

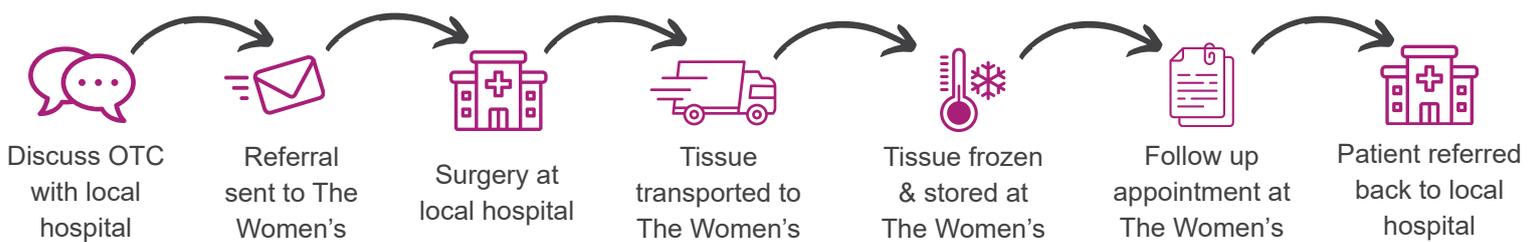


## Ovarian tissue cryopreservation (OTC)

Preserving fertility for children and young people with cancer

**Some cancer treatments can damage the ovaries and make it harder to have a baby in the future. This information sheet explains how ovarian tissue cryopreservation (or ovarian tissue freezing) can help with this.**

### In Time Patient Journey



### What is fertility?

People with ovaries are born with all the eggs they will ever have. The eggs are stored in their ovaries. Every month (from puberty onwards) the body produces messengers in the blood called hormones. These hormones tell the ovary to release an egg and help prepare the body for a possible pregnancy. Each egg could join with a sperm to start a pregnancy.

Some medical treatments (like chemotherapy or radiation) can damage eggs and ovaries. This can make it harder to get pregnant later on. Ovarian tissue freezing can help with having a baby in the future.

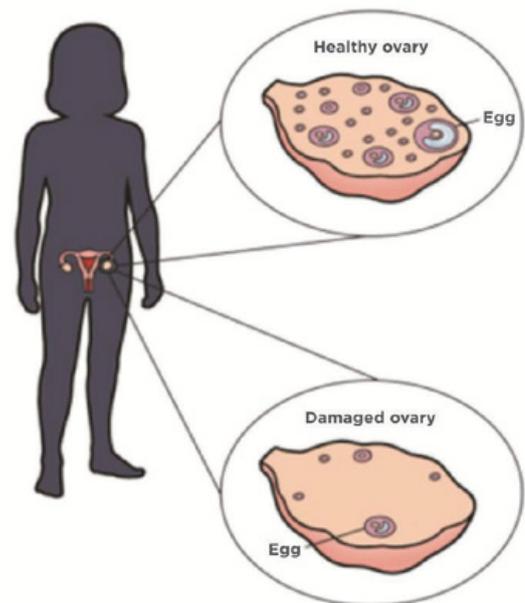


Image shows a healthy ovary with lots of eggs versus an ovary following treatment that has less eggs. Adapted from The Leeds Teaching Hospitals NHS Trust



## About the In Time program

The In Time program is a free, Australia-wide service based at the Women's. It offers free fertility support, ovarian tissue transport and tissue freezing for children and young people (up to 24 years) with cancer.

## Who might choose this option?

This option is for children and young people who need to have cancer treatment that has a high risk of affecting their fertility.

Examples of such treatment include:

- some types of chemotherapy
- radiation to the pelvis (lower tummy area), or whole body
- a bone marrow or stem cell transplant.

Ovarian tissue freezing is the only option for people who have not started puberty. Eggs cannot be frozen before puberty.

It may also be suitable for young people who have started puberty but need to start cancer treatment straight away. This means there is not time to collect and freeze their eggs.

Sometimes it can also be done at the same time as freezing eggs. The doctor will advise whether ovarian tissue freezing is the right choice.

## When would it happen?

Ovarian tissue freezing can happen before or just after cancer treatment. The medical team will explain which option is best.

If treatment is very urgent, the team will talk about whether ovarian tissue freezing is still an option.

## What can you expect?

A general anaesthetic is used to go to sleep for the procedure.

For children and teenagers, the procedure is often done at the same time as another procedure (such as a line insertion for chemotherapy).

There are three key steps:

1. Surgery - keyhole surgery is performed to remove a small piece of tissue from one of the ovaries.
2. Freezing - the tissue is cut into thin slices and frozen in a special laboratory.
3. Storage - the tissue is stored at the Women's in Melbourne.

The surgery usually takes between 30 minutes and one hour. Most people go home the same day.

## What are the risks?

No surgery is without risk, but the risks associated with this surgery are small. Your medical team will talk about these with you.

It is important to understand these risks before agreeing (consenting) to the procedure.

Risks include:

- having a general anaesthetic
- mild pain or bruising at the operation site
- bleeding or infection
- damage to other organs in the area
- needing a larger cut than keyhole surgery.

