

Sperm Freezing

Information for Patients

Sperm freezing may be offered to people whose fertility is at risk so that they have the opportunity to use stored sperm at a later date for fertility treatment. It may also be offered to patients before fertility treatment, such as in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI) when a back-up sample is required.

The storage and use of human sperm is regulated by the Human Fertilisation and Embryology Authority (HFEA), established under the Human Fertilisation and Embryology (HFE) Act (1990, as amended 2009). The Edinburgh Fertility Centre is licensed by the HFEA to procure, process and store sperm.

Please read the following information carefully as it is important that you are able to make informed decisions about the storage and use of your sperm and to the disclosure of information. You should be given a suitable opportunity to read the information and consent forms before completing them, and have the opportunity to discuss anything with a counsellor but we understand that in some circumstances, such as for urgent oncology referrals, this is not always possible. If you think of any questions, even after you have completed consent forms, it is a good idea to write them down and we can try to answer these at your appointment for sperm freezing.

Consent Forms

You must complete two types of forms to consent to sperm storage:

- HFEA CD form: Your consent to disclosing identifying information

And either the:

- HFEA GS form: Your consent to the storage of your eggs and sperm (for patients without a current named partner)

Or the:

- HFEA MT form: Your consent to your sperm and embryos created outside the body using your sperm being used in treatment (IVF and ICSI) or stored (for patients with a current named partner)

If you have been given the forms to take home and you are happy to complete the sections within them, we ask that you leave the declaration section of each consent form blank so that this is signed and dated with a member of clinic staff present. If there is anything you do not understand, please let us know and consent forms can be completed during an appointment at our centre.

HFEA GS Form: Consent to the storage of your eggs or sperm

The HFEA GS form shows that you consent to your sperm being stored and allows you to state how long your sperm can remain in storage. As part of your consent, you need to decide what you want to happen to your sperm if you die or become unable to make decisions for yourself. If you have a partner you wish to name to use the sperm in such circumstances, you should use the HFEA MT form.

The law allows you to store for any period up to 55 years, in 10 year increments. This consent must be 'renewed' at 10 yearly intervals.

HFEA CD form – Consent to disclosing identifying information

We will store information about you and your medical treatment and some of this information will be submitted to the HFEA. You may give consent for your information to be shared with specific groups of people outside our centre. This allows us to support your care or treatment if your GP or other healthcare professionals responsible for your treatment (eg. oncology team) request information about your samples.

You may consent to your identifying information being disclosed as part of valuable medical research (eg. the safety and effectiveness of fertility treatments). This also applies to identifying information about any child born as a result of your treatment. If you give consent for non-contact research, you will not be notified about research. Data which is routinely collected can be seen by the research team or those who link datasets. If you consent to contact research, we may contact you in the future if there is a research study we think you might be suitable to take part in. We would tell you what the research is about and you decide if you would like to participate. In both types of research, there are strict security measures and confidentiality controls and you will never be identified in publications.

HFEA MT form – Consent to treatment and storage

If you have a partner you wish to name to use your stored sperm for future fertility treatment (IVF or ICSI), you must complete the HFEA MT form. You need to give your consent if you want your sperm to be used to create embryos and for those embryos to be used or stored. If you consent to storing embryos created using your sperm, you will state how long you consent to them remaining in storage. You will also need to state what you would like to happen to your sperm and/or embryos if you were to die or become unable to make decisions for yourself. The use of your sperm in treating any named partner would be considered by the medical staff caring for them at the time.

If you do not have a partner you wish to name, you should complete the GS form. If your personal circumstances change and you later wish to name a partner to use your sperm in fertility treatment, it is important that you let us know at the earliest opportunity. It is important to understand that stored sperm can only be used in future fertility treatment for the partner you have named in the MT form, providing consent has been given in the appropriate sections which includes posthumous use.

Changing or withdrawing consent

You may change or withdraw your consent and we encourage you to review the terms of your consent if your circumstances change. There are a number of reasons you may wish to amend consent (eg. if you did not name a partner at the time of storing sperm but later wish to do so or if your partner changes). You may wish to withdraw consent to your samples being stored and this is common if you have had successful fertility treatment and do not require your remaining samples for future fertility treatment. If you have had a treatment that can affect your fertility (eg. chemotherapy), sperm production might return. Your follow-up semen analysis results can help you decide if you wish for your sample to remain in storage or be allowed to thaw and perish. If you wish to change or withdraw your consent, please contact us as soon as possible so we can send you the relevant consent form to complete and return to us.

Counselling

Before storing sperm and signing consent forms, you will be given the opportunity to speak with one of our fertility counsellors. This may be to discuss implications or concerns about storing sperm. If you would like to arrange a fertility counselling appointment, please let us know and we can arrange that for you. You can also speak with a fertility counsellor after sperm storage.

Screening Tests

Sperm, embryos and tissues are stored in highly complex and specialized freezers at a temperature of -196°C. Samples are stored in secure containers, which are placed into a freezer alongside samples from other patients. There is a theoretical risk that any infectious agents present in a sample from one patient could cross-infect samples from other patients. We should emphasise that there has never been any documented case of this happening in the context of sperm or embryo storage in the UK. However, due to the theoretical risk, before sperm can be frozen and stored, the law requires screening for transmissible infections.

