Sperm Freezing & Storage



Storing sperm is a way of preserving male fertility where a man is to undergo a treatment that may damage his ability to produce sperm such as chemo/radio therapy, surgery or other medical treatments. Sperm can be stored from boys after they enter puberty, and storing sperm for a long period does not alter its ability to fertilise an egg.

You can be referred to the **Regional Fertility Centre (RFC) in the Royal Hospital Site** to bank sperm prior to having surgery or commencing treatment which could reduce your fertility. This is often advised even if there is thought to be only a small chance of the treatment affecting your fertility, when it is considered a bit like an insurance policy or back up 'just in case'. The RFC is a clinic which provides fertility treatments including IVF, but also has a bank to store eggs and sperm for men & women, and adolescents who are undergoing cancer treatment. Sperm are stored in liquid nitrogen at -196ºC and can be thawed for future use either in artificial insemination or other fertility treatments.

What is the process if I am referred to the Regional Fertility Centre?

1. A doctor or nurse from your surgical or oncology team sends a referral form to the RFC via email.
2. Before you can bank sperm, you need to have blood tests to check for infections. These are the same checks you have when giving blood. They include blood tests for HIV and hepatitis.
3. When your referral is received you will be contacted by phone by a member of staff from the RFC to offer you an appointment to attend the clinic. If you have a wife or partner, you should bring them to the clinic with you. If you don't have a partner, you can bring a parent or friend or family member for support if you wish.

What can I expect when I attend the clinic?

1. Before you bank sperm, you will need to complete a personal details form both for yourself and for your wife/partner if you have one, and consent forms which the doctor can help you fill in. The consent forms allow you to specify:

    - What happens to the sperm if you are no longer able to make decisions for yourself or if you die

- How long you want to store the sperm for – this is usually 10 years initially
- Whether your wife or partner can use the sperm to have a baby if you die or become mentally incapacitated, and whether you want to be named as the parent if a child is born as a result of treatment after your death
- Whether your sperm can be used for training
- Any other conditions you want to state about how the sperm can be used.

These forms are necessary to allow us to store sperm for you, as every clinic must have valid patient consent forms for all sperm, eggs or embryos stored within it. All Fertility clinics in the UK are regulated by the Human Fertilisation and Embryology Authority (HFEA) who carry out regular inspections to ensure that all stored material is accounted for. **QR code links to the consent forms at end of this document.**

If you want to allow your partner or wife to be able to use your sperm in the event of your death you need to specify this along with their details on the consent forms.

2. At the RFC you will meet with the doctor and then the scientist, who will test and process your sperm sample for storage. You will be given a container to produce a sperm sample by masturbation in a private room in the clinic. If you feel this might be difficult you should let either the doctor or the scientist know. You can bring your partner into the room with you to produce your sperm sample if you think this would be helpful. If you cannot produce a sperm sample in the clinic arrangements can sometimes be made for you to produce the sample at home and bring it back to the clinic if you do not live too far away.

How is the sperm sample processed?

The sperm are processed and frozen for your subsequent use.

You will be contacted by one of the scientists from the laboratory after they have processed and frozen your sample. You will be advised on the quality and number of sperm samples stored and the type of treatment your sperm would be suitable for (see treatments below). If you wish to return to bank more sperm this can possibly be arranged before your treatment or surgery, or if there is an interval between surgery and commencing chemotherapy or radiotherapy.

What happens when sperm are stored?

When you store sperm, it is important that you understand the limits on the storage time and keep in contact with the clinic.

- The standard storage period for sperm is normally 10 years. This period can be extended, if necessary, up to a maximum of 55 years.
- You can vary or withdraw your consent at any time.

- **You must let the clinic know if your relationship status changes e.g. if you have a new partner or have ended an existing relationship so that you can make the necessary changes to your consent forms. If you have not named a partner on the consent form, they cannot use your sperm in the event of your death.** Similarly, if a relationship ended but your ex-partner was still named on your consent form, they could legally use your sperm if you died.
- **You must let the clinic know if you change postal address, phone number or email address**. The clinic will contact you one year before the storage period is coming to an end. If they cannot contact you when the storage period ends, legally the clinic will have no option but to take your sperm out of storage and allow it to perish.
- If your fertility has not been affected and you go on to have children, you should withdraw your consent for storage. This will prevent you getting reminder letters and reduce the administration associated with stored material in the clinic.

How can I have a baby with stored sperm?

You can use your stored sperm in fertility treatment with your partner, either IVF or artificial insemination. If you have multiple samples stored, and the sperm is of very good quality, it may be suitable for use in **artificial insemination**. However, some sperm do not survive or are damaged by the freezing process. This means that after freezing there may be a reduction in number, quality and movement of sperm. Sperm quality can also be reduced at the time of a cancer diagnosis even in men who feel otherwise well. Unless someone has attended the clinic on several occasions to store multiple samples of very good quality sperm, the amount of sperm available will be limited. It is likely therefore that the best way to use the sperm is with **In vitro fertilisation (IVF**) where a single sperm is injected into each egg in the laboratory by a process known as Intra-cytoplasmic sperm injection (**ICSI)**. This involves the female undergoing treatment to produce multiple eggs which are extracted from her ovaries and then injected with the sperm to achieve fertilisation. This is a more invasive treatment than artificial insemination but usually requires the use of only one straw of stored sperm per treatment and has higher success rates than artificial insemination.

Further information on IVF-ICSI treatment can be found on the Regional Fertility Centre website https://www.RFC.hscni.net the Human Fertilisation & Embryology Authority website*:* https://www.hfea.gov.uk.

Practical Questions

Is there a charge for sperm storage?

There is no fee if eggs or sperm are stored for medical reasons – eg. Prior to cancer treatment.

Is IVF free?

You and your partner are eligible for HSC funded (free) IVF/ICSI if you meet the standard eligibility criteria for publicly funded treatment. This currently includes a woman being under 40 (or up to 43 if female has good egg reserve), neither partner being sterilised, and the female having a BMI <30kg/m^2 and not having had previous NHS funded IVF. Currently each eligible woman (your partner) gets one fully cycle of treatment. Funding is however under review and may increase in the future, and eligibility criteria could also change.

How do I get fertility treatment using my sperm?

If you and your partner cannot conceive naturally, either one of you can ask your GP to refer you to the Regional Fertility Centre. It is probably easier for the referral to be made by your GP as you will be the one who already has a record in the clinic. The GP should stipulate on the referral that you have sperm stored in the clinic. When you receive an appointment both you and your partner should attend together as your partner will have to undergo some standard tests – blood tests and an ultrasound scan of her womb and ovaries before treatment can begin. There can be several months wait for an initial appointment, but when your names are added to the waiting list for IVF, the waiting time is not long (this can vary but is currently less than 3 months (September *2025*).

QR code links to the consent forms – try to read these before you attend for sperm banking

HFEA GS form is for single men/boys without a female partner

Consent form required for all men storing sperm

Consent form for men who have a female partner

For further information on sperm banking see link below:

https://www.cancerresearchuk.org/about-cancer/coping/physically/sex/men/sperm-banking