Please note, if cancer treatment has already started the risk of infection from this procedure may be higher.

## Where is the tissue stored?

We can store the tissue at The Women's, Melbourne for the following length of time:

- For patients under 18 years of age, we can store tissue for up to 20 years.

- Patients will need to sign a new consent form once they turn 18 years of age.
- For adult patients, we can store tissue for up to 10 years
  - It may be possible to store tissue for longer than this.

## Future possibilities

Later in life, if the patient wants to try for a baby or we can thaw their tissue and put it back into the body. It is usually placed near the ovary or in the abdomen wall (stomach area).

The tissue may start working again to make hormones and eggs.

Often, in vitro fertilization (IVF) will be used to collect eggs from tissue to help make a baby. This is where an egg is joined with a sperm in a laboratory. The embryo that is made is then put back into their uterus (womb) to grow into a baby.

It is important to know that ovarian tissue can only be used by the person it belongs to.

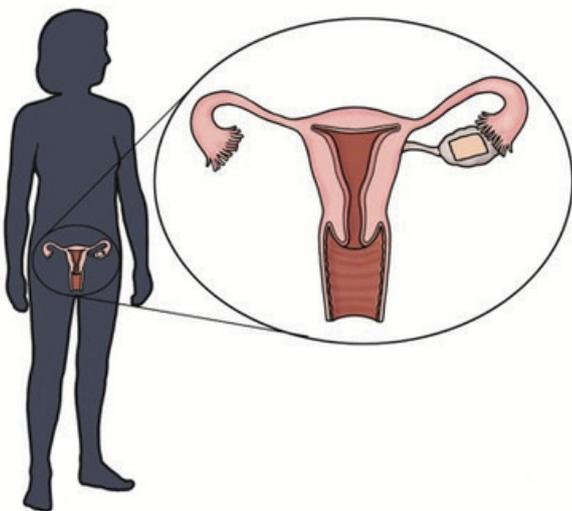


Image shows an expanded view of the uterus and ovaries with a patch showing the location of the transplanted ovarian tissue. Adapted from The Leeds Teaching Hospitals NHS Trust

## How successful is it?

Not everyone who freezes ovarian tissue will be able to get pregnant in the future. However, it gives them a chance.

It is important to know that:

- the tissue may not work (make hormones or eggs) when it goes back into the body
- even if the tissue works, it might not lead to a pregnancy
- patients with cancers such as leukemia have a higher risk of cancer cells from the tissue going back into the body.

The success of this procedure depends many factors such as:

- the patient's age at tissue collection
- how healthy they are
- processing techniques and storage conditions.

## How much does it cost?

Referral to the In Time program is free.

This includes:

- consultation with the Women's fertility team
- transport of the ovarian tissue
- tissue freezing and storage.

The procedure will be carried out at the hospital. Usually, a paediatric (children's) surgeon or gynaecologist (women's health doctor) will do this.

## Is this the right choice?

Your team will include:

- an oncologist (cancer doctor)
- a fertility doctor
- a nurse.

They can explain the procedure and answer any questions.

They can also help work through any emotions that may come when making this decision. Parents or carers will need to give consent for their child or young person to have this procedure (up to the age of 18). However, we encourage everyone to be included in conversations and decision-making. It's normal to have mixed feelings about this decision. The medical team will help everyone involved to be a part of the decision in a way that feels right.

## What if you decide not to go ahead?

It's OK to decide not to freeze ovarian tissue. The same medical care and support will be given either way.

If a decision is made not to go ahead, the cancer treatment will still progress as planned.

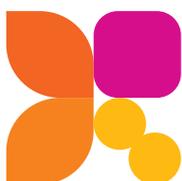
The doctor can talk about other ways to manage any hormone or fertility changes in the future.

If preferred, fertility options can be talked about when cancer treatment has finished.

## Possible questions

Here are some suggestions for questions you may like to ask the medical team.

- Are there any risks to fertility from cancer treatment?
- Apart from ovarian tissue freezing, what other fertility options are there?
- How long until the cancer treatment starts?
- Is a decision on fertility options needed now?



**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. © The Royal Women's Hospital 2025

## Key Points

- Some treatments for cancer (like radiation and chemotherapy) can damage fertility.
- Ovarian tissue freezing is an option to help preserve fertility for children and young people.
- Doctors use keyhole surgery to remove ovarian tissue.
- It's okay to have questions.
- It's okay to choose NOT to freeze ovarian tissue.
- Young people can ask questions without parents/carers in the room if they prefer.
- Our medical team are here to support you with this decision.

## The Women's website

For more information on In Time, Fertility Preservation options and support services, please visit The Women's Hospital website



## Do you need an interpreter?



You can ask for an interpreter if you need one.

## Support services

If you need support, please contact the In Time program nurse who is available from Monday- Friday 7:30am - 4:00pm

**Telephone: (03) 8345 3227**

**Email: [rsu.fps@thewomen's.org.au](mailto:rsu.fps@thewomen's.org.au)**

Social workers, Psychologists or pastoral care are often available local hospitals if extra support is required. Please speak to your nurse to arrange.