Quad Screen
A guide to prenatal testing

What is a quad screen?
A quad screen is a test done during pregnancy that tells you the chance of your baby having Down syndrome, trisomy 18, or spina bifida. The quad screen does not diagnose these conditions.

How is a quad screen done?
To have a quad screen, you will need to give a small blood sample between weeks 15 and 22 of pregnancy. The amounts of 4 proteins and hormones are measured. These substances are made by the baby and placenta, and they are found in every pregnant woman’s blood. The amounts of these proteins and hormones are often different when the baby has Down syndrome, trisomy 18, or spina bifida.

What do I learn from a quad screen?
A quad screen has 3 results, which are numbers such as “1 in 4,000 (0.025%)” or “1 in 75 (1.3%).” These numbers are the odds, or chances, that your baby has Down syndrome, trisomy 18, or spina bifida. Results are usually available within a week after the blood draw.

The quad screen can detect 84% of cases of Down syndrome, 73% of cases of trisomy 18, and 80% of cases of spina bifida. But, it will not detect all cases of these birth defects, and it does not test for any other health problems. If you are having a multiple birth, a quad screen is less accurate, but it may still be helpful.

What are the benefits of a quad screen?
A quad screen provides you with information about your baby’s health without any risk to your pregnancy.

What are the risks of a quad screen?
Most people are worried when they get an abnormal quad screen result. It can cause stress for the rest of your pregnancy, especially if you decide not to have all the follow-up testing.
What does a “positive” test result mean?

A few women (about 5%, or 1 out of 20) will have a “positive” quad screen. This does not mean their baby has a birth defect. It only means that the risk of their baby having 1 of these 3 conditions is higher than a certain level. Most women who have a positive quad screen result will have a healthy baby.

If your health care provider tells you that your quad screen result is positive, but does not give you the exact risk, you may want to ask for more information. Often, people feel better when they know the exact odds that their baby will have a birth defect. For example, a risk of 1 out of 10 (10%) for Down syndrome also means there is a 9 out of 10 (90%) chance the baby does not have Down syndrome.

If you have a positive quad screen result, your provider will offer you follow-up appointments, such as a visit with a genetic counselor and an ultrasound to carefully examine the baby’s anatomy. You may also choose to have an amniocentesis. Amniocentesis is a test that will tell you whether or not your baby has Down syndrome, trisomy 18, or spina bifida.

What does a “negative” test result mean?

Most women (about 95%, or 19 out of 20) have a “negative” quad screen. This does not mean the baby is completely healthy. It only means that the chance of the baby having 1 of these 3 conditions is lower than a certain level. A few women who have a negative quad screen result will have a baby with Down syndrome, trisomy 18, or spina bifida.