

**Teenage and Young Adult  
Cancer Service**

# **Fertility Preservation**



This leaflet has been written for young people who are about to start treatment for cancer. Your treatment may involve radiotherapy or chemotherapy. Both of these treatments may affect your fertility (ability to have children).

## What treatments will affect my fertility?

**Chemotherapy:** Many chemotherapy drugs will affect your fertility. They can affect your ovarian function. This means you may not release eggs. The effect can vary depending on the particular drugs used and how much of the drug you receive. For many young people, their ovarian function will return to normal when their chemotherapy stops.

**Radiotherapy:** Radiotherapy to your pelvis and tummy can also affect your fertility. If the area being treated includes your ovaries, the radiotherapy will cause damage to your eggs. Radiotherapy can also affect the womb (uterus). This can make it more difficult to carry a pregnancy successfully.

Your oncologist or nurse specialist will discuss this in more detail with you. They will be happy to answer any questions or concerns you may have.

## Fertility preservation

Although you might not be thinking about having children just now, you might in the future. If your fertility is likely to be affected, your doctor will speak with you about fertility preservation. They will discuss what can be done to help you to have your own biological children in the future.

We give a general guide to the different fertility preservation options below. Your doctor and nurse specialist will discuss them with you. You can then decide if you want to go ahead with fertility preservation or not. If you do decide to go ahead, the procedure must be done before you start your cancer treatment.

You might feel embarrassed talking about this, but it is important you think about it now. You might feel rushed to make a decision. Try to take some time to think about your future plans. If you have any questions or want to discuss it more, talk to your oncologist, nurse specialist or family doctor. It might also help to talk to a close family member or friend.

## What types of fertility preservation are available?

There are several types of fertility preservation available. Not all of them are suitable options for everyone. Below is a list of the procedures that may be available to you:

- **Oocyte cryopreservation (egg freezing):** This involves stimulating the ovaries to produce more eggs. This is done by giving you hormone injections over several days. We then collect, freeze and store your eggs for use in the future. This procedure is now well established. It does take some time due to the need for stimulation of the ovaries. It is not suitable for people with hormone related tumours.
- **Embryo cryopreservation:** This involves stimulating the ovaries in the same way as for oocyte cryopreservation. Sperm from your partner is then used to fertilise the egg in the lab. The fertilised egg is called an embryo. It is important to highlight that any embryos belong to both you and your partner. This is the most successful procedure for fertility preservation. It is not suitable if your tumour is hormone related.
- **Ovarian tissue cryopreservation:** This involves the surgical removal of all or part of your ovary. This is usually done with keyhole surgery under general anaesthetic. The surgeon will remove, freeze and store

your ovarian tissue. The tissue contains immature eggs which can then be used in the future. As this procedure does not involve any drug treatment, it may be quicker than treatments which require stimulation of the ovaries. This procedure is in the early stages of development. A small number of babies have been born from it, but it is still unclear how successful it is. It is not suitable for people with ovarian cancer, or when there might be cancer cells in the ovary.

- **Ovarian shielding (oophoropexy):** This involves shielding or removing the ovaries from the radiotherapy treatment area. This helps to reduce the amount of radiation they receive. This procedure is only considered for those having abdominal or pelvic radiotherapy.

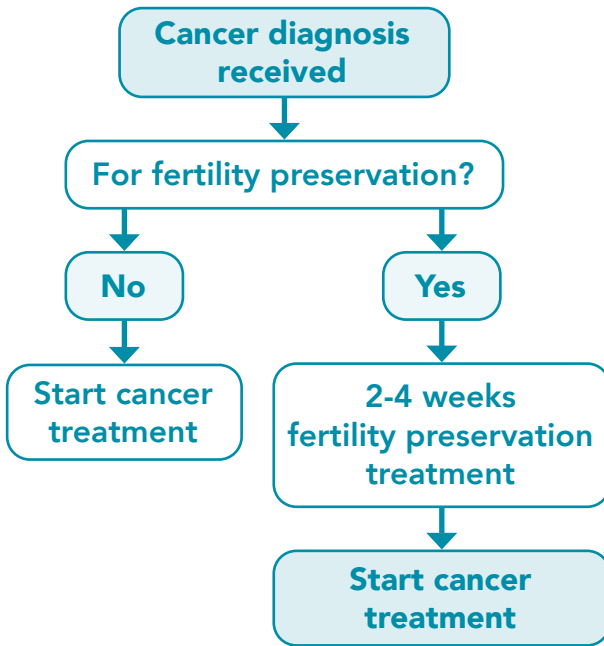
Some of these procedures might involve frequent hospital appointments for blood tests and scans. These appointments may be over several weeks.

