

BLOOD CANCER AND FERTILITY – MEN

An information sheet for patients, families and whānau



This information sheet will help answer questions you may have about your ability to have children in the future. It will also provide information specific to time of diagnosis, treatment and after treatment has finished.

WHAT IS FERTILITY IN MEN?

Fertility means your ability to make a woman pregnant and have a baby. Infertility means that you are not able to become pregnant or father a child.

Infertility in men depends on:

- Decreased or no sperm production
- Low sperm motility (movement)
- Abnormal sperm shape
- Issues related to sperm transport such as blockage

Will my treatment affect my fertility?

Unfortunately, for some boys and men, treatment for a blood cancer or other haematological condition may make changes to their reproductive system and sperm, meaning they are unable to make a woman pregnant. Different types of chemotherapy may cause low testosterone levels and reduce your sexual drive.

This will depend on many things, including:

- What cancer or condition you have been diagnosed with.
- What treatment you will have (type and dosage).
- Your age.
- General fertility influences such as smoking, drug use and weight.
- Relevant medical history such as conditions causing hormone changes or trauma.

It is not always possible for your doctor to predict what will happen with your fertility but they will give you the best information they can.

Why does treatment for a blood cancer or condition affect fertility?

Your reproductive system can be damaged by either chemotherapy and radiotherapy and have a temporary or permanent effect on fertility. Both these treatments can cause cell death targeted at abnormal cells like cancer cells but can also effect and damage the surrounding normal cells.

Radiotherapy (radiation treatment) to an area that includes the testicles can reduce both the number of sperm and their ability to function. This doesn't mean that you will be unable to make your partner pregnant, but it becomes far less likely.

It is important to talk to your haematologist or nurse before your treatment starts about how it may affect your fertility. They will be able to give you information specific to you and suggest appropriate options.

-
- It is very important you understand your risk of infertility. Your haematologist will be very happy to repeat any information you need if you are unclear.
 - Prepare any questions, worries and concerns about your fertility before your appointment and make sure you have the information you need before you leave.

Who can give you support?

People in your support team may include:

- Haematologist
- Clinical nurse specialist

- Nurse
- Fertility services
- GP
- LBC Support Services Coordinator
- Psychologist/counsellor
- Cultural support
- Social worker
- Spiritual leader
- Family/whānau and friends

What to expect from your health care team

Sexual activity – Ask your doctor or nurse if it is okay to be sexually active during your treatment. Most men can be, but it is good to talk about this with your doctor to confirm.

Infertility – Different treatments are high or low risk for causing infertility. If you would like to have children after treatment, it is important to talk about this with your health care team before starting. There may be a way to preserve fertility prior to treatment and a referral to a fertility specialist can be made.

Birth control – It is important to prevent pregnancy during treatment because of the potential harmful effects on a fetus. Even if there is a risk of being infertile with treatment, birth control/contraception should be used. Your doctor will be able to advise you which birth control is best for you and your partner.

Condom use – It is advised by most doctors that you use a condom during intercourse if you are having chemotherapy. Even if your partner is on other birth control there may still be traces of chemotherapy in your semen that could have harmful effects on your partner.

What emotional support is available to me?

Being told that treatment might affect your fertility, no matter what level of risk, for some people can be very difficult to accept. You may have planned children in the future or not given it much thought until you were told you might not be able to have children after treatment. As a result, people feel a whole range of emotions, including anger, depression, anxiety, guilt and uncertainty. You may find it helpful to talk with someone about how you feel. There are many people who can offer

support, so please ask your LBC Support Services Coordinator for more information.

For some people, fertility is not a concern and does not impact treatment decisions.

Emotional support is available from diagnosis, through treatment and for many years after. It might not be until years following treatment that the impact on fertility is a concern. It is important to remember that you can always contact your GP, the haematology department at the hospital, a fertility clinic or LBC for more information and to discuss your options.

Will I have the option of being referred to a fertility specialist?

Unfortunately, not everyone will have the option of being referred to a fertility specialist before treatment starts. Due to the nature of some blood cancers and conditions (such as acute leukaemia and aggressive high-grade lymphoma) treatment needs to start immediately and it is life-threatening if it is not. Your haematologist will explain this to you if this is the case.

You may wish to speak to a fertility specialist even if you are at a low risk of fertility problems after treatment. It might be possible to arrange a consultation over the phone. You can also talk with a fertility specialist about your options after you have finished treatment.

If I am able to see a fertility specialist before treatment, what options might be available to me?

Some men may be referred to a fertility specialist before starting cancer treatment. There may be some fertility preservation options available to you that increase your chances of having a baby in the future. Many options for fertility preservation may be funded through the public health system, including sperm storage.

Sperm cryopreservation (freeze and storage)

- An appointment at a fertility clinic is organised to collect your sperm.
- Sperm is collected through ejaculation and is frozen using liquid nitrogen.
- Often the sperm count is satisfactory after one visit.

- The sperm sample is then stored for up to 10 years, but a request to extend this time can be made.

Testicular tissue freezing

- There is no current legislation and policy in New Zealand for collecting and freezing testicular tissue. For any updates on this, contact your fertility specialist.

Surgical sperm retrieval (SSR) and sperm microinjection (ICSI)

- This procedure can be done if there are some moving sperm in the testis but low or absent sperm in the semen.
- They are collected from a needle biopsy of the testis and can be stored or used for fertilising an egg.
- This procedure will involve having your partner also freezing mature eggs through oocyte cryopreservation.
- Fertilisation of the egg and sperm will be carefully completed in a laboratory as part of in vitro fertilisation (IVF). The fertilised egg will then be planted into your partner's uterus.

When can I start trying to have a baby, once I have finished treatment?

Generally haematologists will recommend you wait for a year after you finish treatment before you start trying to have a baby. This is for many reasons, including monitoring for signs of the cancer coming back and allowing time to recover physically and emotionally from the treatment you have received.

Speak with your haematologist or GP when you feel ready to have a baby and they can provide more information and/or refer you to a fertility specialist.

Please remember, during treatment it is very important to wear a condom when having sex even if your partner is on other birth control, as treatment could harm a developing baby. Chemotherapy can be transferred through semen, which would be harmful for your partner. Getting pregnant while having treatment could harm a developing baby.

Should I see a fertility specialist once I have finished treatment?

You may like to see a fertility specialist when you have finished treatment. They may be able to check

if the chemotherapy has affected your fertility and what options you have moving forward.

This may include:

- Blood test.
- Semen analysis, which measures the amount of semen you produce and the number and quality of sperm within that sample. If there is no sperm in your semen or you cannot ejaculate, a testicular biopsy may be an option to see if there are any sperm left in the testes.

If you finished treatment many years ago and you and your partner are unable to get pregnant, you can still be referred to a fertility clinic for assessment and support. Ask your GP or haematologist to send a referral for you.

If you cannot have children naturally or with IVF, it is still very important that you get support from a fertility specialist. There are options available that mean you can still father a child and be a parent even if you cannot conceive.

These include:

- Donor sperm
- Adoption
- Fostering
- Surrogacy

What support is available to partners or parents of someone whose fertility might be affected by treatment?

For some people, being told your partner or child may be infertile after treatment can be distressing. Your partner or child's emotional support team are also available to make sure you get the help you need. Please contact an LBC Support Services Coordinator if you would like to have more information about establishing your own support network.

Support for Adolescents and Young Adults (AYA)

Fertility and having a baby might not be on your mind and may or may not be something that you see happening in the future.

No matter what age or stage you are at, it is important that you have all the information you need to plan for the future.

