

## Family Planning for CF Partners

If you are thinking about having a baby and your partner has CF, there are many things to consider including your partner's health, whether you carry the CF gene and the reproductive options available to you.

It's important your partner discusses family planning with the CF team who will also be able to provide information about reproductive choices to help you both decide on the best option for you.

### Do You Carry the CF Gene?

If you are planning a pregnancy, you may want to find out if you carry a CF gene. Carrier screening for partners of people with CF who are planning a pregnancy is free through Medicare. If you do NOT carry a CF gene, then the new baby will be a CARRIER as they will inherit a CF gene from your partner but not from you. If you are not a carrier your baby will not have CF.

If your partner has CF and you are a carrier, a baby will inherit a CF gene from your partner and have a 50% chance of also inheriting a CF gene from you. This means that with each pregnancy, there will be a 50% chance of the baby either having CF or being a CF carrier,

Couples who both carry CF genes can contact their local Genetic Services to make an appointment with a genetic counsellor. All discussions with a genetic counsellor are confidential. Information will not be passed onto the CF team without your permission.



### What are your Reproductive Choices?

#### Conceive Naturally

Many couples decide to conceive naturally. In some situations, umbilical cord blood may be able to be collected and tested at delivery. This would need to be arranged prior to the birth of your child and discussed with your obstetrician or doctor.

Newborns may also be diagnosed through newborn screening (heel prick/Guthrie test) or recalled for further investigations, such as sweat tests if they are found to be carriers.

#### Conceive Naturally and have Pre-Natal Testing

Once a baby is conceived naturally there are pre-natal tests that can be performed to see if the baby has CF.

The genotype (genetic make-up) of both parents needs to be known for pre-natal testing so it will be necessary for you to find out your carrier status.

- *Chorionic Villus Sampling (CVS)*: This test can be performed from 12 – 14 weeks of pregnancy, with public hospitals in WA performing CVS from 13 weeks gestation. In this procedure a sample of placental cells are taken from the mother and tested for genetic conditions such as CF.
- *Amniocentesis*: This test can be performed from 16 weeks. A sample from the amniotic fluid (the fluid surrounding the developing baby) is taken and analysed by a laboratory.

Whilst these are both very safe procedures, there is a very small risk of miscarriage associated with them.

### **Pre-Implantation Genetic Testing (PGT)**

PGT is performed on embryos conceived by in vitro fertilisation (IVF). IVF is a process by which an embryo is created outside the body using an egg cell from the mother and a sperm cell from the father. After a few days, a cell is removed from the newly created embryo and tested for a specific genetic condition, such as CF. Only the unaffected embryos are implanted into the uterus.

### **Donor or Sperm Egg**

Artificial insemination is available through private fertility practices. All sperm and egg donors are screened for the most common CFTR genes. Although an egg donor can be used, it is much easier to use a sperm donor. The aim of using a donor is to avoid both parents being carriers of the CF gene.

### **Donor Embryo**

Donor embryos are sometimes available. Couples undergoing IVF may choose to donate their embryos if they have more than they need.

## **Decision Making**

Obviously, there is no 'right' choice here. People will make different choices at various times in their lives and choices are often influenced by family, relationship, medical or financial circumstance. Only you and your partner can decide which option is the right one for you both.

For more information contact the Genetic Services in your area and make an appointment with a genetic counsellor. All discussions with a genetic counsellor are confidential.

## **Useful Resources**

- [Genetic Services of WA](#) (Department of Health)
- [Assisted Reproductive Treatment](#) (Varta)
- [Reproductive Technology Council](#)

Many thanks to Genetic Services WA for their input into this factsheet.