

The Royal Children's Hospital Fertility Preservation Service Sperm Banking Information Sheet

Male fertility

When a male is born, he has all the parts of his reproductive system in place, but it is not until puberty that he is able to reproduce. The testes contain 2 different types of cells, the Sertoli cells and the Leydig cells. The Sertoli cells are responsible for making sperm and the Leydig cells are responsible for producing testosterone. Until puberty, these cells are immature and inactive and do not produce sperm.

What is sperm banking?

Sperm banking is when you produce a sample of sperm via masturbation which is then frozen for future use. It is clearly labelled with your details and stored in a large tank of liquid nitrogen. Sperm can be stored for an indefinite amount of time.

Why do I need to consider freezing my sperm?

Chemotherapy drugs enter the blood stream and travel around the body searching for cancer cells to destroy. Unfortunately, this medication cannot differentiate between some healthy cells and cancerous cells, thus destroying sperm and sperm and sperm producing cells in the process.

When would I need to consider freezing my sperm?

You will need to freeze your sperm before you start any chemotherapy or radiotherapy. This is because once you start this treatment, the damage to the sperm and sperm making cells (Sertoli cells) is immediate and irreversible.

How do I do this?

The sample needs to be produced via masturbation. The entire sample needs to be collected in a jar that will be provided to you.

Where do I do this?

There are two options for you to produce your sample:

- 1) If you live within 45 mins of the Andrology Unit, you can produce your sample at home and then bring it in to the lab at your allocated time within 1 hour of producing. The laboratory staff will give you instructions and timing for this.
- 2) You may also produce your sample at the Andrology Unit. You will have an appointment time to attend the rooms. If you are a minor, you will need a parent to accompany you to this appointment. This can be awkward and embarrassing, but the staff at the Andrology Unit do this every day and will try to make you feel as comfortable as possible. You will be told step-by-step what to do and given as much time as you need.
- 3) You may be asked to give more than one sample, if there is enough time before you start your treatment, but not all in one go. The reason for this is that your sperm might not be of high quality because of the cancer. If time allows, you may be asked to wait 2-3 days between each collection to give the sperm time to build up again. This might not be possible though depending on your treatment protocol and how fast your doctor needs to start treatment.

What happens next?

Your sperm will be stored at the Andrology Unit for 10 years. Once this time limit is reached, you can apply for the storage to be extended. While this may not be a priority at diagnosis, it will be something you may have to encounter down the track. It is important that you stay in contact with the sperm bank so that your yearly storage fees are paid and they know your contact details.

Who do I contact for further information?

If you would like any further information, please contact the Oncofertility team at RCH.

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