

Some medical treatments like radiation, chemotherapy, and some surgery, can affect your fertility. If you are about to have any of these treatments, you may wish to consider the option of fertility preservation.

How can these treatments affect my fertility?

Some treatments can reduce sperm production or damage sperm and affect your chance of having children in the future.

Chemotherapy

This is a common treatment for many cancers. Certain types of chemotherapy can be toxic to sperm and immature sperm stem cells. It can also damage cells in the testes that help support sperm production (Sertoli and Leydig cells). These effects can happen very quickly after starting chemotherapy.

In some cases, the damage is temporary and sperm production recovers. Recovery may not be immediate and for some, it may take up to five years. In other cases, damage may be permanent and sperm production never returns to normal. The risk of permanent damage and the speed of recovery depends on the type, dose, and duration of chemotherapy.

Radiation

Radiation therapy to the groin area may also cause low sperm counts by destroying sperm and the stem cells that make sperm. Radiation therapy can also damage the genetic material inside sperm.

Radiation therapy to the brain can damage the pituitary gland. This pea sized gland in the brain produces hormones, including those that control sperm and testosterone production in the testes. If the pituitary gland

is damaged from radiation therapy, you may experience low testosterone and low sperm production, together with other hormone deficiencies.

Surgery

Surgery for cancers of the reproductive organs such as testicular cancer and cancers in the pelvis, like bladder, colon, prostate, and rectal cancer, can damage these organs and nearby nerves and may cause infertility.

Testicular cancers may require surgical removal of the entire testicle, for the cancer to be safely treated. This type of surgery is called an orchidectomy, and it can be on one side (unilateral) or on both sides (bilateral). Removing one testicle alone may not cause infertility if the other testicle is working normally, but it may reduce sperm concentration if you already have poor sperm production.

When should I consider freezing my sperm?

It is important to consider storing your sperm before starting chemotherapy or radiation treatment or before undergoing surgery that may damage the testes.

Sperm that is collected and frozen close after starting chemotherapy and radiotherapy is at high risk of genetic damage. This means the sperm may not work properly and could cause an abnormal pregnancy.

Depending on the type of treatment you have, sperm production may never return to

normal. In some cases, sperm production may not recommence after treatment.

If you are unsure about whether you want to have a child in the future, storing sperm can be a simple way to keep your options open.

How does it work?

You will need to attend an andrology laboratory that provides a storage service. The Royal Women's Hospital Andrology Unit and Sperm Bank offers this service.

We will ask you to supply a semen sample. The sample should be taken after abstaining from sex for two to seven days. We prefer you take the sample on site, at our Andrology Unit.

If you cannot supply a sample on site, you can bring a sample from home. If you choose to do this, the sample must arrive at the laboratory within 1 hour of collection. When taking the sample, avoid using any lubricants and keep the sample at body temperature. If you wish to produce your sperm sample at home, discuss this with the lab first.

Transporting sperm is simple. Remember to keep the sample at body temperature. Do not transport it with ice blocks or an ice pack as this can damage your sample. Place the specimen jar in your pocket or in a handbag, where it will stay at body temperature.

If you are unable to come to the andrology lab or bring in your sample, a family member or friend can deliver it for you. To do this, you must contact the andrology lab in advance, as special documentation, and consent is needed.

When we receive your sample, our scientists will check your sperm count, how well the sperm swim (motility) and their appearance (morphology). Any sperm in the sample can then be frozen and stored for later use.

How much will it cost?

There is an initial cost for processing and storage of up to four semen samples for one year. Ongoing sperm storage fees are charged each year.

You will find a list of current fees at www.thewomens.org.au/sperm-preservation-clinic.

How can I arrange sperm storage?

Talk with your treating specialists or local doctor (GP) about freezing sperm as a part of your disease/cancer treatment plan.

Ask them for a referral to the Andrology department at The Royal Women's Hospital.

How will my frozen sperm be used?

If your sperm production does not recover or your doctors are concerned your sperm may be damaged after your treatment, it can be used in assisted reproductive technologies such as intrauterine insemination (IUI) and in vitro fertilisation (IVF) to achieve a pregnancy.

For more information

Reproductive Services Fertility
Preservation Nurse

T: (03) 8435 3227
(Monday to Friday - 7.30am to 5pm)
E: rwh.fps@mivf.com.au

RWH Andrology Unit and Sperm
Bank

321 Cardigan Street
Carlton VIC 3053
T: (03) 8345 3992
(Mon to Fri 8.30 am - 4.30 pm)

Do you need an interpreter?



If you need an interpreter,
remember you can ask for one

Disclaimer: This fact sheet provides general information only. For specific advice about your healthcare needs, you should seek advice from your health professional. The Royal Women's Hospital does not accept any responsibility for loss or damage arising from your reliance on this fact sheet instead of seeing a health professional. If you require urgent medical attention, please contact your nearest emergency department.

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