



1. Can I have a baby?

A guide to help women with cystic fibrosis
make informed choices

Can I have a baby?

The effects of CF on female fertility

There is little evidence to show that women with CF are less fertile than normal, however there has been very little research in this area. The mucus from the neck of the womb tends to be stickier in CF but does not usually prevent women from becoming pregnant. If the mucus forms into a plug this may reduce your fertility. Whether or not you are having any monthly periods you should assume that you could become pregnant. You always need to use a reliable form of contraception before having sex if you do not wish to become pregnant.

It is known that women who are very underweight or who have chronically poor health (who do not have CF) may stop having periods. This is not serious in itself, but it is a way for the body to conserve energy (for example to fight infection). Thus periods may stop in CF as a consequence of chronic illness. Periods may restart when weight is regained or the infection is controlled. When a woman who has had regular periods misses three or more together (and she is not pregnant!), further investigations may be needed to discover the cause. Even if you are not

having periods you always need to use a reliable form of contraception to prevent pregnancy.

Pregnancy

Pregnancy is becoming more common in CF. In women with good lung function and weight successful pregnancy is certainly possible. If you are considering pregnancy it is best to discuss this with your CF doctor before you become pregnant. He/she will look at many aspects of your health in order to assess the risk of pregnancy for you as an individual and to make the pregnancy as safe as possible for you and the baby.

Am I medically fit enough to have a baby?

This question is not easy to answer and depends on a combination of factors including lung function, weight, nutrition and the presence of other medical conditions such as CF related diabetes. The risk of pregnancy will be individual for each woman with CF and so this is why it is important to discuss all the medical issues with your CF doctor and be assessed by him/her as early as possible.

Lung function: Your pre-pregnancy level of lung function is an important factor when trying to assess if you are



*Is it safe to get pregnant?
What are the risks to me and the baby?*

fit enough to undergo a pregnancy. However it would be unwise to base a decision of fitness solely on this factor. In general terms women with good lung function usually tolerate pregnancy well. However in women with low lung function the risk of pregnancy to mother and baby may be great.

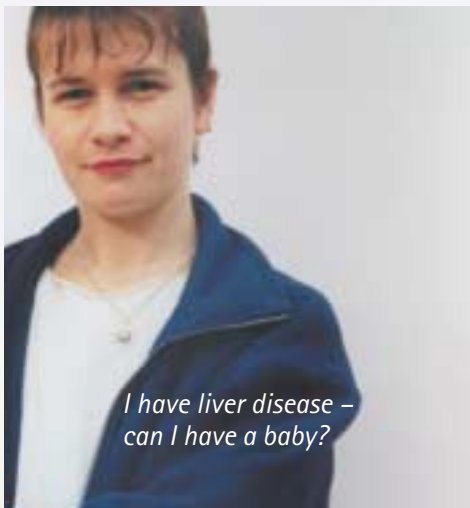
Weight: The heavier the better! – although low weight does not appear to affect pregnancy as much as poor lung function. Pre-pregnancy weight should be as near normal as possible as it is known that any woman who has low weight pre-pregnancy may

deliver prematurely and have a baby of low birth-weight. Maternal weight gain in pregnancy should be about 10-15Kg, (20-30lbs) and it is important that women should try to achieve this. Your CF dietician and doctor will monitor you closely in pregnancy and give advice regarding supplemental feeding.

Diabetes

If you already have CF-related Diabetes (CFRDM)

Diabetes does not stop you having a child but it has been shown by a large American study of 258 pregnancies in women who have CF, that patients with CFRDM tended to lose more lung function by two years after the birth. It is important to have good sugar control prior to conception and in early pregnancy. Both high and low blood sugar levels are harmful to the baby and control of sugar may be more difficult in pregnancy. It is best to discuss your plans to become pregnant with your CF doctor and/or diabetic doctor as early as possible so that tight sugar control can be achieved. Also the number of insulin injections you need each day may have to be increased to ensure good control of blood sugar.



Pregnancy induced diabetes

A proportion of pregnant women (without CF) become diabetic in pregnancy and this may disappear once the baby is born. If you have pancreatic disease (and you need to take pancreatic enzymes) you may be at a slightly greater risk of this occurring in pregnancy. However diabetes is looked for routinely at antenatal visits with your GP and at hospital visits. If you develop diabetes during pregnancy you are likely to need insulin injections to control your blood sugar levels. Careful control of blood sugar levels is important because both high and low blood sugar levels are harmful to the baby. Providing the diabetes settles down after the birth, you are unlikely to need further insulin injections.

Liver disease

Pregnancy is unsafe in severe liver disease. Many adults with CF have slightly abnormal liver function tests but this is not necessarily a barrier to successful pregnancy. You will need to discuss the safety of taking URSO during pregnancy with your CF doctor.

Possible effects of pregnancy on health in CF

Changes during normal pregnancy

In normal pregnancy, lasting 38-42 weeks, the mother's body undergoes many changes to provide for the growing baby. Pregnancy is considered in thirds (trimesters). In the first trimester there is little outward sign of pregnancy. In the second trimester the womb begins to show and the baby's movements are felt for the first time. The womb reaches the rib cage during the third trimester before settling at a lower level just prior to the baby being born.

