



Sperm banking before cancer treatment

Some cancer treatments can affect men's ability to father a child (his fertility). Collecting and storing sperm before treatment allows men the chance to still have children in the future if they choose.

This fact sheet answers some common questions about sperm banking, what it is, who needs it, how it works and where to go to do it. It also suggests questions to ask your doctor. We aim to help you make an informed decision about your future ability to have children.

This fact sheet does not replace talking to your doctors or nurses. It aims to act as a tool to help you prepare questions you can ask your healthcare team.

What is sperm banking?

Sperm banking, also known as sperm cryopreservation, is the collection, freezing and storing of semen. Semen is the fluid that contains sperm. Sperm can be stored until you decide you want to have a baby. Sperm banking is one of the easiest, most successful and well established methods of preserving fertility. It can be used for males who are at least mid-way through puberty. Sperm banking can be performed on sperm produced by ejaculation or after a minor procedure with anaesthetic called a testicular biopsy. Testicular biopsy is performed when a man or a boy is not able to produce an ejaculated sample. Read our [Testicular Biopsy](#) factsheet for more information.

Some cancer treatments (radiotherapy, chemotherapy, bone marrow therapy and surgery) can affect fertility. This may only be for a short time until after your treatment is over. But for some men it can be permanent. Before treatment begins it is important to discuss with your doctor how your treatment may affect your future fertility. Read our [Fertility preservation options for men with cancer](#) factsheet for more detailed information about how cancer treatment can affect fertility.



Who needs to bank sperm?

Cancer doctors recommend that all males having cancer treatment that may affect their fertility be given the chance to consider whether they wish to store sperm. This includes young men and adolescent boys who have gone through puberty. There are now also experimental options for freezing immature sperm and testicular tissue for prepubertal boys. It could mean they will be able to father children later in life.

Your cancer doctor and/or a fertility specialist can discuss with you how likely it is that your treatment will affect your fertility. If you are not ready to have children it may be difficult to look ahead to a time when you will want children. However, after treatment starts it does become more difficult to store sperm. The sperm may become damaged by treatment and won't be worth using. This is because some treatments such as radiotherapy and chemotherapy can damage sperm temporarily or permanently during the treatment.

Taking time to think carefully about your decision is important. Storing sperm allows you the opportunity to decide later in life whether you wish to father a child.

Can all men having cancer treatment bank sperm?

Most men will be able to bank sperm if they want to. However, there are rare situations when a man is not well enough to bank sperm. Others patients may have a cancer that means treatment must begin immediately for example, some types of leukaemia and lymphoma. This means it may be difficult to find time to bank sperm before treatment starts.

Sometimes a man's sperm count is low or the quality of the sperm is damaged. This can be caused by some types of cancers or because you are not well at the time of giving the sperm sample. However, as long as there is some sperm it is highly likely that you will be able to use this sperm to have a baby. This will either happen naturally, or with assisted fertility techniques such as



insemination or IVF. It is ideal to freeze sperm from several samples if the time is available.

Where do I go to sperm bank?

Sperm banking is done in a hospital, fertility clinic or a special sperm banking facility. These facilities are called ‘andrology units’.

How is the sperm collected?

The process of getting a semen sample requires the man to give consent to store his sperm and to actually collect a sample. Before or at the time of collection of the semen, men need to have a blood test to check for infections such as HIV, hepatitis and cytomegalovirus (CMV). Your doctor will discuss the meaning of these tests in more detail with you.

All men banking sperm will need to sign a medical consent form before the process happens. In the case of minors the legal guardian must complete the forms. This is because there are several important moral and legal issues that surround storing an individual’s sperm. For example, what happens to the sperm if the man dies? How long is the sperm stored for? Whether or not the partner of the sperm donor can use the sperm if the man dies? There may also be several other conditions you want to record about how your sperm is used.

To collect the sperm you will be left alone in a private room or with your partner. You will need to masturbate to gain the sample or your partner can stimulate you. Or you may prefer to bring along something you know will help you ejaculate like some magazines.