You may need to have a trans-vaginal ultrasound during some of these procedures. This is a scan which involves inserting a scanning probe, similar to a tampon, into your vagina. This allows us to see your womb more clearly. Your doctor or nurse will be able to give you more information about this.

## Are there any restrictions I should be aware of?

All people requesting NHS-funded egg or embryo storage must meet the current criteria for fertility treatment. This includes being under 38 years of age at the time of referral and having a body mass index (BMI) of less than 35. It is also a requirement that you have no children of your own. You must also not have had any previous sterilisation procedures.

# What happens now?



Some young people may worry about delaying the start of their cancer treatment to carry out fertility preservation. If you have concerns, it may help to talk this over with your oncologist or nurse specialist. We know this may be a difficult decision. It is important to take some time to think about it. As we said earlier, you might not be thinking about having children now but you might do in the future.

## Assisted conception service (ACS)

Before your eggs, embryos or ovarian tissue can be stored, a blood sample must be taken. This will be done at your first visit to the ACS. The test screens for hepatitis B, hepatitis C and HIV.

We will discuss the tests with you and answer any questions you might have. We will check that you fully understand the information before asking you to sign a consent form. If any of these test results are positive, further support and medical follow up will be available.

We will also discuss what fertility options are available to you and what these involve. We will be happy to answer any questions you might have. You may not feel able to make a decision right away and may want time to think about things. You will be given another appointment to return a few days later. If you decide to go ahead you will be given appointments to return to start your treatment.

## **Do I need to use contraception?**

Although your treatment may affect your fertility, there is no way to know for certain. You must practice safe sex and use a condom during your treatment and for up to a year after your treatment finishes. This not only helps to prevent pregnancy, but will also protect you and your partner from sexually transmitted infections.

## **Is everything I discuss confidential?**

All of these appointments are confidential. This means the staff will not tell anyone else (not even your parents) what happens at these appointments. They will not share anything you have spoken about or any worries you have. Your results will only be sent to you and your oncologist. If your doctor is worried you do not fully understand what is happening, they might encourage you to talk to your parents, another family member or a close friend. If there is anything you do wish your doctor or nurse to share with someone else, they can do this but only with your permission.

## About this information

This guide is provided for information only. It should not replace professional medical advice relevant to your own individual situation.

The information was produced by The Beatson West of Scotland Cancer Centre with contributions from:

- Clinical Nurse Specialist Teenagers and Young Adults
- Ward manager Assisted Conception Service
- Professor of infertility (Edinburgh)
- Young people.

Every effort has been taken to ensure the information is accurate at the time of publication.

## Further information and support

- **Glasgow Royal Fertility Service (Assisted Conception Service)** ☎ 0141 211 8535

[www.nhsggc.scot/hospitals-services-a-to-z/assisted-conception-service/](http://www.nhsggc.scot/hospitals-services-a-to-z/assisted-conception-service/)

Clinic Area B (ground floor)  
Queen Elizabeth Building  
Glasgow Royal Infirmary  
16 Alexandra Parade  
Glasgow G31 2ER

All our staff are here to make sure your treatment goes as smoothly as possible and will try to help with any questions or problems you may have. There are also voluntary organisations providing information and support.

These include:

- **Macmillan Cancer Support** ☎ 0808 808 0000  
[www.macmillan.org.uk](http://www.macmillan.org.uk)  
Providing practical, medical, emotional and financial advice for those affected by cancer.
- **Macmillan Cancer Support-** Fertility information can be found at  
<https://www.macmillan.org.uk/cancer-information-and-support/impacts-of-cancer/fertility>
- **Teenage Cancer Trust**  
<https://teenagecancertrust.org>  
The Teenage Cancer Trust offers unique care and support, designed for and with young people.

## Glossary of terms

### **Chemotherapy:**

The use of anti-cancer drugs to destroy cancer cells.

### **Cryopreservation:**

The process of freezing and storing body tissue

**Embryo:** A fertilised egg.

**Hepatitis:** Inflammation of the liver.

### **HIV (Human Immunodeficiency Virus):**

The virus that causes AIDS.

**Oncologist:** A doctor who specialises in treating cancer.

**Oocyte (egg):** A reproductive cell.

**Radiotherapy:** The use of high energy X-rays or radiation to destroy cancer cells.