The effects of normal pregnancy on CF

During the first trimester, women often feel breathless due to the hormonal changes and in CF the sputum may also become thicker. Toward the end of pregnancy the womb "squashes" the lungs upwards which may cause increased breathlessness and reduced lung function in women with CF, trapping

sputum and increasing the risk of infection. Throughout pregnancy the amount of fluid increases in the body and ankle swelling is common. Indigestion, nausea and vomiting are common in pregnancy and this can be



a problem, especially for underweight women with CF. Tiredness is also a common problem. Pregnancy induced diabetes occurs in healthy women but is likely to be more common in CF and is more likely to persist after delivery.

A much more detailed explanation about pregnancy and how to make it as safe as possible for you and the baby is given in leaflet 5 of the series.

Long term effects of pregnancy on women with CF

Little is known about the long-term effects of pregnancy but early results from a study of 258 CF pregnancies in America was reassuring. This study compared pregnant CF women with CF women of equal severity who had not been pregnant and followed both groups for 3 years. Overall they found pregnancy had no significant effect on weight, lung function or lifespan in the group of CF pregnant women compared with CF women who had not been pregnant. However those with CF related diabetes (requiring insulin) had a greater loss of lung function two years after delivery than the non-pregnant group.

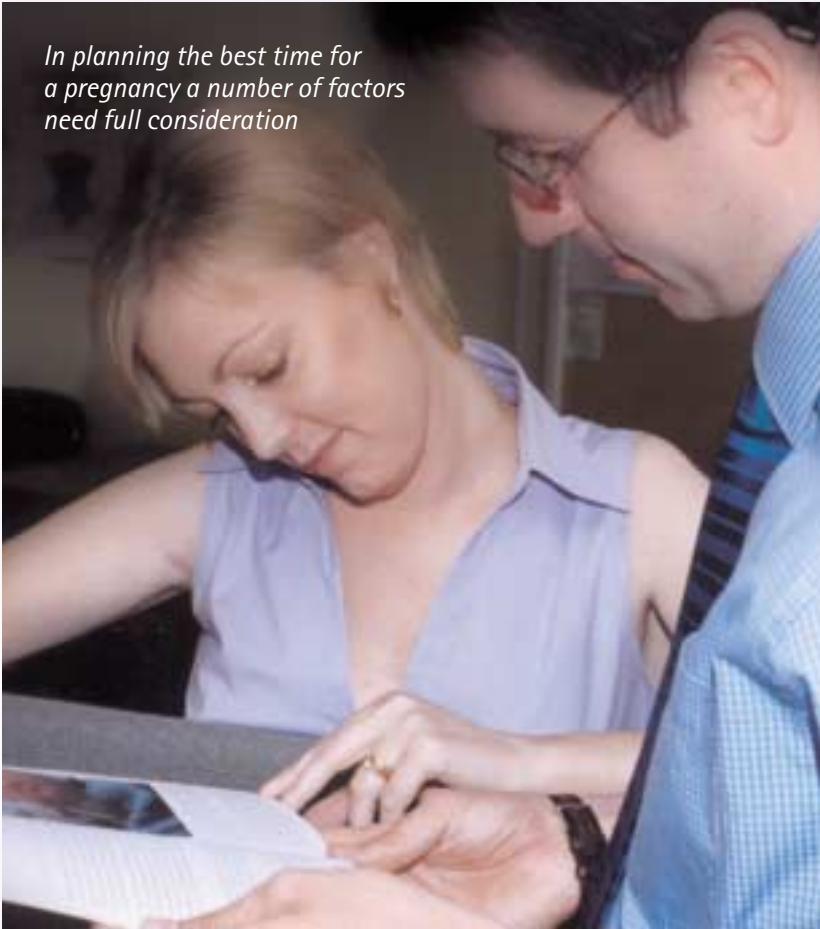
Is it safe to get pregnant after transplantation?

A small number of people have become pregnant after combined heart-lung or lung transplant but this remains extremely rare. Pregnancy has also been successful following single kidney, liver or heart transplants, and there appears to be no additional risk of organ rejection (failure). However it is advisable to wait for at least a year after your transplant before discussing with your CF and transplant teams the possibility of becoming pregnant. You may need additional monitoring during your pregnancy.



*I've had a transplant –
am I OK to get pregnant?*

In planning the best time for a pregnancy a number of factors need full consideration

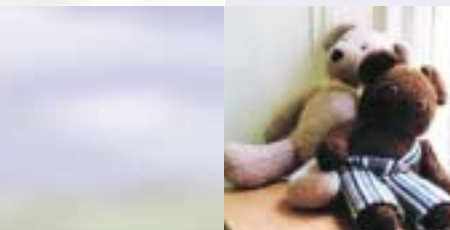


When is it best to plan a pregnancy?

Many women with CF wish to become pregnant when they are as well as possible and so this tends to be at a younger age than many first-time mothers. It could be tempting to rush into a relationship and pregnancy because you do not know what the future might hold. In planning the best time for a pregnancy the following factors need full consideration:

- *Your health*
- *The strength of your desire to have a baby*
- *Your natural hope to have as long as possible with your child while you are well*
- *The stability and permanence of your relationship with your partner*
- *Your child's need for a strong relationship with his/her father*

These factors are given greater consideration in leaflets 4 and 6 of this series.



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Leaflets in the series:

Leaflet 1: Can I have a baby?

Leaflet 2: How can I have sex safely?

Leaflet 3: Could our baby have CF?

Leaflet 4: Should we have a baby?

Leaflet 5: How can I plan for a safe pregnancy and birth?

Leaflet 6: How could we become parents?

Leaflet 7: How does it feel to go through infertility
treatment? – A patient's perspective

Leaflet 8: What is it like to be a parent?

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