

What is Non-invasive Pre-natal Paternity DNA Test and why is it important?

Non-Invasive Pre-natal Paternity Testing is an increasingly popular and minimally invasive cutting-edge DNA test that determines whether a man is the biological father of a fetus — with no risk to the mother or the unborn child. Unlike traditional prenatal paternity tests that require more invasive procedures like amniocentesis or chorionic villus sampling (CVS), NIPP uses a blood sample from the pregnant woman and a cheek swab from the alleged father for the test.

NIPP is possible because, as early as the 7th week of pregnancy, small fragments of fetal DNA (known as *cell-free fetal DNA*) begin to circulate in the mother's bloodstream. It is now possible to extract and analyze this fetal DNA to compare it with the alleged father's genetic material.

Why Is This Test Important and Popular?

Safe for Mother and Baby

Traditional invasive methods come with risks, including miscarriage. NIPP eliminates those risks entirely, offering peace of mind during a sensitive time.

NIPP can determine the paternity of a developing fetus. The test uses the blood sample from a pregnant woman and cheek swab from the alleged father. The test can be performed after 7 weeks of pregnancy. It is safe for mother and baby and can help in legal disputes and give peace-of-mind before the baby is

Accurate and Reliable

Modern NIPP tests, when performed by accredited laboratories, offer accuracy levels over 99% for paternity inclusion and 0% for exclusion, making the results highly trustworthy. That is the test can determine with above 99% accuracy if a man is the biological father and 100% accuracy if the man is not the biological father.

Early Testing Options

Testing can be done as early as the first trimester — usually around 7–10 weeks — providing answers early in the pregnancy journey. Knowing the biological father in situations where suspicions exist can help with planning for the future.

Legal and Emotional Relevance

In cases of legal disputes, naming traditions, birth registry, immigration applications, or personal reassurance, early paternity answers can guide important decisions regarding naming, custody, responsibility, and family planning.

Applications and Impacts

- **Family Planning**: Helps both parents make informed choices about name, birth registry, future involvement, support, and bonding even before birth.
- Legal Cases: Provides critical evidence in paternity disputes that could affect legal custody or financial responsibility before the baby is born.
- **Healthcare Access**: When paternity is established, the unborn child may qualify for additional health benefits, specialized care or family medical history tracking.
- Peace of Mind: Knowing the truth sooner can significantly reduce anxiety, especially in uncertain or complex relationship dynamics.

Ethical and Social Considerations

While the technology is powerful, NIPP testing also raises questions around consent, privacy, and the potential for misuse. At ITSI Biosciences, we strongly advocate for informed consent and counseling prior to conducting any DNA test, especially one as sensitive as prenatal paternity test. We encourage individuals and healthcare providers to view NIPP not just as a tool for truth, but as a pathway to responsible decision-making and care.



DNAnews

Vol 2.05 May 2025

ITSI's Commitment to Accurate, Responsible Testing

With over two decades of experience in bioanalytical services and application of DNA technologies, ITSI Biosciences is proud to offer consultation, testing solutions, and educational support to help families navigate the complexities of prenatal DNA testing. All our testing is performed under rigorous quality standards to ensure accuracy, confidentiality, and care.

Need Help Understanding Prenatal DNA Testing?

We're here to help. Contact ITSI Biosciences at info@itsibio.com, +1-814-262-7331 or visit www.itsibio.com to learn more about our DNA testing services.

Thank you for reading this month's edition of *DNAnews*. Stay tuned for next month's issue, where we'll explore the latest developments in DNA testing and its real-world applications!

Stay informed. Stay connected.

The ITSI Biosciences Team

DNAnews is a monthly newsletter by ITSI Biosciences LLC. The purpose is to provide some basic information about DNA and how it is currently being leveraged to answer many pertinent questions in life today. For questions/comments please send an email to Editor, DNAnews, itsi@itsibio.com.