

**FS23** in a series providing the latest information for patients, caregivers and healthcare professionals.

## Highlights

- “Fertility” describes the ability to conceive a biological child. Some cancers and some cancer treatments affect fertility.
- Human reproduction requires three elements: mature sperm, mature eggs and a person with a uterus to carry the pregnancy and give birth.
- The risk of infertility caused by cancer and its treatment is based on several factors, including the type of cancer; the type, duration and doses of treatment; and the patient’s age at the start of treatment.
- Addressing fertility and sexual health is an essential part of cancer treatment and follow-up care. It is important to talk with members of your healthcare team before treatment begins about the potential effects of your treatment.
- There are many options available to help you preserve the ability to have biological children in the future. Some of these options require that action be taken before treatment begins. Not all patients starting cancer treatment will either need or want to consider this subject, but it is important to discuss fertility with your treatment team.
- Sperm freezing (sperm banking), and egg or embryo freezing are the fertility preservation methods with the highest likelihood of success.
- Most cancer survivors who do conceive after treatment have routine pregnancies and healthy babies. However, patients should talk with their healthcare team about any potential risks they face regarding conception or pregnancy.
- There are many ways to build a family, whether through natural conception, using assisted reproductive technology (ART), or adoption. Patients who want children should consider and discuss all options.

## Introduction

Chemotherapy, radiation and other cancer treatments can cause “late” side effects that may appear months or years after treatment has ended. One possible late effect is “infertility,” the inability to conceive a child without medical intervention. When first diagnosed with a blood cancer, your primary concern may be your upcoming treatment and long-term survival. You may not be thinking about whether you can or want to have children in the future. However, information about the potential effects of your treatment can help you take steps to leave your options for family building open after cancer treatment.

This publication provides only general information about this topic. Speak with members of your healthcare team about the specific effects of your treatment and the fertility preservation options that are available to you.

**To collect all the important information you need throughout diagnosis, treatment, follow-up care and long-term management of a blood cancer, visit [www.LLS.org/SurvivorshipWorkbook](http://www.LLS.org/SurvivorshipWorkbook) to view the free LLS booklet *Navigating Life During and After a Blood Cancer Diagnosis*. There is a version of the workbook for adults, young adults and children/adolescents.**

## Cancer and Fertility

Not all cancer treatments affect fertility. The risk to your fertility depends on several factors, including:

- Your age at the time of diagnosis and treatment
- The type and dosage of chemotherapy drug(s) you receive
  - Alkylating agents—for example, **cyclophosphamide**, **ifosfamide** and **procarbazine**, along with the drug **cisplatin**—have the most significant effect on fertility. Other drugs are generally less toxic to sperm-forming cells and eggs, but they can also cause infertility, especially when used as part of a combination of therapies.

- The location and dosage of radiation
  - Exposure to the testes may destroy cells that form sperm.
  - Exposure to the ovaries may destroy eggs.
  - Exposure to the pituitary gland in the brain or the thyroid at the base of the neck may cause changes in creation of hormones that regulate puberty and fertility.
  - Exposure to the uterus (womb) may cause damage making it difficult to carry a pregnancy safely.
- The duration of treatment
- Whether you received a blood or marrow stem cell transplantation, which is associated with a high risk of infertility
- The type of cancer
  - Certain cancers cause a decrease in the number of sperm. For example, patients with Hodgkin lymphoma may have a low sperm count at the time of diagnosis due to the effects of the cancer itself.

Other medical issues unrelated to cancer can also impact fertility. Talk to your doctor if you have:

- Early or delayed onset of puberty
- Trouble getting pregnant or contributing to a pregnancy
- A history of miscarriages
- Irregular menstrual cycles (periods)
- Any other questions or concerns

### Possible Effects of Treatment on Sperm

Sperm is made and stored in the testes. Sperm production begins at the onset of puberty and continues throughout the person's life, although the amount and quality of sperm can naturally decrease with age. Cancer treatment can cause:

- Lower-than-normal testosterone production
  - Testosterone is required for sperm production and plays a role in sexual functioning and desire.
- Loss of sperm stem cells that mature into sperm, causing sperm to stop producing.
  - Changes to sperm production can be temporary or permanent.
  - If sperm production recovers, it can take from 1 to 3 years, and sometimes longer.

