

What is male infertility?

A couple is considered infertile if they have been unable to get pregnant after one year of frequent unprotected sexual intercourse. Male infertility is used to classify infertility when the female partner is known to be fertile.

How common is male infertility?

Infertility is estimated to affect 8-9% of males and about 15% of couples in Australia.

It's generally accepted that for those couples who are infertile:

- In about 1 in 5 cases, male infertility alone is the cause
- In about 1 in 3 cases, female infertility is the cause
- In more than 1 in 3 cases, both male and female factors are involved.

The numbers above are based on old data², and we don't know the exact prevalence of male infertility or the proportion of couples' infertility attributable to the male partner³.

We do know that about half of the couples who don't achieve pregnancy after 12 months of trying do manage to naturally achieve pregnancy in the following year, and about 1 in 7 do so in the year after⁴.

Causes of male infertility

Male infertility usually results from problems with spermatogenesis. This can be due to hormonal problems, poor function of the testicles or blockages in the male urogenital tract.

Sperm production in the testicles can be reduced by:

- Genetic conditions like [Klinefelter syndrome](#)
- [Varicocele](#)
- Testicular inflammation or injury
- Severe illness
- [Undescended testes](#)
- Abnormal hormonal function due to genetics, infection, a cancerous or non-cancerous tumour, or as a consequence of surgery
- Testosterone therapy
- Anabolic steroid misuse or abuse
- Opiate use
- Obesity
- Some medications.

The way sperm function can be impaired by:

- Genetic factors
- Age
- Infection or inflammation in the urogenital tract, which can be caused by sexually transmitted bacteria like chlamydia or other microbes.

Abnormalities that result in some parts of the [male reproductive system](#) not developing at all, such as in men with congenital bilateral absence of the vas deferens, can prevent the transport of sperm. Other men may have blockages in their reproductive system because of scarring or accidental injury during surgery or for unknown reasons.

Ejaculation problems and [erectile dysfunction](#) can be causes of male infertility.

Lifestyle factors such as alcohol and tobacco use can contribute to infertility, as can participating in high-intensity sports or activities that might expose your testicles to high temperatures (like saunas or occupational exposures).

Diagnosis of male infertility

To work out the cause of your infertility, your doctor will usually order a semen analysis or blood test to measure your [hormone](#) levels. They might test for infections, or send you to get an ultrasound to look at the structure of your testicles and other scrotal contents. In some cases, a testicular biopsy might be needed for diagnosis.

Treatment of male infertility

The way male infertility is treated depends on its cause⁴.

If your infertility is caused by some aspect of your lifestyle, your doctor can support you to change your behaviour. If medication for a medical condition might be contributing to your infertility, they can also find alternative treatments.

Your doctor might prescribe hormonal treatment or other medications to treat your infertility.

Surgical procedures can be performed to repair varicocele or obstructions of the urogenital tract if these are the cause of your infertility.

If treatment of your infertility is unsuccessful, assisted reproductive technologies (ART) may help you and your partner conceive.

Health effects of male infertility

Male infertility is associated with [testicular cancer](#) and poor health arising from various chronic diseases⁵, including [diabetes](#), [heart disease](#) and depression⁶. Infertile men also have a higher risk of dying than fertile men⁵. These associations do not mean that every infertile man will develop disease or die early, but they are a reminder to take care of yourself and visit your doctor if you have any concerns about your health.

If you and your partner have been trying to conceive for a year or more but haven't, you should both visit your doctor(s). It's possible that you might still conceive naturally, but beginning investigations earlier, rather than later, is best. Men's and women's fertility

both decline with age.

Fertility problems can be a source of considerable stress for both partners, so you might want to talk to your doctor about couple's counselling so you and your partner can best support each other.

Some fertility services focus more on females than the couple but the fertility of both partners should be investigated from the outset.

Questions to ask your doctor about male infertility

- Are there lifestyle changes I can make to increase our chances of conceiving?
- Could any medications I'm taking be affecting my fertility?
- What does my infertility mean for my future health?
- What are my chances of fathering a child naturally?
- Would assisted reproductive technologies help me father a child?

References

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