

Male Reproduction

As men with CF live longer and healthier lives, many more are becoming parents. Although men with CF can enjoy a normal sex life, most are unable to conceive naturally.

Approximately 98% of men with CF are infertile due to a blocked or absent vas deferens. The vas deferens is the tube that carries sperm from the testes to the ejaculatory duct. This means that most men with CF will not be able to conceive a child without medical help.

Sperm are still produced normally and men with CF still get erections and ejaculate when they orgasm. With assisted reproductive technologies (ART) many men with CF are still able to have their own biological children.

Semen analysis

Males with CF should consider having a sperm count done, whether planning a family or not. While there is a 98% chance there are no sperm in their semen, there is still a 2% chance there is. Semen analysis measures the numbers of sperm, motility (ability to move), size, shape and volume of ejaculate sample. This information can help make good sexual and reproductive health decisions now and into the future.

Assisted reproductive technologies

ART are used if couples are experiencing difficulties conceiving a child naturally.



Sperm extraction followed by in vitro fertilisation (IVF) is the technique which is used to assist men with CF, who are infertile, to conceive a child.

Sperm Extraction

Is a procedure performed under local anaesthetic to extract the sperm from either the testicles or the tubes connected to the testicles. Men with CF produce sperm in their testicles, but the blocked or missing vas deferens means that the sperm are unable to get out through the penis. Sperm extraction is carried out to enable creation of an embryo through IVF.

Intracytoplasmic Sperm Injection (ICSI)

This is an IVF procedure where a single extracted sperm is directly injected into the woman's egg, assisting with fertilisation and the development of an embryo. This procedure is used in males with CF because of the low ejaculate volume associated with poorly

functioning/absent seminal vesicles (structure where semen is produced). The technique is useful in men with CF because of the problems with semen and sperm.

Usually the female partner will have ovarian stimulation with hormones to increase the number of eggs for collection. The egg collection is usually done under ultrasound procedure. The semen sample is needed on the same day as egg collection. The egg is then fertilised with a single sperm in the laboratory. Once fertilisation is successful the embryo is placed in the woman's uterus. It is recommended that potential risks or complications associated with ICSI should be discussed with your fertility specialist.

Useful Resources

- [CF Carrier Screening Program \(CF Community Care\)](#)
- [Fertility Stories \(CFWA\)](#)
- [Reproductive Technology Council](#)
- [Assisted Reproductive Treatment \(Varta\)](#)
- [CFWA Factsheets](#)

Last reviewed December 2021.