

Cancer treatment and fertility for people who were assigned male at birth



Some cancers and their treatments can reduce your fertility. Not all people who have cancer will be affected.

How can cancer and its treatment affect my fertility?

For people who were assigned male at birth (AMAB), cancer and its treatment can affect your future fertility by:

- decreasing or stopping the production of your sperm
- affecting the quality of your sperm
- decreasing the production of testosterone-based hormones and reducing libido (sex drive)
- damaging the tubes that transport sperm in the penis and the nerves needed to ejaculate or become erect.

Cancer and gender affirmation

Effects of cancer or treatment may be different if you've undergone any medical gender affirmation, including affirming surgery or hormonal therapies. Talk to a trans-affirming health professional to figure out your options and risks.

Which cancer treatments can affect fertility for people AMAB?

Chemotherapy, radiation therapy, hormone therapy and some surgical treatments can affect your chance of having biological children in the future.

Chemotherapy

These medicines stop or slow the growth of cancer cells but can also damage normal, healthy cells such as the sperm-producing cells in your testicles.

The extent of possible fertility issues depends on the type of chemotherapy, the amount given, and the length of time you have chemotherapy.

Radiation therapy

This treatment uses high-energy waves, similar to x-rays, to kill or slow the growth of cancer cells. Radiation therapy can damage the genes in new sperm, decrease sperm production, and change the ability of sperm to move quickly and freely. Radiation to the brain can also cause damage to the pituitary gland, which plays an important role in the production of sex hormones.

Surgery

Surgical removal of cancerous tissue in the area around the bladder, penis, rectum or one or both testicles can damage the tubes that carry sperm or nerves involved in erection.

Surgery to the brain near the pituitary gland can also affect fertility as this gland is involved in the production of sex hormones that help make sperm.

Hormone therapy

Some hormone therapies can affect testosterone-based hormone production. This can lead to decreased sperm production and cause sexual side effects, such as lowered libido and problems with erections.

Other treatments

Research is still being done on newer cancer treatments such as targeted therapies and immunotherapy. Their effect on future fertility is not completely understood at this point.

Are fertility changes permanent?

The effect of cancer treatment on fertility may be temporary or permanent, depending on:

- your age (fertility naturally declines with age)
- whether you have existing fertility problems
- the type of cancer you have
- the treatment(s) you have.

What should I do?

Each person's situation, treatment plan and diagnosis is different.

Before starting treatment, it is important to talk to your doctor, nurse or radiation therapist about:

- whether you may want to have children in the future
- how your treatment may affect your fertility
- what fertility preservation options are available.

Your doctor may refer you to a fertility specialist.

Key terms

AMAB/PMAB:

Assigned male at birth/Presumed male at birth.

Fertility (for a person assigned male at birth):

Ability to conceive or reproduce.

Infertility (for a person assigned male at birth):

Inability to conceive or have children.



For information for patient and carers please scan the QR code.

! Important

You may still be fertile during and immediately after your cancer treatment.

You should use a reliable method of contraception because some cancer treatments can damage your sperm and harm an unborn baby.

Ask your doctor or nurse about what contraception to use during your treatment.

Talk to your doctor, nurse or radiation therapist **immediately** if your partner is already pregnant or becomes pregnant during your treatment.

For more information

- Cancer Council has a booklet called *Fertility and Cancer*. Call 13 11 20 or visit cancer.org.au/about-cancer/living-with-cancer
- Canteen has a resource called *Maybe later baby?* A guide to relationships, sex and fertility for young people affected by cancer. Visit canteen.org.au
- FUTuRE FERTILITY, the first Australasian oncofertility registry, has several resources on its website. Visit futurefertility.com.au
- Healthy Male (previously known as Andrology Australia) has information such as booklets and videos on people AMAB sexual and reproductive health. Visit healthymale.org.au
- TransHub - Fertility is a concern for some trans and gender diverse people for a range of reasons. Visit transhub.org.au/fertility