Analysis of a semen sample can indicate whether you are making sperm. This can be done after treatment is completed. Talk with your doctor about when to be evaluated.

### Possible Effects of Treatment on Eggs

The ovaries (the organs where eggs are produced) are especially susceptible to damage during cancer treatment because they contain cells that cannot be regenerated after birth. When a person with ovaries is born, nearly one million follicles that contain eggs are present in their ovaries; but they cannot produce new eggs. Therefore, the total effect of cancer treatment on fertility will depend on how many undamaged follicles and/or eggs remain after treatment has ended.

Cancer treatment can also cause:

- Lower-than-normal estrogen production
  - Estrogen plays a role in ovulation (when the ovary releases an egg), preparing the uterus for pregnancy, sexual functioning and desire.
- Disruption of the menstrual cycle (periods), which may be temporary or permanent
- Premature ovarian failure (POF), also called "premature menopause." This is a loss of ovarian function in a person younger than 40. When POF is caused by cancer treatment, it is unlikely that a person will have subsequent menstrual periods or be able to become pregnant without medical intervention. Generally, POF is managed with hormone (estrogen and progesterone) replacement therapy.
  - People with POF are encouraged to eat a healthy diet and exercise regularly (aerobics and weight training) to decrease the health risks of osteoporosis and heart disease. A doctor may also prescribe calcium and vitamin D supplements for bone health.
  - Even though some people may retain a degree of ovarian function after treatment or they may start menstruating again, they may develop POF and have trouble conceiving later in life. If you are at risk for POF, you may want to start a family early. If you do retain ovarian function after treatment but are not ready to start a family, you may still want to consider egg or embryo freezing. See *Options for Egg Preservation* on page 4.

### Possible Effects of Treatment on the Ability to Carry a Pregnancy

Cancer treatment can affect a person's ability to carry a pregnancy safely.

- Radiation to the pelvic area can cause damage to the uterus (womb) and increase the risk for infertility, miscarriage or premature birth.
  - Some studies have shown that estrogen therapy may help improve uterus function after radiation to the pelvis or total body irradiation (TBI).
- Treatment can also cause damage to organs (such as the lungs or heart) that could increase the risk of problems during pregnancy, labor and delivery.

### Possible Effects of Treatment on Sexual Function

Cancer and cancer treatment can also cause changes in sexual function, such as:

- Inability to achieve or maintain an erection
- Vaginal dryness and/or pain during intercourse
- Loss of desire and/or an inability to achieve an orgasm

Visit [www.LLS.org/booklets](http://www.LLS.org/booklets) to view *Sexual Health and Intimacy* for more.

### Options to Preserve Fertility Before Treatment

You may be able to take steps to preserve your fertility before treatment begins. The options available to you depend on:

- Your age, sex and current fertility status
- Your overall health at the time of diagnosis
- How quickly you need to begin cancer treatment

Some of the options to preserve fertility, described on the following pages, are available for children, even those who have not gone through puberty. See *Fertility Issues in Children and Adolescents Who Have Cancer* on page 6.

### Options for Sperm Preservation

**Sperm cryopreservation (freezing).** To save sperm for future use, sperm freezing is a common, noninvasive option. Sperm freezing is also referred to as "sperm banking." The process involves the collection of semen by masturbation. If there are sperm in the semen, they can be frozen and stored at a special facility for

possible future use. Some hospitals have their own sperm bank programs. Sperm banking is a reliable and effective fertility preservation option with the highest likelihood of success. However, sperm banking may be a less successful approach for some patients, such as those with Hodgkin lymphoma, because they may already have low sperm counts caused by the cancer.

The American Society of Clinical Oncology (ASCO) guidelines recommend that sperm banking be offered to all patients assigned male at birth who have gone through puberty and who have a recent diagnosis of cancer. Most children have some sperm in their semen by about age 13. The optimal timing for sperm banking is prior to the start of therapy because the quality of the semen and the DNA integrity of the sperm can be affected even after a single dose of chemotherapy.

