

The Royal Children's Hospital Fertility Preservation Service Egg Freezing Information Sheet

Female fertility

When a female is born, her ovaries will contain hundreds of thousands of eggs, which stay inactive until puberty begins. When puberty begins, usually between the ages of 8 & 14, the pituitary gland (located near the brain) starts making hormones that stimulate the ovaries to make female sex hormones (oestrogen and progesterone). These hormones assist with pubertal development and eventually the onset of periods. About once a month, during ovulation, an ovary sends a tiny egg into one of the fallopian tubes. For pregnancy to occur the egg needs to be fertilised by a sperm. If the egg is not fertilised by a sperm, a period will occur two weeks later.

What is egg freezing?

During the natural menstrual cycle, a group of eggs grow in fluid filled sacs (called follicles) in the ovary. Usually, only one egg will become fully mature and be released through ovulation. The other growing eggs will be reabsorbed. An egg freezing cycle stimulates the ovaries to grow a number of follicles and mature a number of eggs which can be collected and frozen.

Why do I need to consider freezing my eggs?

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 the quickly dividing cells in the ovaries and reducing the number of eggs. If the number of eggs (ovarian reserve) decreases due to treatment, there is a possibility that menopause may start earlier. Progression through puberty, periods and fertility can sometimes be affected. The impact on fertility is variable and dependent on age and type of treatment.

When would I need to consider freezing my eggs?

Ideally, if time allows, you would have an egg freezing cycle before starting any chemotherapy or radiotherapy treatment. However, this is potentially an option from as early as 6 months after you finish your oncology treatment depending on your age and the dose of treatment you received.

How is this done?

You will need to take follicle stimulating hormone (FSH) injections for between 10-14 days to stimulate your ovaries to recruit and grow lots of follicles. This is an injection with a very fine needle into the abdomen daily. During this time, you will have ultrasounds to count and measure the follicles that are growing. Once the follicles measure the required size, you will need to take another injection to mature the eggs inside the follicles. This is called the trigger injection.

To collect the mature eggs, you will come into hospital for a short procedure that is done while you are asleep. This can take approximately 15-20 mins. Afterwards, you will wake up in recovery and we will be able to tell you how many eggs were collected. The scientists will check the eggs, selecting only the mature eggs, and then cryopreserve them for future use. Once you are comfortable, you will be able to go home, usually 1-2 hours after the procedure.

Risks involved with freezing your eggs

- There are risks associated with the procedure to retrieve the eggs
- While thousands of babies have been born using this technique, very few have been born to those who collected eggs as a teenager
- The ovaries may be hyperstimulated by the FSH injections resulting in a hospital admission
- There are costs involved for the storage of your eggs
- There are costs involved for future IVF cycles

Where do I have this done?

You will be referred to see an IVF specialist for your egg freezing cycle. We are happy to refer you to any IVF clinic of your choice.

What happens next?

Your eggs will be stored for 20 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 IVF clinic where your eggs are stored.

Who do I contact for further information?

For further information, please contact the Oncofertility team at RCH.

Oncofertility Team
The Royal Children's Hospital
50 Flemington Road
Parkville 3052
T: (03) 9345 5309
E: fertility@rch.org.au
W: www.rch.org.au/fertility