Cystic fibrosis

**Cystic fibrosis is an inherited condition in which the lungs and digestive system can become clogged with thick, sticky mucus.**

It can cause problems with breathing and digestion from a young age. Over many years, the lungs become increasingly damaged and may eventually stop working properly.

Most cases of cystic fibrosis in the UK are now identified through screening tests carried out soon after birth. It's estimated that 1 in every 2,500 babies born in the UK has cystic fibrosis.

A number of treatments are available to help reduce the problems caused by the condition, but unfortunately average life expectancy is reduced for people who have it.

Symptoms of cystic fibrosis

Symptoms of cystic fibrosis tend to start in early childhood, although they can sometimes develop very soon after birth, or may not be obvious until adulthood.

Some of the main symptoms of cystic fibrosis can include:

* recurring [chest infections](http://www.nhs.uk/conditions/Chest-infection-adult/Pages/Introduction.aspx)
* difficulty putting on weight
* frequent, wet-sounding [coughs](http://www.nhs.uk/conditions/cough/pages/introduction.aspx)
* [diarrhoea](http://www.nhs.uk/Conditions/Diarrhoea/Pages/Introduction.aspx)
* occasional wheezing and [shortness of breath](http://www.nhs.uk/Conditions/shortness-of-breath/Pages/introduction.aspx)

People with the condition can also develop a number of related conditions, including [diabetes](http://www.nhs.uk/Conditions/Diabetes/Pages/Diabetes.aspx), thin, weakened bones ([osteoporosis](http://www.nhs.uk/conditions/Osteoporosis/Pages/Introduction.aspx)) and liver problems.

Causes of cystic fibrosis

Cystic fibrosis is caused by a faulty gene that a child inherits from both of their parents.

The faulty gene means that some cells struggle to move salt and water across the cell wall. This, along with recurrent infections, can result in a build-up of thick, sticky mucus in the body's tubes and passageways.

To be born with cystic fibrosis, a child has to inherit two copies of this faulty gene – one from each of their parents. Their parents will not usually have the condition themselves, because they will only carry one faulty gene and one that works normally.

If both parents carry the faulty gene, there's a 25% chance that each child they have will be born with cystic fibrosis.

Screening and testing for cystic fibrosis

Most cases of cystic fibrosis are now detected soon after birth through the [newborn blood spot test](http://www.nhs.uk/Conditions/pregnancy-and-baby/Pages/newborn-blood-spot-test.aspx).

This involves collecting a drop of blood from the baby's heel and testing it for abnormalities that could indicate cystic fibrosis.

More tests will be needed to confirm the diagnosis, such as:

* **a sweat test** – to measure the amount of salt in sweat, as the sweat of someone with cystic fibrosis has higher levels of salt than normal
* **a genetic test** – where a sample of blood or saliva is checked for the faulty gene that causes cystic fibrosis

These tests can also be carried out in older children and adults with symptoms of cystic fibrosis who haven't been screened previously.

If you have a family history of cystic fibrosis, you can be tested to determine if you're at risk of having a child with the condition by checking if you're a "carrier" of the faulty gene that causes it.

Treatments for cystic fibrosis

There's currently no cure for cystic fibrosis, but a number of treatments are available to help control the symptoms, prevent complications, and make the condition easier to live with.

Possible treatments include:

* [antibiotics](http://www.nhs.uk/Conditions/Antibiotics-penicillins/Pages/Introduction.aspx) to prevent and treat [chest infections](http://www.nhs.uk/conditions/Chest-infection-adult/Pages/Introduction.aspx)
* medicines to make the mucus in the lungs thinner and easier to cough up
* medicines to widen the airways and reduce inflammation
* special techniques and devices to help clear mucus from the lungs
* medicines that help the person absorb food better
* following a special diet and taking supplements to prevent [malnutrition](http://www.nhs.uk/Conditions/Malnutrition/Pages/Introduction.aspx)

A [lung transplant](http://www.nhs.uk/conditions/Lung-transplant/Pages/Introduction.aspx) may eventually be needed if the lungs become greatly damaged.

The Cystic Fibrosis Trust

The UK's leading charity for people affected by cystic fibrosis is the [Cystic Fibrosis Trust](http://www.cftrust.org.uk/).

Its website contains a range of useful information, an online forum and news items about ongoing research into cystic fibrosis.

The charity also operates a helpline – 0300 373 1000 – which is available from 9am and 5pm, Monday to Friday.