For patients who cannot perform masturbation for physical, emotional or religious reasons, other options to obtain sperm include:

- **Vibratory stimulation.** In this procedure, a special vibrator is placed at the base of the glans penis (the head of the penis) to cause ejaculation. The process requires no anesthetic or sedation.
- **Electroejaculation.** For this procedure the patient is under anesthesia. An electric probe is passed via the rectum and placed against the prostate to stimulate ejaculation.
- **Medication for erectile disorder.** If the patient is unable to achieve an erection, a doctor may prescribe a phosphodiesterase type 5 (PDE5) inhibitor, such as **sildenafil (Viagra)** or **tadalafil (Cialis)**.
- **Medication for retrograde ejaculation.** If the patient experiences retrograde ejaculation (when semen enters the bladder instead of exiting through the penis during orgasm), a doctor may prescribe an alpha-agonist, such as **pseudoephedrine (Sudafed)**.

**Testicular sperm extraction (TESE).** For patients who have no sperm in their semen, this surgical procedure, performed under anesthesia, may be an option. The doctor removes pieces of tissue from the testes, which are then examined for mature sperm. The mature sperm can be removed from the tissue and frozen for possible future use.

**Testicular shielding.** A shield can be used to protect the testicles during radiation therapy. Shielding must be planned before treatment begins, and the shields must be used every day of treatment. Not all patients will be able to use shields, because sometimes the testes need to be treated with radiation.

### Other Options Under Study

**Testicular tissue cryopreservation (TTC).** For patients who have not yet gone through puberty and therefore do not produce mature sperm or other patients for whom sperm freezing is not possible, TTC may be an option. This method involves collecting and freezing a small amount of testicular tissue with the hope that the tissue will contain stem cells that would later produce mature sperm. No babies have yet been born as a result of using frozen testicular tissue. Researchers are studying options for obtaining viable sperm from frozen testicular tissue, including:

- Transplantation of testicular tissue back into the patient's body with the hope that sperm stem cells will mature into sperm
- In vitro maturation (IVM) where sperm stem cells will be recovered and matured in a lab

There is a concern that transplanted testicular tissue could carry cancer cells back into the body, so this approach may not be appropriate for patients with some cancers. Testicular tissue cryopreservation is considered an experimental approach. Researchers are still learning about these methods and further study is needed.

Testicular tissue cryopreservation is available both outside clinical trials and as part of clinical trials. If you are interested in a clinical trial, talk to your treatment team.

The Leukemia & Lymphoma Society (LLS) offers help for patients and caregivers in understanding, identifying and accessing clinical trials. Pediatric and adult patients and caregivers can work with Clinical Trial Nurse Navigators who will help find clinical trials and provide personalized support throughout the entire clinical trial process. Visit [www.LLS.org/CTSC](http://www.LLS.org/CTSC) for more information.

### Options for Egg Preservation

**Egg or embryo cryopreservation (freezing).** A person assigned female at birth who either has gone through puberty or is currently going through it can freeze their eggs. Puberty usually occurs between the ages of 9 and 15. During the procedure, eggs are removed from the ovary to be frozen and stored for possible use in the future. They can be frozen either as unfertilized eggs (oocytes) or as eggs fertilized with sperm (embryos). These procedures are performed by trained specialists called “reproductive endocrinologists.”

- **Egg freezing.** To stimulate the ovaries and encourage eggs to mature, the patient receives daily hormone injections for about 10 days to stimulate the ovaries. The patient is given an anesthetic, and the eggs are then removed from the ovaries and frozen for future use without being fertilized. The entire process generally takes about 2 to 3 weeks to complete. Doctors can usually start an egg freezing cycle at any time, regardless of the stage of the menstrual cycle using “random start” stimulation protocols.

Sometimes it is necessary to begin cancer treatment right away, which does not allow time for hormone fertility treatment. Or, hormone fertility treatment may not be safe or appropriate for some patients. In these cases, immature eggs may be collected from the ovaries after only brief fertility treatment or without fertility treatment. (Immature eggs can also be collected from surgically removed ovarian tissue.) Since these eggs will not have fully matured in the ovaries, the eggs must then undergo **in vitro maturation (IVM)**, which means that the eggs will mature in a laboratory. Researchers are still learning about IVM and success rates are lower than when freezing mature eggs.

Since egg freezing does not require sperm at the time of collection, it is a good option for patients who may be undecided about family plans and do not want to use donor sperm to fertilize their eggs. It is also a choice for those who have religious or ethical objections to embryo freezing.

