of spina bifida.

Anencephaly is a failure of the skull and brain to fully develop. Babies with anencephaly either are stillborn or die soon after birth.

What do the test results mean?

If AFP levels are normal, your risk of having a baby with either an open fetal defect or Down syndrome is low. There is still a chance, though, that the risk of a defect in your baby was not detected by the screening test. No test is perfect. An abnormal result may mean that the fetus was older or younger than thought or that there is more than one fetus. If it is determined that you are at increased risk for fetal abnormalities, further testing will be offered.

What kind of testing is done to evaluate an abnormal or elevated result?

The first test you may be offered is an ultrasound. An ultrasound can help show whether the estimated gestational age (the age of the fetus) is correct. If the pregnancy is further along than was thought, this may change how the results of your test are read. Ultrasound may also reveal that you have twins. It often can determine whether the fetus has a neural tube defect. In about half the cases, the ultrasound explains why AFP levels are high.

If no reason for high AFP levels is found with ultrasound, you may be offered amniocentesis to measure AFP in the amniotic fluid. Amniocentesis is a medical procedure that removes a small amount of fluid from the amniotic sac (bag of water) through a very fine needle inserted through the mother's abdomen. It is generally regarded as a safe procedure, but does have a low risk of miscarriage.

I have read this material and understand the risks and benefits of maternal serum screening and DO NOT CHOOSE to have these tests done.

Patient Signature _____ Date _____