The level of screening depends on how the samples will be used in future fertility treatment. As a minimum, a blood sample will be taken to test for human immunodeficiency virus (HIV), hepatitis B and hepatitis C. If surrogacy treatment may be needed in the future, blood samples will also be tested for human T-lymphotropic virus (HTLV), cytomegalovirus (CMV) and syphilis and we will ask for a urine sample to test for chlamydia and gonorrhoea. With the exception of CMV, we are

unable to freeze and store sperm if any of these test results are positive. If additional tests are required, this will be discussed with you.

If you test positive for a transmissible infection, you will be informed in confidence by a member of the clinical team. You will be offered a follow-up appointment to explain the results, counselling and referred as appropriate. No information will be disclosed to unauthorised persons. There may be implications associated with a positive test result, such as risk of exposure of the infection to your partner or it may impact some personal insurance policies. Sperm may still be stored but special arrangements will have to be made and you will be referred to another centre.

Freezing Sperm

You will be given an appointment to produce a sample for freezing and we recommend that you abstain from ejaculation for 2 to 7 days beforehand. This is in order to produce the best quality sample for storage. If you have not already provided photo ID (passport or driving licence) you will need to take this to your appointment. If you do not have a passport or photo driving licence, you will need to provide your GP registration form/card with your NHS number and a recent photo. At your appointment, you will be asked to confirm your name and date of birth and this will be checked by two members of laboratory staff. You will be shown to a private room where you will be left to produce your semen sample by masturbation. When you have provided your sample, you are free to leave the department and you will be contacted by phone to let you know the quality of the sample and if it was suitable for storage.

Semen analysis and freezing procedure

We will assess your sample for quality and suitability to freeze. This includes assessing the number of sperm (count), how they swim (motility) and their shape (morphology). If the sample is suitable for storage, we add a protective solution to minimise the damage to sperm during freezing. The sample is divided between small containers called straws and the number of straws will depend on the volume of the sample. The straws are cooled until they reach cryogenic temperatures and stored in a tank to maintain the appropriate temperature.

The number of samples that need to be stored varies between patients and will depend on a number of factors, mostly related to the quality of the sample provided. There may also be constraints relating to the timing of any treatment you are due to have. This will be discussed with you and the healthcare professional in charge of your treatment before your appointment for sperm freezing.

There is no guarantee that your semen sample is fertile before storage. It is possible that due to an illness, previous treatment or for other reasons, there is a reduction in the number of sperm you are producing, or the sperm may not be moving actively. If this is the case, it may not be possible to successfully freeze the sperm. If we believe it is not going to be worthwhile to store a specimen, we will let you know and discuss with you the possibility of providing another sample.

Sperm survival

Some sperm will not survive freezing and thawing as it is an unnatural process for sperm. Although your sample may be deemed as suitable for freezing, your sperm may be particularly susceptible to freezing and none survive. Even if sperm survive the process, we cannot guarantee a successful outcome from fertility treatment. We feel it is important that you are aware of this now so that you have as much information as possible to help manage expectations for any future fertility treatment. Storage of fertility preservation samples is split between vessels that are continuously monitored but we cannot absolutely guarantee the safety of the storage. Your samples have no monetary value and in the unlikely event of any accidental loss, destruction or damage of your sperm as a result of equipment failure, electrical failure, fire, natural disasters, theft, malicious damage or any unforeseen occurrences, the Edinburgh Fertility Centre and its staff cannot be held liable.

Follow-up after Chemotherapy

Depending on your treatment and dose, fertility may be restored after you stop chemotherapy. We recommend that a semen analysis is carried out at least 1 year after chemotherapy has stopped. This can help you decide if your samples should remain in storage.

Fertility Treatment Using Your Sperm

If you have not already been referred for fertility treatment and decide in the future that you and your partner wish to use your stored sperm, your GP can refer you and guidance can be given on eligibility for NHS funded treatment. There are different fertility treatments available, such as IVF or ICSI and after referral, our clinical team will advise you on the best option for you and your partner. If you change your name or identity after storing sperm and later return for fertility treatment, you will need to provide evidence of your acquired identity; likewise if your appearance has significantly changed, you will be asked to provide up-to-date identification.

If you have consented to your sperm being used posthumously, the partner who you have named on the HFEA MT consent form can contact their GP to discuss a referral and eligibility for NHS funded fertility treatment.

Cost of Freezing and Storing Sperm

At the time of referral, you will be advised if you meet the eligibility criteria for NHS funding to freeze and store sperm. If you do not meet the criteria, we are able to offer sperm freezing and storage on a self-funded basis. You will be advised of the cost at the time of storage. Prices can be found on our website and will be subject to review on an annual basis.

Review and Contact from the Laboratory

It is important that you let us know if you change address or medical practice so that we are able to contact you when needed. We will occasionally contact you to check that your details are up-to-date and circumstances have not changed.

Renewal of consent

At least a year prior to your 10 year consented storage period expiring, we will attempt to contact you to determine your wishes and you will have an opportunity to extend the storage for another 10 years (up to 55 years maximum). If we cannot contact you for any reason (i.e. you have moved or changed details) then we are required by law to allow the samples to perish when the storage period ends.

Expiry of storage consent

A year before the expiry of your storage consent, we will contact you. If you are eligible to extend the storage period, you must complete and return a new consent form. If we do not receive this or if we are unable to contact you, we are legally obliged to allow the samples to thaw and perish according to the expiry of the storage consent we hold.

Contact details

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Royal Infirmary of Edinburgh
51 Little France Crescent
Edinburgh, EH16 4SA

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