It is important not to use any lubricants to aid in getting an erection as they can damage or affect the quality of the sperm. If you are having extreme problems you may be able to use your own saliva. The specimen needs to go into a sterile container and is then handed to the nurse or scientist when you leave. You cannot use a normal condom to collect sperm. However, there is something on the market called ‘MaleFactor Pak’. This unique semen collection kit includes



everything you need to collect and transport a semen sample including a special condom. Ask your doctor about this.

Sometimes men can collect sperm during sex in the privacy of their own home. This is done using a special non-toxic condom. However, to ensure the sperm live, the sample needs to be taken to the laboratory quickly after ejaculation. You may be told not to have sex or masturbate a few days before coming to the clinic to collect the sperm sample. This will help in getting as much sperm as possible. If your cancer treatment must begin immediately, then the abstinence period doesn't matter. Your doctor may recommend that you collect more than one sample but this may not always be possible.

What happens to the sperm sample after collection?

The semen sample is labelled and sent to the laboratory where it is mixed with a solution to help protect the sperm. The sample is assessed for sperm number and motility and if the sample is thought to be good enough, it is frozen in liquid nitrogen where it can stay until it is needed for fathering a child.

How do men feel about sperm banking?

Understandably most men feel some level of anxiety and embarrassment about having to sperm bank. Walking into the clinic, waiting and then having to produce the sample is likely to feel uncomfortable. The staff involved in your care will be very aware of how stressful this is for you. They will try to support you and make the process as easy as possible for you. Teenagers can find the process extremely difficult. They may prefer to come alone or bring along a friend or brother close in age rather than their parents. Remember, if you are feeling anxious about producing the sample, it is very normal. You won't be the first to feel like this.

How long can I store sperm?

Sperm can be stored for many years. There is no scientific limit to how long you can store frozen sperm. Damage to the sperm can happen during the freezing or



thawing process, but the length of time it stays frozen does not alter the success rate for the sperm being able to create a child. Your doctor/fertility specialist will discuss with you how long you want your sperm kept. Different States in Australasia have different laws regarding storage of sperm.

How much does it cost to store sperm?

This will vary depending on where you are and the sperm banking facility you use. Generally though there will be a 'one-off' processing and freezing fee and then you will pay a regular storage fee to store the sperm. These costs are not covered by Medicare or private health insurance. The sperm banking facility storing your sperm will contact you regularly to find out whether or not you want to continue storing your sperm. Fees may be paid once or twice a year. It will depend on the facility. Please be sure to let the facility know if you move address.

How successful is sperm banking for having a baby?

Sperm banking has a very high success rate for producing babies through fertility treatment using IVF (fertilising eggs with sperm outside of the human body) or artificial insemination (injecting semen directly into the vagina or uterus). The decisions about whether or not to perform insemination or IVF may depend on several factors including:

- the quality of the sperm once it is thawed (freezing and thawing can damage sperm)
- the number of sperm frozen
- the age and health status of the woman receiving the sperm (women under 35 have the best chance of producing a child from sperm banking)

There is no guarantee sperm banking will enable a man to father a child but it will give men their best chance.



Questions for your doctor

Before you start your cancer treatment it is important to ask your doctor about sperm banking. You might like to ask your doctor about some of the following questions:

- How likely is it that my treatment will affect my fertility?
- How soon after my treatment is finished will I know if my fertility has been affected?
- Can I have sperm banking?
- Can I bring someone along with me when I give the sample?
- When should I do sperm banking?
- Where do I go to have sperm banking?
- How much does sperm banking cost (collection and storage)?
- What costs will I need to pay for my sperm banking?

- How successful is sperm banking in producing a child?

Where do I go for further support?

- Other fact sheets from the Future Fertility website
www.futurefertility.com.au or www.futurefertility.com.nz
- Fertility and cancer A guide for people with cancer, their friends and family. Booklet produced by Cancer Council Australia 2014
(<http://www.cancervic.org.au/downloads/resources/booklets/Fertility-and-Cancer.pdf>)
- CanTeen (www.canteen.org.au) Information and support for young people with cancer.
- Fertile Hope (www.fertilehope.org) Help and support for planning a family after cancer treatment.



You may also like to call a Cancer Helpline service:

- Australia 13 11 20
- New Zealand call 0800 226 237

Both these helplines will allow you to speak with an experienced cancer nurse who can guide you to further information about sperm banking.