

Prenatal Risk Profile

Most babies are born healthy, however occasionally a baby can be born with a birth defect or a significant health problem. The Prenatal Risk Profile is a *screening test* to help identify babies with a certain types of birth defects.

Before birth, babies produce a substance called alpha-fetal protein (AFP) in their brain and spinal cord. The amount of this protein increases as the pregnancy continues. The AFP may be higher in babies who have neural tube defects such as spina bifida or anencephaly. These birth defects affect about 1/1000 babies in the Pacific Northwest. Lower than normal AFP may be associated with Down's syndrome, a chromosomal abnormality found in about 1/600 births.

What is the Prenatal Risk Profile?

The PRP is a blood test which measures the amount of several substances, including AFP, which may help identify babies with open neural tube defects or chromosomal abnormalities. It is done between 16-18 weeks of pregnancy.

Will this test guarantee a healthy baby?

No! The PRP is only a *screening test*. Most birth defects are not detectable by the PRP or by any other test. If an abnormal value is found, additional tests must be run to diagnose whether there is an abnormality. The most common reasons for an elevated AFP test is twins or an incorrect due date. In these cases the only extra testing needed is an ultrasound. An abnormal PRP may be related to a fetal death or a molar pregnancy. The PRP will detect about 70-80% of the cases of spina bifida and 90% of the cases of anencephaly. It will detect 86% of the cases of Down's syndrome. This means some babies with neural tube defects or Down's may go undetected by this test. *No test can guarantee perfection.*

What happens next?

If the test comes back normal	No further testing needed
If the test comes back abnormal	1 st : ultrasound (to rule out twins, date the pregnancy, and look at the spine) 2 nd : repeat or recalculate the PRP 3 rd : genetic counseling, possible amniocentesis

What are some of the benefits of the PRP screening test?

- If the results are normal you can be reasonably assured that your baby is most likely free of open neural tube defects and/or Down's syndrome
- If the results show a problem, it may help you prepare by reading and seeking assistance from specialty organizations that deal with the specific problem. It may also help in making decisions about the place of birth, type of delivery and early care of the baby, all of which can improve the long and short term outlook for an affected child.

What are some of the drawbacks of the PRP screening test?

- Worry and concern about your baby, especially while waiting for test results
- Some women feel detached from their baby during the waiting period
- Cost of testing and follow up testing if the results are abnormal
- The test does not detect all cases of neural tube defects or Down's syndrome
- Considerable stress over deciding what to do if results are abnormal