

Fertility Preservation for Women with Cancer

Before your cancer treatment

This handout is for women of childbearing age who have cancer. It explains what you can do before you have cancer treatment to protect your ability to have children.

What is fertility preservation?

Fertility is your ability to become pregnant and carry the pregnancy to a live birth. Some types of cancer and cancer treatments can affect fertility.

Fertility preservation protects your ability to have children. If you wish to have children in the future, you can consider options for fertility preservation before you have your cancer treatment.

How does cancer treatment affect fertility?

When you were born, your body contained all of the eggs it will ever have. These eggs are stored in your ovaries. This is your *ovarian reserve*.

Chemotherapy, radiation, and some cancer surgeries can damage or destroy your store of eggs or harm your womb. The extent of damage depends on your age, your overall health, and the type of treatment you have.

Radiation

High doses of radiation can affect your fertility:

- **Radiation to the pelvis** can destroy some of your eggs. This lowers your chance of having children.

It can also affect your womb. You may enter *menopause* (stop having periods) at an earlier age than normal.



Talk with your healthcare provider if you have any questions about how cancer treatment will affect your fertility.

- **Radiation to the uterus** may damage it. A damaged uterus may not be able to grow to full size or stretch to carry a baby.
- **Radiation to the brain** can affect the glands that control your hormones and your periods.

Chemotherapy

Chemotherapy medicines can be *ovotoxic* (cause damage to your ovaries). The extent of damage depends on your age and the medicine you receive. The younger you are at the time of chemotherapy, the more likely you are to return to menstruation. But many women who are over 35 years old are at risk for early menopause after having chemotherapy.

Surgery

Surgery is often used to treat ovarian and uterine cancers. If your surgery:

- **Removes your ovaries:** You will no longer have any eggs and cannot have biological children.
- **Removes your uterus:** You cannot become pregnant or carry a child.

What are my options for fertility preservation?

If you want to have children in the future, your options depend on:

- The type and stage of your cancer
- How soon you must start cancer treatment

Talk with your *oncologist* (cancer doctor) about your treatment plan. Ask if you can use one of these methods to preserve your fertility:

Banking

- **Embryo banking** uses *in vitro fertilization* (IVF). For IVF, you receive hormone injections and may also take pills. These medicines cause your ovaries to produce as many mature eggs at the same time as possible. These eggs are collected during a minor surgical procedure.

Sperm are then used to fertilize the eggs. This creates *embryos*.

Embryos of good quality are then frozen (*cryopreserved*) and saved to be used later (*banked*).

- **Egg banking** is like embryo banking. But, the collected eggs are frozen without being fertilized.

Ovarian Tissue Freezing

In surgery, small pieces of healthy ovarian tissue are removed and frozen. This tissue, which contains eggs in their follicles, is thawed and placed back in the woman's body after her cancer treatment is done. This is an experimental procedure. It is done as part of a study and is not yet widely available. We do not yet know if it will work for all women.

Medicine to Protect the Ovaries

Hormones are given to put the ovaries into a state of rest. This may be used to prevent heavy vaginal bleeding during chemotherapy. This method is not yet proven. We do not know if it improves fertility after cancer treatment for all women.

Does insurance cover fertility preservation?

Even if you have cancer, your health insurance may not cover fertility preservation. Talk with your insurance agent to find out what your plan covers.

University Reproductive Care takes part in the Sharing Hope program. The program helps cancer patients and cancer survivors access fertility preservation services. It is sponsored by the LIVESTRONG Foundation. To learn more, visit www.livestrong.org/we-can-help/livestrong-fertility.

What are my options after cancer treatment?

- **If your ovaries are damaged but your uterus is healthy:** You may be able to become pregnant with the help of an egg or embryo donor.
- **If your uterus is damaged but your ovaries and eggs are healthy:** You may be able to use a *gestational carrier* (surrogate) to carry and give birth to your child.
- **If both your ovaries and uterus are damaged:** You can no longer have biological children. If you want to raise children, your options are adoption or foster parenting. When choosing an adoption agency, make sure they will approve adoption by a cancer survivor.

Questions?

Your questions are important. Call your doctor or other UWMC healthcare provider if you have questions or concerns.

University Reproductive Care (URC): 206.598.4225 weekdays between 8 a.m. and 5 p.m.

After hours and on weekends or holidays, call 206.598.6190 and ask for the URC provider on call to be paged.

Website:

<http://depts.washington.edu/obgyn/URC>

What questions should I ask my doctors?

- How soon do I need to start cancer treatment?
- Will my cancer or its treatment affect my ability to have children in the future?
- What are my fertility preservation options?
- Do any of these options make my cancer treatment less effective? Do they increase the chance that cancer will return?
- If my oncologist is unsure about my treatment outcome, may I still bank embryos or eggs?