

# THE PROBLEMS WITH “HOME” PATERNITY TESTS

**John Taddie, PhD**

A “home” paternity test is one in which DNA samples are collected and sent to a lab by test participants themselves, using test kits available in some stores or on the Internet. With these tests, participants (1) purchase a sample collection kit, (2) swab the inside of their mouths and that of a tested child, (3) seal the samples in envelopes labeled with the names of the tested parties, and (4) mail the samples to the lab for testing. Home tests range in price from about \$70 to \$250. Unfortunately, you usually get what you pay for, and “less expensive” can also mean “less reliable” and “more concerns”.

First, the qualifications and reliability of the lab analyzing the samples may be questionable or unclear. A frightening reality regarding home paternity tests is that there are no regulatory or accrediting agencies overseeing these tests in the laboratories that perform them. This means that labs analyzing home test samples need not be accredited in any way and, even if they are accredited, they need not adhere to any industry standards for quality assurance. For example, some labs do not perform duplicate testing of samples to safeguard against sample switches, the most common cause of incorrect test results.

Second, tested parties often make sample collection errors. In some cases, samples are poorly collected, possibly contaminated, and may fail to produce a reportable result, while in other cases samples are mixed up during the collection process and may produce an erroneous result. Third, because there is no verifiable identification of tested parties and chain-of-custody of collected samples, tested parties are not protected in the event of a lab error and have no legal recourse against the lab. Fourth, because samples are not collected under a strict, verifiable chain of custody, the test results are not legally defensible, and patients must often redo their test using legally-defensible methods. In each of these situations, money spent on the home test kit is wasted, and the tested parties may have to pay for another test.

Finally, home test kits carry great potential for misuse and fraud. Because there is no verifiable identification of tested parties and chain-of-custody of collected samples, tested parties can intentionally switch samples or submit samples of one individual in place of those of another in order to obtain a DNA test report stating a desired result. For example, a man who does not wish to be a child’s father could secretly substitute his best friend’s sample for his own. Or a mother who wants her husband to be the father of a child could submit one of his known children’s samples as that of the child in question. In other words, results obtained from a home paternity test kit are only as trustworthy as the person who mails the samples to the lab. Can a mother or alleged father ever know for sure whose samples were sent to the lab for testing if either of them is not physically present through the entire process to witness the sample collections, labeling, packaging, and mailing? To help minimize misuse of home test kits, some laboratories include on their test result reports a statement to the effect that the samples were not collected under a strict chain of custody, that the identity of the tested parties has not been verified, that the test results may not be defensible in a court of law. However, not all laboratories employ such a practice, and even when they do, such statements can go unnoticed and potentially fool an unwary beholder into believing the test results are valid.

The outcome of a DNA paternity test can completely change the course of a life—sometimes many lives. If you are seeking a paternity test, then your highest priority should be getting a test that you trust, even if it means spending \$400 or more for a legally-defensible, chain-of-custody paternity test. Because of the potential problems, limitations, and risks associated with home paternity tests, people “shopping around” for a paternity test are advised to consider these tests with caution. If you decide that a home test kit is the best choice for your personal situation, please take the time to research your options so that you can take appropriate steps to minimize the concerns and maximize your confidence in the test results. Otherwise, that \$79 paternity test could cost you a whole lot more in the long run.