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What is cystic fibrosis (CF)?

CF is a genetic condition affecting around 1 in 2,500 people. CF affects a number of organs in the body (especially the lungs and pancreas) by clogging them with thick, sticky mucus. The symptoms of CF can include:
- repeated chest infections and coughing
- digestive problems
- diarrhoea and abnormal stools.

What is a genetic condition?

A genetic condition is caused by an alteration in our genes. Our genes are the set of 'instructions' inside our bodies which make each of us an individual. There are thousands of different genes and each gene has a role in the body. If a gene is faulty, it can cause a genetic problem or disease. A fault in a gene is known as a mutation.

We have two copies of each gene. One copy comes from our mother and the other comes from our father. When we have children, we pass on one copy of each of our genes to each child.

CF is a recessive genetic condition. This means that people with CF have a mutation in both copies of their CF gene. Individuals with one faulty copy and one normal copy of the CF gene are healthy and they are known as CF carriers. Their normal CF gene keeps them healthy and compensates for the faulty copy of the gene.

Might I be a carrier?

Carrier testing can be done and will be discussed with you. The table below gives carrier risk figures for various healthy family members.

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Will my children have CF?

If your partner is not a carrier, you will not have a child with CF, but there will be a 1 in 2 (50%) chance that your child will be a healthy carrier.

If your partner is also a carrier, there will be a 1 in 4 (25%) chance that you will both pass on a faulty CF gene and have a child with cystic fibrosis.

There will be a 2 in 4 (50%) chance that only one of you will pass on a faulty CF gene. When this happens, the child will be a healthy carrier.

There will also be a 1 in 4 (25%) chance that you will both pass on a normal CF gene and have a child who is not a carrier.

These chances will be the same in each pregnancy.

Some couples who are both carriers want to know if a baby will be affected with CF. There are two types of test available during pregnancy which can tell whether the baby is affected with CF. These tests can be discussed in more detail with a genetic counsellor. There are also leaflets which tell you more about these tests.
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