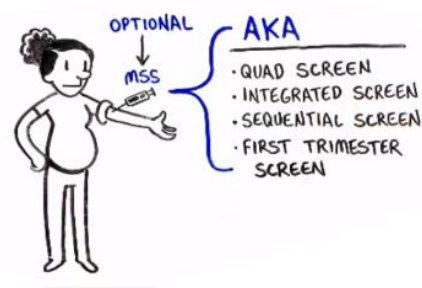


# Traditional Maternal Serum Screening

Traditional maternal serum screening is an optional blood test that can be done during pregnancy. There are many different versions of this testing.<sup>1</sup> This type of testing measures different protein markers in the pregnant woman's blood and can tell you if there is a higher or lower chance for certain genetic and health conditions in the baby. In some cases, this testing also requires a specific ultrasound measurement of the back of the baby's neck known as the nuchal translucency.

Depending on what screening test you have, the blood test may be done in the first trimester, the second trimester, or may require a blood draw in both the first and second trimesters of pregnancy.



## What does traditional maternal serum screening test for?

Traditional maternal serum screening typically provides information about three specific conditions: Down syndrome, trisomy 18 (and sometimes trisomy 13), and open neural tube defects, including spina bifida and anencephaly. The prognosis for these conditions can vary tremendously depending on the condition and even between individuals with the same condition. In some cases, traditional maternal serum screening may indicate a twin pregnancy or a higher chance for other health concerns or genetic conditions in the baby. It is important to know that traditional maternal serum screening cannot detect all genetic conditions or birth defects. No test can guarantee the birth of a healthy baby.

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<sup>1</sup> You may have heard it called the “Quad Screen”, “Integrated Screen”, “Sequential Screen” or “First Trimester Screen”.

## How accurate is maternal serum screening?

Maternal serum screening can never provide a “yes” or “no” answer. It can only tell if the chance is higher or lower for these conditions to be present in the baby. Maternal serum screening results will show a higher chance in most, *but not all*, pregnancies where the baby actually has an open neural tube defect, Down syndrome, or trisomy 18. If the maternal serum screening indicates a higher chance of one of these conditions, then genetic counseling and further testing is usually offered. Some women will decide to have a diagnostic procedure, such as CVS or amniocentesis, so they can know with certainty if the baby has the genetic condition or not.

## What are the risks associated with maternal serum screening?

Maternal serum screening is performed on a sample of a pregnant woman’s blood. While there is no risk for pregnancy complications such as miscarriage, it is important to think about what these test results may mean for you. Most of the time the test will come back low risk and many women feel relief based on these results. However, if the test indicates a higher chance of a genetic condition or health concern it may create worry and uncertainty about what to do next.

## Making a decision that is right for you...

Some women find information from traditional maternal serum screening helpful and some women do not. Traditional maternal serum screening has some benefits and drawbacks when compared to cell-free DNA screening. Whether or not to undergo traditional maternal serum screening should be a choice, and the decision should reflect your values, personality, beliefs, and needs.

You can find more information and videos about prenatal genetic testing options at: [www.doh.wa.gov](http://www.doh.wa.gov) and [www.geneticsupportfoundation.org](http://www.geneticsupportfoundation.org).