- **Embryo freezing.** After the egg retrieval process (see above), the eggs are fertilized in the laboratory with sperm from a partner or donor to create embryos. This is called “**in vitro fertilization (IVF)**.” The embryos are then frozen and stored for possible future use. Embryo freezing is the option with the highest likelihood of success. The process can typically take about 2 to 3 weeks.

Patients who have an aggressive cancer requiring immediate treatment may not be able to delay treatment for 2 weeks to complete egg or embryo freezing. Patients with hormone-sensitive cancers should speak with their doctor about the safety of egg/embryo freezing. In some cases, medication can be given to reduce estrogen levels.

**Ovarian tissue freezing.** Freezing ovarian tissue for later transplantation may be an option. Part of the ovary (or the entire ovary) is surgically removed and frozen for possible future use. This procedure may be appropriate for:

- Patients who have not gone through puberty, and therefore, have no mature eggs
- Patients who need to start treatment quickly
- Patients for whom hormone fertility treatment may be unsafe, such as those with a history of hormone-driven cancers

At the time of removal, the tissue is evaluated for evidence of cancer. The outer layer of the ovary that holds the eggs is removed, cut into small pieces and frozen. In the future, the ovarian frozen tissue containing eggs can be transplanted back into the patient with hope that the eggs will mature. The patient may be able to conceive through natural conception or require IVF.

The first live birth using this method was in 2004 and since then, about 200 babies have been born, mostly from patients who were adults at the time of tissue freezing. Due to the increasing success, it is no longer considered experimental and is a standard option for fertility preservation. For patients with some types of cancer, the doctor may advise against tissue freezing because of a concern that the transplanted tissue could carry cancer cells back into the body. This method is also not recommended for carriers of *BRCA* gene mutations.

Researchers are also studying using in vitro maturation (IVM) for immature eggs taken from frozen ovarian tissue without having to transplant the tissue back into the body. This is still an experimental approach and further research is needed.

Ovarian tissue freezing is available both outside of clinical trials and as part of clinical trials. If you are interested in clinical trials, talk to your treatment team.

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**Ovarian transposition (oophoropexy).** If the ovaries will be in the radiation treatment field, patients may undergo this minor surgical procedure in which a doctor moves the ovaries outside of the radiation field to minimize exposure and radiation damage. Even when the ovaries are moved, they may still be exposed to some radiation.

**Uterus transposition.** This procedure, done in combination with ovarian transposition, is a new surgical procedure that may be appropriate for patients who need pelvic radiation for certain cancers. If successful, the patient could potentially carry a pregnancy after radiation treatment and possibly conceive without medical assistance. Uterus transposition was first reported in 2017 and is not yet widely available.

**Ovarian shielding.** A shield can be used to protect the ovaries and other parts of the reproductive system during radiation therapy. Shielding must be planned before treatment begins, and the shields must be used every day of treatment. Not all patients will be able to use shields, because sometimes there is a need to treat the specific area with radiation.

### Other Options Under Study

#### **Gonadotropin-releasing hormone (GnRH) agonists.**

These medications are being studied for their fertility-protective properties. Gonadotropin-releasing hormone agonists are drugs that are modified versions of a naturally occurring hormone, which helps control the menstrual cycle (periods). These drugs are currently used during cancer treatment to suppress menstruation if the patient is likely to experience prolonged thrombocytopenia (low platelet count), which puts the patient at risk for heavy menstrual bleeding. Some studies suggest that GnRH agonists may also help preserve ovarian function. Researchers theorize that this drug, when administered during cancer therapy, may protect the ovaries from damage by preventing ovulation (when the ovary releases a mature egg) and reduce the number of eggs that are affected during cancer treatment. However, based on current data, it is unclear if these medications can preserve fertility, and further research is needed. Even if a patient will receive GnRH agonists, other fertility preservation options should still be pursued.

### Considerations for Transgender Individuals

Hormone treatments and surgeries, used as part of gender-affirming care for transgender and nonbinary individuals, can affect fertility. Conversations about fertility are recommended before a patient starts hormones to transition and before undergoing gender-affirming surgeries that involve the reproductive system.

