



## FERTILITY AND REPRODUCTIVE PLANNING FOLLOWING CANCER DIAGNOSIS AND TREATMENT

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**Note: This handout is offered as a communication aid for patients and their providers. It is not a substitute for professional examination, diagnosis, or treatment.**

### INTRODUCTION

Being diagnosed with cancer at any age is an overwhelming experience. There can be many immediate concerns that weigh heavily on your mind.

If you are at an age when you can bear children, it is important to understand that *cancer treatment can affect the ability to have children*. This ability is called *fertility*.

Having children may not seem a priority right now to you. Understanding your options may help you avoid future regret. If your oncologist does not discuss fertility considerations before you start cancer treatment, bring up this subject without delay.

If you have already started treatment or if you need to start treatment urgently, there is a chance your ability to be a biological parent can be restored after cancer treatment.

Your oncologist may be focused on starting treatment to help preserve your life. Talking about keeping your fertility intact may be at the back of their mind. Fertility and reproductive planning are essential to bring up if your doctor does not.

### FERTILITY CONSIDERATIONS FOR FEMALES

Some treatments, including chemotherapy and radiation, can destroy many of the eggs the female carries, which can lead [to infertility after treatment](#).

[Radiation](#) to the abdomen or pelvis may affect the ability of a female to become pregnant with a fertilized egg or carry a pregnancy to full term.

Surgical or radiation [treatment to the brain](#) may affect the pituitary gland. The pituitary gland stimulates eggs to mature and ovulate (be released to be fertilized by sperm). There are hormonal medications that may be taken after treatment to mature eggs. Talk with your doctor.

Surgical removal of the uterus or one or both ovaries can also affect fertility.

#### **Fertility Preservation Options for Females**

There are a few ways females may be able to preserve fertility:

- [Freezing eggs](#): fertilized eggs (embryos) and unfertilized eggs – This process can last two or more weeks. There are hormone self-injections (to help your body mature more eggs) and frequent blood tests.
- A reproductive endocrinologist who is also a gynecologist manages this process.
- Moving the ovaries out of the way of treatment ([ovarian transposition](#))

Not every one of these will be available for every type of cancer treatment, but it is important to ask and understand your options.

### **Financial Considerations**

Your insurance may or may not cover fertility preservation. It is essential to understand [your financial obligation](#). The freezing of eggs and embryos has several stages, each with an associated cost.

### **Breast Cancer and Fertility Preservation**

Females with [estrogen-receptor-positive breast cancer](#) often need to take endocrine therapy for up to 10 years after finishing their initial treatment. It is advisable to wait until the endocrine therapy is complete to try for a pregnancy to avoid the risk of congenital disabilities.

For more in-depth information about fertility preservation for females, read the article referenced above from the [Memorial Sloan-Kettering Cancer Center](#). A helpful article from the [American Cancer Society](#) is also attached to help add perspective.

## **FERTILITY CONSIDERATIONS FOR MALES**

For males, some cancer treatments may cause:

- changes in your ability to make sperm
- changes in your ability to have an erection
- an inability to ejaculate
- a decrease in the hormone levels needed to make sperm

### **Give Time for Your Body to Be Cleared of Damaged Sperm**

If your treatment involves chemotherapy or radiation therapy, Memorial Sloan-Kettering Cancer Center experts recommend you [wait at least one year](#) after you have completed therapy before trying to have a child to ensure your body had time to clear out sperm that may have been damaged.

You may need to wait longer than a year if your treatment involves immunotherapy, biologic, or targeted therapy. Discuss this important topic with your oncologist.

Waiting for your body to be cleared of damaged sperm may decrease the chance of congenital disabilities or other health problems.

### **Recovering Your Sperm Count**

It can [take up to 5 years](#) after certain cancer treatments to recover your sperm count. You can choose to have a semen analysis one year (or more) after your treatment is complete to determine your sperm levels. If they are low, have the test repeated in a year, suggest Memorial Sloan-Kettering Cancer Center experts.

### **Freezing and Banking Your Sperm**

You can have your sperm frozen and stored at a sperm bank for future use before you begin treatment.

There are costs associated with banking and storing sperm that your insurance may not cover. It is important that you understand what your financial obligations will be.

For more in-depth information on the collection, banking, and freezing of sperm, [click the link](#) for a Cancer.org (American Cancer Society) informative article.

### **Works Cited**

American Cancer Society. "Preserving Fertility in Males with Cancer." *American Cancer Society*, 6 Feb. 2020,

<https://www.cancer.org/cancer/managing-cancer/side-effects/fertility-and-sexual-side-effects/fertility-and-men-with-cancer/preserving-fertility-in-men.html>.

Memorial Sloan-Kettering Cancer Center. "Fertility Preservation: Options for Females Starting Cancer Treatment."

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Memorial Sloan-Kettering Cancer Center. "Sperm Banking." *Memorial Sloan Kettering Cancer Center*, 24 July 2023,

<https://www.mskcc.org/cancer-care/patient-education/sperm-banking#section-4>.