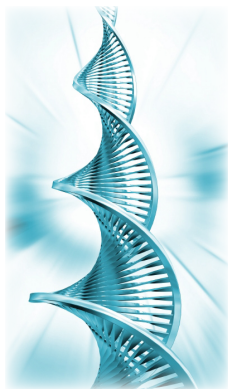



Parentage Testing

DNA Testing



- Resolving Doubt
- Child Support & Custody
- Social Security Benefits
- Immigration & Adoption
- Peace of Mind

Rhode Island
 **Blood
Center**

The Parentage Testing Laboratory at the Rhode Island Blood Center has been assisting individuals with questions about parentage since 1984. We are the only accredited Parentage Testing Laboratory in the New England area. Our facility is located in Providence, Rhode Island with easy access from route 95.

What is Parentage Testing or DNA Testing?

Parentage Testing is composed of a group of DNA tests that identify factors inherited from each parent. In most cases it is the father of the child who



is in question and the testing may be referred to as Paternity Testing. Paternity Testing works like this:

1. Each child inherits half of his or her genes (DNA) from each parent. By comparing the test results from the mother and child, the inherited factors that the biological father had to give to the child can be determined.
2. Next, by comparing those required factors with the test results from the man in the case, we can get one of two possible answers: either
 - a. the required factors are present in the tested man and he is very likely the father, or
 - b. the man cannot be the father because he does not have the required factors.

If the mother of a child is not available for testing, the child and the father in question can be tested alone. If testing is performed to determine whether people are related for purposes of immigration it may be an alleged mother and a child who are tested together. In this case the testing is called Parentage Testing.

What Tests are performed?

At the Rhode Island Blood Center Parentage Testing Laboratory we perform DNA Testing using STRs. On occasion, if additional testing is needed we include HLA Typing using DNA. HLA typing is also called Tissue Typing.

Can you prove paternity?

These tests are well established, accurate and legally conclusive. In addition, our laboratory is nationally accredited for Parentage Testing by the AABB (American Association of Blood Banks).

Our testing will routinely yield a probability of paternity (the likelihood that the tested man is the father) of close to 100 % or prove with absolute certainty that the tested man is NOT the father of the child. In addition, if the alleged father is excluded we retest the clients using a second DNA sample from the same individuals.

Can Parentage Testing be used for purposes of immigration?

Yes. The United States Department of Homeland Security and United States Embassies throughout the world may require documentation of the relationship between a resident of the United States and a family member in a foreign country who wishes to emigrate. Parentage Testing (DNA Testing) may be required to prove the stated relationship.

Who will pay for the tests?

Will my medical insurance cover the costs of these tests?

Medical insurance does not usually cover the costs of parentage testing. The individual requesting the testing is required to pay. Payment may be in the form of cash, money order, MasterCard or Visa.

How do I make arrangements to have parentage testing done?

An appointment is necessary. Appointments are readily available. Our courteous, professional staff will be happy to answer any questions you may have.

Please call: 401.453.8353 or 1.800.283.8385 ext. 353

What happens when I arrive for my appointment?

When you arrive, there is free parking in our garage. Check in with the Receptionist and you will be escorted to a private room where your personal information will be taken. We will ask for identification such as a driver's license, state ID or passport. You will be asked to read and sign a release form giving us permission to collect samples from you and the child in the case. Photographs will be taken of all parties who will be tested. Samples will be collected.



When will I receive my results?

Test results are usually available in approximately 4 weeks after all samples are collected. The results of testing will be mailed to all individuals in the case at the same time.

Can anyone find out the results of my test?

Can I find out the results of my test on the phone?

Results of Parentage Testing are confidential. Only authorized individuals receive the test results. We will not compromise that confidentiality by disclosing test results over the telephone.

What if I don't understand the results?

Our knowledgeable staff is available to answer any questions concerning the results of testing. Please call if you have any questions.



How does DNA Testing work?

DNA is extracted from buccal swabs (mouth swabs) or blood using a technique that removes contaminants leaving a pure solution of DNA.

The DNA systems we use for parentage testing are called STRs or Short Tandem Repeats. These markers are found in many places in the human genome. Those used for parentage testing are passed from parent to child



in a very predictable manner. The markers are basically repeating segments of DNA that differ in size from one person to another. The size difference comes from the number of repeating segments of the particular sequence of DNA bases that comprises the individual STR system.

To determine the size of the DNA fragments in each person tested, the DNA is first amplified using PCR (Polymerase Chain Reaction) to make many copies of the DNA marker of interest. During PCR a fluorescent label is attached to the amplified DNA that will allow us to visualize it later in the procedure.

The fragments are next separated according to size using electrophoresis. Electrophoresis is a technique that will separate DNA fragments by size by applying an electric current to DNA that has been placed into a gel like material.

Once the DNA fragments are separated according to size they are visualized using an instrument that will detect the fluorescent label on the DNA.

The sizes of the DNA fragments from the test samples are determined by comparing the sizes of DNA fragments of known size to those of our test samples.

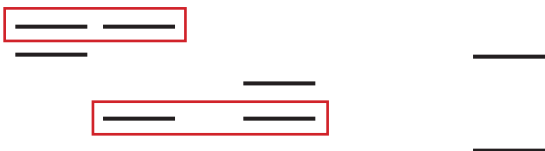


↑↓
DNA fragments
of known size

↑↓
client DNA

Once the sizes of DNA in the specific systems are determined, they are represented by a number and referred to as alleles. Each person should have 2 alleles in each system examined for parentage testing. One allele comes from the biological father and the other allele comes from the biological mother.

Mother Child Alleged Father 1 Alleged Father 2



In cases where an individual appears to have only one allele it may be because both parents passed the same allele or the allele is "silent". Each known allele has a determined frequency of occurrence in the general population and among different ethnic groups. These frequencies are used to calculate the probabilities of parentage (the likelihood that the tested person is a parent of the child).

Please call: 401.453.8353 or
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ext. 353



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