Even after taking hormones for some time, many patients are still able to take measures to preserve their fertility. However, sperm, egg or embryo banking often requires stopping hormone therapy for 3 months or more, which can be distressing for patients. Additionally, patients diagnosed with cancer may not have enough time to go through this process before beginning cancer treatment. It may be an option after cancer treatment if treatment did not damage the testes or ovaries.

- **Transfeminine people taking estrogen.** Although estrogen can have a permanent effect on sperm production, some people are able to produce sperm after they discontinue estrogen therapy. Before attempting to collect and freeze sperm, patients will need to be off hormones for at least 3 months. After collection, it is also important to discuss the amount of usable sperm in the semen. If only a small amount of sperm is collected, invitro fertilization (instead of artificial insemination) may be required to conceive. Although experimental, testicular tissue freezing may also be an option and take less time to complete. See *Testicular tissue cryopreservation (TTC)* on page 4.
- **Transmasculine people taking testosterone.** Before beginning the egg or embryo freezing process, patients will need to be off hormones until the menstrual cycle resumes, typically after about 3 to 6 months. See *Egg or embryo cryopreservation (freezing)* on page 4. Ovarian tissue freezing may also be an option and take less time to complete. See *Ovarian tissue freezing* on page 5.
- **Pubertal blockers.** Some transgender or nonbinary children take pubertal blockers. These medications delay or prevent them from going through puberty of their sex assigned at birth. If a person does not go through puberty of their sex assigned at birth, their options for fertility preservation are limited due to a lack of mature sperm or eggs. If a patient stops taking puberty blockers (and does not begin

hormone therapy), they will go through puberty of their sex assigned at birth. After this, the patient may choose to do sperm or egg freezing. However, the process can cause physical and emotional changes that the person may find distressing. Although experimental, ovarian tissue freezing (see page 5) or testicular tissue freezing (see page 4) may also be an option.

Before doing fertility preservation and/or stopping hormone therapy, patients may find it helpful to speak with peers who have gone through the process to help them learn more. If a patient decides to stop taking hormones, it is important to have a support network in place first, including a therapist who has experience working with transgender patients.

For more information, visit Family Equality at <https://www.familyequality.org/family-building/trans-family-building/> to view *Trans Family Building*.

### Fertility Issues in Children and Adolescents Who Have Cancer

Pediatric (childhood) cancer has seen a significant rise in survival rates in the last decades. More than 80 percent of patients survive to adulthood. But success in using therapies such as radiation, chemotherapy and surgical procedures has led to patients requiring medical attention for late and long-term effects. The potential negative impact of cancer treatment on the future reproductive health of childhood cancer survivors has placed fertility preservation at the forefront of survivorship care.

**Discussing Fertility Issues With Your Child.** Fertility is a complex concept, which may be hard to understand, especially for young children and adolescents. Parents may also find it difficult to discuss issues regarding sexuality and fertility with their children. Still, pediatric patients should be involved, as much as possible, in the discussion about how their cancer treatment can affect their future ability to have children. Parents can ask their child's healthcare team to help them find age-appropriate ways to explain and talk about these issues with their children. Many pediatric oncology centers have multidisciplinary teams that include oncologists, reproductive endocrinologists, nurses, psychotherapists, child-life specialists and social workers, who work together to help children and their families cope with disease, treatment and survivorship issues.

**Fertility Preservation for Children.** The American Society of Clinical Oncology (ASCO) recommends that parents and guardians discuss the risk of infertility and fertility preservation options with members of their child's healthcare team. This discussion should take place before treatment begins, if possible. The American Academy of Pediatrics (AAP) supports these recommendations, too.

Some cancer treatments—such as chemotherapy with alkylating agents and radiation—can have long-term effects on a child's future fertility. In addition, some therapies can affect the endocrine system, the glands and cells that control growth and development. Talk with your child's doctor if your child seems to be going through puberty early (before age 9) or has not entered puberty by age 15. The doctor will want to evaluate the child and may prescribe medicine to alleviate symptoms caused by hormone imbalance.

Parents may consider discussing these questions with their child's treatment team:

- Could the treatment plan affect my child's ability to have children?
- Will this treatment affect my child's ability to go through puberty?
- What are the chances this treatment will lead to early menopause?
- Can treatment affect some organs (such as the lungs or heart) in a way that will increase the risk of problems during pregnancy or labor?
- Are there any cancer treatment options that may not affect my child's fertility?
- What options are available to preserve fertility before treatment begins? Will any of these options affect how well the cancer treatment works?
- Would it be helpful to see a fertility specialist before treatment begins? Can you make a recommendation?
- Who can help me with financial concerns about the cost of fertility preservation?
- After treatment, how will my child know if their fertility has been affected?

