

# Freezing and Storage of Sperm



Concept  
Fertility  
Centre

12.3.10

## WHAT DOES THIS INVOLVE?

The freezing of sperm has been performed since the early 1950's and has been undertaken at Concept Fertility Centre since the early 1980's. A semen sample, collected at Concept Fertility Centre is mixed with a cryoprotectant (similar to antifreeze in a car) and drawn into thin plastic straws, each of about 0.5ml in volume. Normally between 5 and 20 straws may be prepared from each single ejaculate. The straws are coloured and a coloured plug is used to seal the end. These colour combinations are unique for each man. The man's name, date of birth, Concept file number and sample number are recorded on each straw. These straws are then placed into a programmable freezing machine and liquid nitrogen is pumped into it at a controlled rate. This allows the sperm straws to be frozen in a scientifically controlled manner.

At the completion of the freezing programme, the straws of semen are stored in liquid nitrogen at -196 C in a state of suspended animation. Sperm can stay in this situation for many years without any detrimental effect.



## WHY FREEZE SPERM?

- Prior to having a vasectomy
- Prior to chemotherapy or radiation therapy
- Sperm donation
- Prior to HRT
- When the male partner is going to be away during fertility treatment

## HOW IS SPERM FROZEN?

- A semen sample is produced and then mixed with a special freezing media
- This mixture is then drawn up into thin, coloured plastic straws (a bit like drinking straws) which are sealed with a coloured plug
- The straws are labelled with name and a unique file number and placed into a controlled rate freezer machine
- Once frozen the straws are stored at -196°C in liquid nitrogen

## WHO WOULD STORE SPERM?

The freezing and storage of sperm is undertaken for many reasons:

### *Pre-vasectomy/Pre-chemotherapy/HRT*

Men may store sperm before undergoing vasectomy or chemotherapy as an insurance policy. Vasectomies should be considered as irreversible because repair and reconnection of the vas deferens may be unsuccessful or accompanied by a significant reduction in normal fertilizing capacity of sperm.

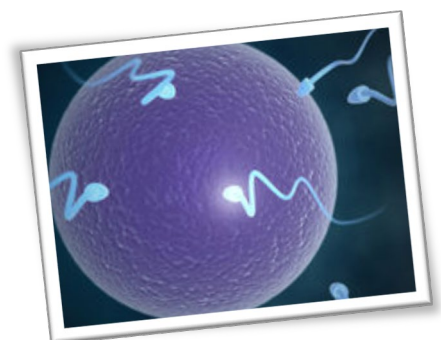
Some chemotherapy and HRT can result in damage to a man's future ability to produce sperm. Freezing sperm before treatment can be a way to circumvent this potential problem.

### *Sperm Donation*

Sperm donation may be anonymous or may be provided to known recipients. The storage of sperm allows artificial insemination to be performed without the complication of managing the sperm collection procedure. Sperm donors are also health tested and each sperm sample remains in quarantine for six (6) months. The sperm samples are cleared for use after final health tests are completed. This reduces the risk of transfer of the known viral diseases such as hepatitis and HIV.

### *Management of Assisted Reproductive Treatment*

Some men who are not going to be readily available when their partner is undergoing treatment for assisted conception or men who find semen collection on demand a difficult exercise, could consider the storage of sperm a convenient option.



## MANAGEMENT OF SPERM STORAGE

Men who choose to store their sperm need to be aware of the costs (see fee schedule 12.4.2). Please contact Concept Fertility Centre to discuss the costs at the time. Further fees will be incurred after 5 years of storage.

All men who wish to store sperm need to undergo blood tests for HIV, Hepatitis B and Hepatitis C.

Concept forms (13.1.4 & 12.4.16) to store semen must be signed before storage, and this consent will last for 5 (five) years up to a maximum of 15 (fifteen) years. Special applications will be required to extend storage beyond 15 (fifteen) years. Ongoing consent is needed at 5 and 10 years from the date of storage.

It is important to inform Concept of any change of address. If men are not contactable for renewal of the consent and application for continued storage after (15) fifteen years, the samples will be discarded. Under the Human Reproductive Technology Act 1991, no posthumous use of semen is permitted. In the event of death, Concept will need to be informed so that decisions can be made regarding the disposal of the stored semen. Please contact Concept if you wish to discuss this further.

## SEMEN COLLECTION

Semen samples are collected in the collection rooms at Concept or at home. It is important to book the collection room at a suitable time (Monday-Friday, 7.30am -3:00 pm). We advise abstaining from sexual relations for one day prior to collection. Because the collection rooms are used by others it is important not to be late for the appointment. Concept will inform you if the sample is unsuitable for freezing. A report will be sent to your doctor.

## USE OF SPERM

The sperm will be thawed and used only with specific written consent of the man who owns the stored semen. Men who choose to donate their sperm have the right to vary or withdraw their consent at any time.

## FURTHER INFORMATION

Should you require any further information please call the Scientific Director at Concept.

## Stages involved in sperm freezing

- Undergo blood tests for HIV, Hepatitis B & C
- Sign a semen storage consent form
- Collect a semen sample at Concept or at home
- Semen is frozen

## How long can semen remain in storage?

*The Human Reproductive Technology Act 1991* allows semen to remain in storage for a maximum of 15 years. Consent to continue storage must be given every 5 years. In special circumstances storage extension could be granted.

## Change of address?

Please let Concept Fertility Centre know your new contact details if you change address.

## Questions and Notes

## Contact Us

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