

What is Cystic Fibrosis (CF)?

CF is a genetic condition affecting around 1 in 2500 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
- Poor weight gain

What is a genetic condition?

A genetic condition is one that is caused by a change in our genes. Genes are the unique set of instructions inside our bodies which makes each of us an individual. There are many thousands of different genes, each carrying a different instruction. If a gene is altered, it can cause a genetic condition or disease. This gene alteration is sometimes known as a mutation.

We have two copies of each gene. One copy is inherited from each of our parents. When we have children, we pass on only one copy of each of our genes.

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

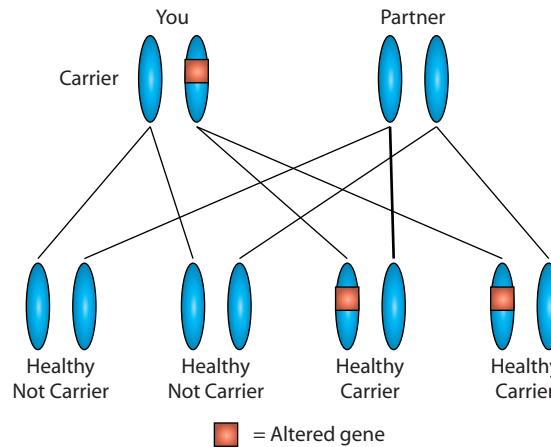
What chance is there that I am a carrier?

The table below gives risk figures for various healthy relations, assuming a partner without a family history of CF.

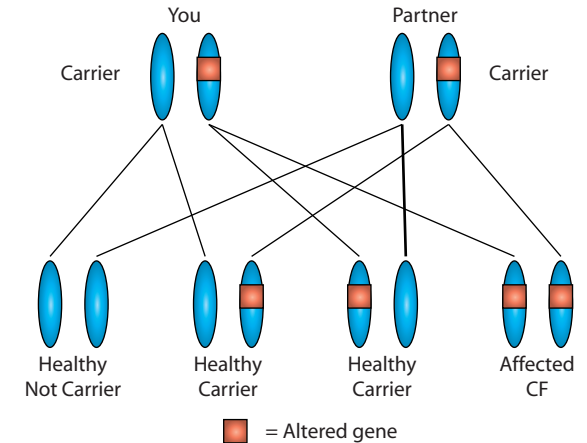
Relation to person affected by CF.	Risk
Parents	1 (100%)
Brother or Sister	2 in 3
Aunt or Uncle	1 in 2
Grandparent	1 in 2
First Cousin	1 in 4
Second Cousin	1 in 8

Will my children have CF if I am a carrier?

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, however, your partner is also a carrier there will be a 1 in 4 (25%) chance that you will both pass on your altered copy of the 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 an altered copy of the gene. When this happens the child is a healthy carrier of CF.

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

These chances will be the same in each pregnancy.

There are two types of test available during pregnancy which can tell whether the baby is affected with CF. These tests can be discussed with you in more detail by a genetic counsellor. There are also leaflets available which tell you more about these tests.

What does a carrier test involve?

When you come in for your appointment a small amount of blood will be taken. This will be sent to our laboratory where they will look for any changes (mutations) in the gene that is involved in CF.

A carrier test is able to look for 90% of mutations. If you have an unusual mutation in your family the laboratory may not be able to find it. Therefore, if no mutation is found this does not mean that you are definitely not a carrier. It will, however, greatly reduce your chance of being a carrier.

Questions to consider:

- What would being a carrier mean to me?
- Who would I tell if I found out I was a carrier?
- Would I consider tests in a pregnancy?

For more information:

If you need more advice about any aspect of cystic fibrosis, you are welcome to contact:

Genetic Medicine

Sixth Floor

Saint Mary's Hospital

Oxford Road

Manchester, M13 9WL

Telephone: 0161 276 6506 Reception

Facsimile: 0161 276 6145

Department staffed

Monday - Friday 9.00 am to 5.00 pm

For support and advice, please contact:

Cystic Fibrosis Trust

11, London Road

Bromley

BR1 1BY

Telephone: 0845 859 1000 CF Trust Helpline

Telephone: 020 8464 7200 CF Trust

Facsimile: 020 8313 0472

e-mail: enquiries@cftrust.org.uk

Web Site: <http://www.cftrust.org.uk>

We would like to acknowledge our Clinical Genetics colleagues at Guy's and St Thomas' Hospital NHS Trust who designed and wrote the original version of this leaflet.

Please let us know if you would like this leaflet in another format (e.g. large print, Braille, audio, British Sign Language video/DVD) or in another language.

Translation and Interpretation Service

Do you have difficulty speaking or understanding English ?

আপনি কি ইংরেজিতে বুঝতে কিংবা বুঝাতে পেরেছেন ? (BENGALI)

क्या आपको अंग्रेजी बोलने या समझने में कठिनाई है ? (HINDI)

તમે ભાષા કાચી વાતચીત કરવામાં મુશ્કેલી આવે છે ? (GUJARATI)

ਵਿ ਸੁਰੱ ਅੰਗ੍ਰੇਜ਼ੀ ਬੋਲਣ ਨਾਂ ਸਮਝਣ ਵਿਚ ਦਿੱਕਤ ਹੈ ? (PUNJABI)

Miyey ku adagtahay inaad ku hadasho Ingriisida aad sahamto (SOMALI)

هل لديك مشاكل في فهم والتكلم باللغة الانجليزية ؟ (ARABIC)

你有困難講英語或明白英語嗎？ (CANTONESE)

کیا آپ کو انگریزی سمجھنے اور سمجھانے میں دقت پیش آتی ہے؟ (URDU)

☎ Telephone Number 0161 276 6202/6342

Seen in clinic by(doctor)

and(genetic counsellor)

Telephone number

Last updated Aug 2005: Leaflet 6.1: TIG 59/05

Central Manchester University Hospitals 
NHS Foundation Trust

Cystic Fibrosis Carrier Testing

Department of Clinical Genetics

Information for Patients



INVESTOR IN PEOPLE