Talk with your child's healthcare team about the risk of infertility based on your child's treatment plan. Many childhood cancer survivors go through puberty after cancer treatment and have children without medical intervention.

There are many online resources that parents and children can refer to for information and support. See the *Other Helpful Resources* on page 15 for more information.

LLS offers a free survivorship workbook, called *Navigating Life During and After a Blood Cancer Diagnosis*. You can use this book to collect all the important information you and your child need including fertility information, as you move through diagnosis, treatment and follow-up care. Visit [www.LLS.org/SurvivorshipWorkbook](http://www.LLS.org/SurvivorshipWorkbook) to learn more.

### Options for Having a Family After Treatment

Many patients will be able to conceive naturally after cancer treatment. Patients are generally counseled to wait at least 2 years after treatment is completed before attempting conception. Check with your doctor to find out how long after treatment you should wait. If you are not able to conceive naturally, there are a number of other ways to build a family.

Human reproduction requires three elements: mature sperm, mature eggs and a person with a uterus to carry the pregnancy and give birth. Sperm may be from the patient, a partner or a donor. Eggs may be from the patient, a partner or a donor. The patient, a partner or a surrogate may carry the pregnancy (see *Surrogacy* on page 8). There are many different options and combinations that can lead to a healthy pregnancy and child.

#### Medically Assisted Conception

**Use of frozen sperm.** Depending on the number of vials stored and the number and quality of the sperm specimens, there are two ways to use frozen sperm—artificial insemination and in vitro fertilization (IVF). Artificial insemination involves the injection of semen into part of the reproductive tract of a partner with a uterus (or a surrogate) by a method other than sexual intercourse. Or, the sperm can be used to fertilize mature eggs, collected during an IVF cycle from a partner (or donor), in a laboratory to create embryos. The embryos are then transferred into the uterus of a partner or a surrogate who will carry the pregnancy.

**Testicular sperm extraction (TESE).** If no sperm are present in the semen, this surgical procedure, performed under anesthesia, can be considered. The doctor removes pieces of tissue from the testes. The

tissue is then examined for mature sperm. If sperm are found, the sperm can be used to fertilize mature eggs collected during an IVF cycle from a partner (or donor) in a laboratory to create embryos. The embryos are then transferred into the uterus of a partner or a surrogate who will carry the pregnancy.

**Use of frozen eggs or embryos.** If eggs were frozen, they will first be fertilized with a partner or donor's sperm in the laboratory to create embryos. The embryos are then transferred to the uterus of the person who will carry the pregnancy so pregnancy can occur.

**In vitro fertilization (IVF).** If a patient has a low egg count (a low ovarian reserve), they may want to consider undergoing an IVF cycle to remove mature eggs to be fertilized with a partner or donor's sperm in a laboratory. The embryos are then transferred to the uterus of the person who will carry the pregnancy so pregnancy can occur.

**In vitro maturation (IVM).** If the hormone fertility treatment typically used in IVF is contraindicated for the patient, immature eggs may be collected from the ovaries after only brief fertility treatment or without fertility treatment. (Immature eggs can also be collected from surgically removed ovarian tissue.) Since these eggs will not have fully matured in the ovaries, the eggs must then undergo IVM, which means that the eggs will mature in a laboratory. Researchers are still learning about IVM.

**Donor sperm.** Sperm donated by another person is used to produce a pregnancy through artificial insemination or IVF.

**Donor eggs.** Eggs donated by another person (who undergoes an IVF cycle) that are fertilized and transferred to the uterus of the person who will carry the pregnancy.

**Donor embryos.** Embryos are generally donated by couples who have undergone IVF for infertility. If they do not plan to use the embryos, they may choose to donate their remaining embryos rather than discard them.

