

## Prenatal Genetic Testing: What we Need to Know Before Making a Decision

Valentina Murray\*

Department of Genetics, Nationwide Children's Hospital, 700 Children's Drive, Columbus, USA

### DESCRIPTION

Prenatal genetic testing is a medical procedure that allows expecting parents to identify any potential genetic abnormalities in their unborn child. These tests can help detect various genetic disorders and chromosomal abnormalities that could cause developmental issues, physical disabilities, or intellectual disabilities in the infant.

Before deciding to undergo prenatal genetic testing, it is essential to understand the different types of tests available, their accuracy, risks, and benefits. In this article, we will explore what we need to know before making a decision about prenatal genetic testing.

### Types of prenatal genetic testing

There are two types of prenatal genetic testing: screening tests and diagnostic tests.

Screening tests are non-invasive and do not carry any risk to the fetus. They analyze the likelihood of the infants having a genetic disorder based on factors such as maternal age, family history, and blood tests. These tests include:

- This test combines an ultrasound and blood test to assess the risk of Down syndrome and other chromosomal abnormalities.
- This test involves a blood test to measure the levels of specific hormones and proteins that can indicate the risk of Down syndrome and other chromosomal abnormalities.

Diagnostic tests, on the other hand, are invasive and carry a small risk of miscarriage. These tests are performed if the screening tests show an increased risk of genetic disorders. Diagnostic tests include:

- This test involves taking a sample of the placenta to test for chromosomal abnormalities.
- This test involves taking a sample of the amniotic fluid to test for chromosomal abnormalities.

### Accuracy of prenatal genetic testing

It is essential to understand that no prenatal genetic test is 100% accurate. Screening tests can indicate a higher risk of a genetic disorder, but they cannot confirm it. Diagnostic tests, on the other hand, are highly accurate, but there is a small risk of miscarriage associated with them.

### Benefits of prenatal genetic testing

The primary benefit of prenatal genetic testing is that it allows parents to prepare for the birth of a child with special needs. Parents can educate themselves about the disorder and seek appropriate medical care and support. They can also make informed decisions about the pregnancy, including whether to continue or terminate it.

### Risks of prenatal genetic testing

There are some risks associated with prenatal genetic testing, primarily with diagnostic tests. These tests carry a small risk of miscarriage, usually around 1 in 300 to 1 in 500. There is also a risk of infection, bleeding, and damage to the fetus. The decision to undergo prenatal genetic testing is a personal one and should be based on our individual circumstances, values, and beliefs. It is essential to speak with our healthcare provider and a genetic counselor to understand the risks and benefits of the tests and the implications of the results. It is also worth noting that prenatal genetic testing is not always necessary or recommended for every pregnancy. Some people may choose not to undergo testing, while others may not be eligible for certain tests due to medical reasons or personal beliefs. If we do decide to undergo prenatal genetic testing, it is important to prepare for the potential outcomes and seek support from healthcare providers, genetic counselors, and support groups. These resources can provide information and guidance on how to navigate any challenges that may arise. Overall, prenatal genetic testing can provide valuable information about the health of our unborn child and allow us to make informed decisions about the pregnancy. However, it is important to consider the risks, benefits, and ethical implications before making a decision. Seeking guidance from healthcare providers and

**Correspondence to:** Valentina Murray, Department of Genetics, Nationwide Children's Hospital, 700 Children's Drive, Columbus, USA, E-mail: Valentinamurray@gmail.com

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counselors can help we make a decision that is right for the family.

## CONCLUSION

In conclusion, prenatal genetic testing can provide valuable information to expecting parents about the health of their unborn child. However, it is crucial to understand the different types of tests, their accuracy, risks, and benefits before making a decision. Seeking the advice of a healthcare provider and a genetic counselor can help we make an informed decision that is right for we and our family. In addition to the risks and benefits of prenatal genetic testing, there are also ethical and

social implications to consider. Some people may be concerned about the potential discrimination that could result from knowing about their child's genetic disorder. For example, in some countries, there may be limited access to healthcare or education for children with disabilities. There may also be stigma or negative attitudes towards people with disabilities, which could affect the child and their family. Another ethical concern is the possibility of selective abortion, where parents choose to terminate a pregnancy based on the results of prenatal genetic testing. This decision can be difficult and controversial, and it is essential to consider the ethical implications and seek guidance from healthcare providers and counselors.