

Female Infertility

What is infertility?

Cancer and its treatment may sometimes put female survivors at risk for infertility. Infertility means not being able to get pregnant or maintain a pregnancy, usually after you have been trying for over a year. There are many different causes for infertility in cancer survivors. While it's best to discuss your risk for infertility before treatment begins, there are still options for cancer survivors who may experience infertility as a result of cancer or its treatment.

Infertility or possible infertility may affect you emotionally. If you want to have children, it's perfectly understandable if thinking about being infertile makes you feel sad or upset. This document outlines the physical causes of infertility and options for survivors who may have difficulty having children.

If you are worried about infertility, you should set up an appointment with your gynecologist or another member of your health care team to discuss any concerns or questions you have about the information in this document.

Who might be at risk for infertility?

Infertility may happen in female survivors who have:

- Treatment or surgery that directly affects their reproductive organs
- Surgery that removes the uterus, tubes or ovary
- Radiation treatment directed to cancer in the abdomen
- Some chemotherapy medicines, like those in the alkylating agents group, can cause infertility. These types of chemotherapy medicines can be used to treat many different kinds of cancer, not just cancers that affect the reproductive organs.

Chemotherapy can cause infertility by either reducing the number of eggs in your ovaries or by causing early menopause. Menopause is when menstrual periods stop, because the ovaries run out of eggs. If you are in menopause, it means there are no eggs left, or the remaining few eggs are not healthy.

The table below lists some of the chemotherapy medicines that may damage your ovaries. You might want to discuss this table with a member of your health care team during your next check-up if you don't know what medicine you received during your treatment.

Risk of Harm to the Ovaries	Medicine Families	Brand Names of Medicine
<i>High Risk</i>	Cyclophosphamide	Cytosan
<i>High Risk</i>	Cholarambucil	Leukeran
<i>High Risk</i>	Melphalan	Alkeran, Medphalan, Merphalan, Sarcolysin
<i>High Risk</i>	Busulfan	Myleran
<i>High Risk</i>	Nitrogen Mustard	Mustargen
<i>High Risk</i>	Procarbazine	Natulan, Matulane
<i>Intermediate Risk</i>	Cisplatin	Platinol, Platinol-AQ
<i>Intermediate Risk</i>	Adriamycin	Doxorubicin
<i>Intermediate Risk</i>	Bleomycin	Blenoxane, Bleomycin
<i>Intermediate Risk</i>	Actinomycin D	Dactinomycin, Cosmegen
<i>Low Risk</i>	Methotrexate	Rheumatrex, Folex PFS
<i>Low Risk</i>	5-Fluorouracil	Adrucil

What are some symptoms of infertility?

Some survivors don't realize that they are infertile until they try to have children and aren't able to get pregnant. There are some symptoms of infertility you can look for. However, if you experience any of these symptoms, it does not always mean you are infertile. They could be symptoms of other medical conditions.

You might want to talk to your doctor about your fertility if:

- Your menstrual cycles aren't regular
- You are having hot flashes
- It hurts when you have sex
- You have been trying to get pregnant, but you can't
- You had several miscarriages

Female cancer survivors who completed puberty before they started treatment usually stop menstruating during treatment. This does not mean you are infertile. Your period should return within six months of completing treatment. If it hasn't returned within a year and you are concerned about infertility, you should discuss how long it has been since your last period with a member of your health care team. It may not be related to your fertility. You may have another physical problem that needs treatment.

Some survivors can easily get pregnant but cannot carry a baby to full term, even though they still have healthy eggs. This usually is not because of cancer treatment, but it is still a problem you can discuss with your gynecologist or another member of your health care team.

Your health care team may want to run tests if you are experiencing premature or immediate menopause. Infertility can happen after menopause or in the few years preceding it, because there are no eggs left, or the remaining few eggs are not healthy. The Follicle Stimulating Hormone (FSH) measurement is one test used to determine if

you are in menopause. If FSH levels are high, you may need to use donor eggs if you want to get pregnant.

Your health care team may check your ovarian tubes and uterus to determine whether there is damage to these organs that might cause infertility. Damage to ovaries can happen if you had pelvic or abdominal surgery for cancer.

When might cancer survivors want to consider their fertility?

If you haven't started treatment for your primary or secondary cancer, you should discuss fertility risks before you start treatment. If you have finished treatment, you should discuss your fertility with your health care team as soon as you decide that you want to have children. It's best to contact a fertility specialist as soon as you begin trying to have a child, because you may only have a small number of eggs left. You may run out of your eggs before you realize that you are having difficulties. Even though females who are not cancer survivors usually wait a year before seeing a fertility specialist, you may want to consider talking to a fertility specialist sooner.

What are some suggestions for survivors who want to preserve their fertility before, during or after treatment?

If you are interested in finding out more about how your cancer treatment may have affected your fertility:

- Talk to your health care team about your fertility
- Find a fertility clinic

Fertility options you can discuss with your health care team:

- In vitro fertilization (if you are not yet menopausal)
- Donor embryos
- Donor eggs
- Ovarian auto- transplantation (experimental)
- Surrogacy
- Adoption

Talk to your health care team about your fertility:

Some questions you might want to ask your health care team after treatment:

- Is it safe for me to use fertility drugs?
- Is pregnancy safe for me?
- How long should I wait before I try to get pregnant?

If you have already finished your treatment and are thinking about your fertility for the first time, you may want to set up an appointment with your oncologist to discuss your treatment and its possible effects on your fertility. Your fertility may not have been affected at all. If you are at risk, ask your oncologist to refer you to a good fertility specialist who can help you with fertility problems.

Find a fertility clinic:

Fertility clinics at nearby major cancer centers are more likely to have specialists with experience working with cancer survivors who are trying to have children. If your cancer center or hospital does not have its own fertility clinic or specialist, ask a member of your health care team for a referral.

Questions to ask a fertility specialist/clinic:

- Are you covered by my health insurance?
- Are you experienced in egg, ovarian tissue and embryo freezing?
- Do you have experience working with cancer survivors?

Resources

Fertile Hope

www.fertilehope.org <<http://www.fertilehope.org/>>

Email: Send email through the Web site.

Phone: 1-888-994-HOPE (1-888-994-4673)

Fertile Hope has information and brochures that describe parenthood options for both men and women. The Web site briefly explains the procedure, success rate and cost of each option and explains when they can be used (for example, before, during, or after treatment). The site includes a list of questions to ask your health care team and lists of doctors who specialize in fertility options. The organization also provides financial assistance for certain procedures.

RESOLVE: The National Infertility Association

www.resolve.org <<http://www.resolve.org/>>

Email: info@resolve.org <<mailto:info@resolve.org>>

Phone: 1-888-623-0744 Trained peer staff members answer calls Monday-Friday, 9:00 a.m. to noon and 1:00 p.m.-4:00 p.m. (EST). They are also available Monday evenings from 7:00 p.m. to 11:00 p.m. (EST).

The RESOLVE Web site provides information on infertility and treatment options. Information on the emotional effects of infertility is included, as well as contact information for support services. Alternatives such as adoption and living without children are also discussed. From the site, you can order publications, post a message to the bulletin board or participate in online chats. Contact information for local RESOLVE chapters is also included.

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www.seattlefertility.com

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