

What Is the Integrated Screen?

Every year that a woman gets older, her risk for chromosomal abnormalities in pregnancy goes up. The Integrated Screen is a series of blood tests, together with an ultrasound measurement of the back of the baby's neck, which give us an estimation of the chances that THIS PREGNANCY has a chromosomal problem. One chromosomal problem that people are familiar with is having a third copy of chromosome 21. This is commonly known as Down's Syndrome. There are other, more dangerous, chromosomal problems as well, but they are more rare.

The first part of the integrated screen takes place before the completion of the 14th week. It consists of a blood test from your arm and an ultrasound for the nuchal translucency measurement. These must be done in the same day.

The next step is another blood draw between 16 and 19 weeks pregnant. This is when the levels are highest and the interpretation of these tests are more accurate. After 19 weeks the levels decrease and the test cannot be done accurately. It is important that your due date is established in order for the test to be properly interpreted.

What are the benefits of testing?

Most often, the test reassures you that the chances of these serious abnormalities is very low. If the test shows an increased risk, then further testing is available. Abnormal results can help you and your provider better manage your pregnancy. If a problem is found, you will be able to discuss options and make plans for your delivery.

How accurate is the test?

The test is not 100% accurate. This screen is about 95% accurate. This means that some babies will be normal even though the test is abnormal and vice versa. There is no test that can guarantee a normal baby. If the Integrated Screen flags your pregnancy as high risk for chromosome problems, you will be sent for an amniocentesis or a chorionic villous sampling. These are the only tests available that are better than the Integrated Screen, but they involve putting needles inside with the baby. If you would like one of these tests instead of the Integrated Screen, please let your provider know.

Who should have this test?

All pregnant women should be offered the Integrated Screen. The test is especially important if there is:

A personal or family history of birth defects

Maternal age is 35 or older

A history of medication use that could cause birth defect

A personal history of diabetes

What does an abnormal result mean?

Some test abnormalities may show a higher risk for problems with the spinal cord, brain or digestive system, These include:

Spina bifida (the spine does not close normally)

Anecephaly (the brain or parts of the brain are missing)

Omphalocele (failure of the baby's abdomen to close so the intestines are in a sac outside the abdomen)

Renal agenesis (failure of the fetal kidneys to form properly)

What is the next step after an abnormal test?

Abnormal results indicate the need for further testing. You will be scheduled to see a perinatologist. This is a specialty that involves the diagnosis of disease in unborn children. The perinatologist will take a detailed history and perform a targeted ultrasound. The ultrasound can be helpful in some cases of finding actual defects or may indicate further testing is necessary. Amniocentesis gives a more complete picture of chromosomal abnormalities.

What about other birth defects?

Multiple other birth defects are possible but are not detected by the Integrated Screen. Type 1 diabetes; certain medications, alcohol abuse and cigarette smoking can all cause birth defects. Most often, the cause is simply unknown.