

# Sperm Freezing & Storage



What is sperm freezing and storage?

Sperm are stored in liquid nitrogen at  $-196^{\circ}\text{C}$ . They can then be thawed for use either in artificial insemination or other fertility treatments.

Human sperm have been successfully frozen and thawed for human use for more than 40 years.

What are the options for men or boys having a treatment which may affect their fertility?

**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. Studies have shown that 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.**

## What happens when sperm are frozen?

**Step 1.** Before you agree to the freezing and storage of your sperm, your Doctor will explain the process involved.

**Step 2.** You will be screened for infectious diseases, including HIV and Hepatitis B and C as this is a requirement for all patients.

**Step 3.** You will need to give written consent for your sperm to be stored.

**Step 4.** At the clinic, you will produce a fresh sample of semen by masturbation.

**Step 5.** The sperm are then extracted from the semen and frozen away for your subsequent use.

## How much control do I have over what happens to my sperm?

Before you produce your sample for storage the Doctor will ask you to fill out various consent forms. These forms allow you to specify:

- what will happen to your sperm should you become unable to make decisions for yourself or die
- how long you want to store your sperm for (the standard storage period is 10 years) but this can easily be extended

- whether your partner (if you have one) can use the sperm later to create a family and whether you wish to be recorded as the father of any child born using your sperm if for some reason you have died or been brain damaged in the intervening period
- any other restrictions that you may wish to record for the use of your sperm.

Subsequently, you can vary or withdraw your consent at any time.

### **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 exceeded only in certain circumstances, up to a maximum of 55 years. Your Doctor will be able to explain whether you can do this, and how long you may be able to store your sperm for.
- You must let the clinic know if your relationship status changes eg. you have a new partner or have ended an existing relationship. It may then be necessary to attend and make changes to your consent. Failure to do so may mean that your partner will be unable to use your sperm in the event of your death or mental incapacity.
- You must let the clinic know if you change address. The clinic will contact you on a regular basis e.g. annually when 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.

### **What is my chance of having a baby with stored sperm?**

Some sperm do not survive or are damaged during freezing. This means that after freezing there may be a reduction in number and quality. Some frozen sperm samples are of such poor quality that they can only be used for a kind of “test-tube baby” treatment known as Intra-cytoplasmic sperm injection (ICSI). This involves injecting a single sperm into each egg within the laboratory.

The clinic will contact you after they have processed and frozen your sample. They will advise you on the quality and number of samples of sperm stored. You may wish to have a second attempt and this can be arranged before your treatment or surgery. The clinic will advise you on the type of treatment your sperm would be suitable for.

*For more information visit the Human Fertilisation & Embryology Authority website:*  
<https://www.hfea.gov.uk/>