

## Freezing and Storing Sperm

### Why freeze sperm?

A man may want to store his sperm for many reasons:

- he may need surgery that could make him infertile
- he may need cancer treatment that might damage the cells in the testis that produce sperm by changing the chromosomes (the material that carries genetic information) in the sperm
- he may work in a high risk job and want to consider preserving his sperm for future use by his wife or partner in case of severe injury or even death
- he may be away during his partner's planned fertility treatment
- he may be planning a vasectomy (the male sterilisation operation) but want a safeguard should his circumstances change in the future
- he may require a surgical sperm retrieval, and freezing sperm avoids the need for repeated operations and ensures the availability of sperm before any other fertility treatment begins

### Preparing to store sperm

At the initial consultation at MFS, a nurse or doctor will discuss and assess the man's reasons for considering freezing sperm. If he is unsure about having something as permanent as sterilisation, then he should not go ahead with a vasectomy. Frozen sperm is never as good as fresh sperm. He should consider that that freezing sperm is expensive, not always successful and may require his partner to have invasive fertility treatment if the frozen sperm is used.

A member of the clinical team will provide information about the procedure before sperm is stored and get his informed consent in writing. This must also name the person who can use the sample and state the fate of the sample should he die or become mentally incapacitated. The law also lays down strict limits on the length of time for which sperm is allowed to be stored.

Before storing sperm, he must have a blood test to screen for diseases such as HIV and hepatitis B and C, (see the MFS leaflet 'Routine Infection Screening').

### How is sperm storage carried out?

Freezing sperm is relatively straightforward. Depending on the reason for storing the sperm, the man will be asked to produce several sperm samples over one or two weeks. Each sample is mixed with an equal volume of a cryoprotectant media (fluid that protects the individual sperm when they are frozen). The sample is then cooled slowly before being stored in liquid nitrogen at  $-196^{\circ}\text{C}$ .

**What are the risks?**

Sperm freezing for humans has been available for more than 50 years. So far as is known, freezing sperm is safe for any resulting child.

One risk is that not all the sperm will survive being frozen and thawed.

Alternatively the sperm storage banks themselves might fail and destroy the samples inside them, a problem safeguarded by regularly replacing the banks and linking them to a 24 hour alarm. However, no system can guarantee against a sudden catastrophic failure.

**What are the costs?**

There are two elements to the cost. The initial cost for the first sample includes one year's storage and the screening tests. Thereafter, the annual running cost covers:

- the maintenance of the liquid nitrogen that keeps the samples cold
- the cost of linking the bank to a remote alarm system, which monitors the temperature inside the bank around the clock
- the cost of the audit and paperwork necessary to keep records up to date. (MFS contacts all the owners of frozen sperm annually to check if the sample should remain frozen - if the storage limit permits)

Visit the fees section of [www.midlandfertility.com](http://www.midlandfertility.com) for details of the cost of sperm freezing.

**More information**

In summary, sperm freezing is simple, safe, and effective. Freezing sperm does not guarantee that MFS can make a man's partner pregnant in the years to come, but for some men it will be their only hope. There is a lot to think about, and MFS clinical and scientific staff are happy to help a man make a decision.

Please telephone MFS on 01922 455911 to make an initial consultation appointment.

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