**Surrogacy.** If you and your partner are both unable to carry a pregnancy and/or deliver a baby safely, you may be able to arrange for a person with a uterus (a gestational carrier) to carry the fetus for you. Embryos created with your, your partner's or a donor egg and sperm are transferred to the surrogate's uterus. In most cases, the egg will not come from the surrogate. The egg will come from a parent or a different donor. The surrogate will not be genetically related to the

resulting child. This is called "gestational surrogacy." Surrogacy where the egg is from the surrogate is called "traditional surrogacy," and it is not legally supported in most states. Laws surrounding surrogacy, the surrogacy process and the enforcement or legality of surrogacy contracts differ greatly from state to state. If you are considering this option, it is extremely important to speak to a reproductive lawyer who is knowledgeable about surrogacy law.

### Other Options Under Study

**Uterus transplantation.** In recent clinical trials in the United States, people assigned female at birth have delivered healthy babies via cesarean section following a uterine transplant. Participants were either born without a uterus or had their uterus surgically removed (hysterectomy). More research is needed on the safety and efficacy of uterus transplantation.

Uterus transplantation is available at select institutions outside of clinical trials. Uterus transplantation is also available through clinical trials. If you are interested in clinical trials, talk to your treatment team.

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### Adoption

Adoption is another way to build a family after cancer treatment. In general, people who have been treated for cancer but are free of disease are eligible to adopt infants or older children. Ask any agency you plan to use if they have worked with other cancer survivors, and if not, ask if they are open to working with you. You may need to talk to multiple agencies to find the one that is the best fit for you. Adoptions laws can also differ state to state.

At this time, adopting from within the United States is generally easier than adopting internationally. However, agencies and attorneys can provide guidance on which countries may be willing to work with you because policies vary from country to country.

As you discuss and think about adoption, you will need to consider the cost. Expenses incurred in the adoption process can total in the thousands of dollars. There are organizations that provide some financial assistance for this, and some tax benefits can help with qualified adoption expenses.

**Foster-to-adopt.** Another option is to adopt a child that you have been fostering. This process is often funded by the state and has fewer fees. However, it's important to remember that not every foster situation leads to adoption. In many foster situations, the goal is to reunite the child with their birth family. Foster parents will need to support this goal. Some states offer specific foster-to-adopt programs with the expectation that the child will be adopted by the foster parents if the child either is or becomes eligible for adoption. Ask about all options if you are interested in fostering and/or adoption.

**Considerations for LGBTQIA+ families.** Adoption by gay and lesbian couples is legal in all 50 states. Adoption nondiscrimination laws and policies protect LGBTQIA+ parents from discrimination by adoption and foster care agencies. Some states permit state-licensed child welfare agencies to refuse to place and provide services to children and families, if doing so conflicts with the agency's religious beliefs. Visit

[www.lgbtmap.org/equality-maps/foster\\_and\\_adoption\\_laws](http://www.lgbtmap.org/equality-maps/foster_and_adoption_laws) for information, by state.

### Other Reproductive Health Issues

**Ethical and Religious Concerns.** Fertility and reproduction in the context of a cancer diagnosis and treatment can raise a number of ethical, moral and religious issues related to the welfare of both patients and their future children. The decision-making process associated with these concerns may be accelerated by the need to start therapy. This can cause a great deal of anxiety for both patients and their families.

Some of the ethical issues related to fertility preservation that patients and their caregivers may have to consider include:

- Religious and cultural beliefs associated with fertility preservation
- The use of experimental versus established fertility preservation therapies
- The ability of minors to understand fertility issues and give consent to certain procedures
- The future welfare of children created by assistive-reproductive technologies
- Decisions regarding what to do with stored eggs or sperm, in case of the patient's death
- Decisions regarding what to do with stored embryos, in case of either parent's death
- Decisions regarding what to do with stored embryos, in case the relationship ends in separation or divorce

These are all sensitive and complex subjects that will require the patient (and/or parent or guardian) to consult with not only the medical treatment team but with family members and possibly with legal and spiritual counselors who can guide them, help them make decisions and plan accordingly. It may also be helpful to use support groups and online forums to connect with others who are going through similar experiences.

**Pregnancy After Cancer Treatment.** Most people of childbearing age who have been treated for cancer and are able to conceive can go on to have low-risk pregnancies and healthy babies. Patients should be able to become pregnant if treatment did not affect their ovaries or uterus, and there are no other medical issues that may impact fertility. Before you try to become pregnant, talk with your treatment team about your medical readiness for pregnancy. You may also want to have a fertility assessment by consulting with a doctor called a "reproductive endocrinologist."

Generally, patients are advised to wait for at least 2 years after the end of treatment before they try to become pregnant. This allows enough time for the patient to surpass the period of an early cancer recurrence and allows the body to recover from the effects of treatment. If the treatment has caused late effects that might make pregnancy more difficult, patients should consult a maternal-fetal medicine specialist prior to trying to become pregnant.

Even though some drugs used to treat cancer, such as **imatinib (Gleevec®)** or other, newer targeted therapies are not usually associated with infertility, they are not recommended for people who are pregnant. Patients, however, should not stop taking their medication without medical advice. A patient who is taking any cancer drug should consult their oncologist before trying to become pregnant. **If you are receiving cancer treatment, and you think you might be pregnant, talk to your oncologist immediately.**

**Pregnancy and Chronic Blood Cancers.** If you have a chronic blood cancer, such as chronic myeloid leukemia (CML), and you wish to become pregnant, speak to members of your healthcare team. With proper planning, a safe pregnancy while managing a chronic blood cancer may be possible. Members of your healthcare team may suggest waiting to conceive until your disease is well managed. You may also need to either suspend or change treatment while trying to conceive and during pregnancy. Pregnant patients will require close observation from a hematologist-oncologist and an obstetrician who specializes in high-risk pregnancies.

**Health of Children of Cancer Survivors.** Most children born to cancer survivors are healthy. The percentage of babies with birth defects born to cancer survivors is similar to that of babies born to parents without a cancer history.

When a parent is diagnosed with cancer, it does not always mean that their child is at a greater risk for cancer. Very few cases of cancer are caused by genetic mutations that are inherited (passed on from a parent to a child). You may want to ask members of your healthcare team if your cancer is either caused or linked to a genetic mutation that can be passed on to your children and increase their risk of cancer. If it is, you may want to ask for a referral to a genetic counselor.

**Breastfeeding (Chestfeeding).** Talk with the doctor about whether you will be able to breastfeed after treatment. If you have had radiation to the chest area, your ability to produce milk may be affected.

Some medicines should not be used while you are breastfeeding. Tell your healthcare team if you are either starting or restarting treatment and you are breastfeeding.

**Preventing Pregnancy.** Even if fertility issues are a possible side effect of your cancer treatment, you still may be able to become pregnant or contribute to a pregnancy.

If you are sexually active, it is important to use contraception throughout your treatment and for a period of time after treatment ends. Some drugs can be very harmful to a fetus and may cause birth defects. Pregnancy during cancer treatment or immediately after treatment ends may also not be safe for the pregnant person.

**To learn about birth control options, visit [www.LLS.org/booklets](http://www.LLS.org/booklets) to view *Sexual Health and Intimacy*.**

**If Your Partner Is Pregnant.** Chemotherapy drugs can be excreted in semen and vaginal fluid, and it is possible that exposure could cause fetal abnormalities. Anticancer drugs remain in bodily fluids for approximately 48 to 72 hours, depending on the specific drug. Therefore, patients receiving cancer treatment and whose partners are pregnant may need to refrain from sexual activities or use a barrier method such as condoms or dental dams. Ask the treatment team for guidance.

**Protecting Against Sexually Transmitted Infections (STIs).** If you are sexually active during cancer treatment, you are at risk for STIs, also called “sexually transmitted diseases (STDs).” Barrier methods, such as condoms, internal condoms and dental dams, help protect against STIs. Oral birth control pills, implants and intrauterine devices (IUDs) do not protect against STIs.

**To learn about STIs prevention, visit [www.LLS.org/booklets](http://www.LLS.org/booklets) to view *Sexual Health and Intimacy*.**

**Other Considerations.** If your white blood cell or platelet counts become too low, your doctor may advise you to abstain from sex until the blood cell counts return to normal levels because of an increased risk for infection or bleeding. Ask your healthcare team for guidance.

### Talking With Members of Your Healthcare Team

Ask your oncology team about the fertility effects of your treatment. By having this information before treatment begins, you can consider the options most likely to preserve your fertility. You can also ask for a referral to a fertility specialist to help you understand and explore your options. Fertility specialists include:

- Reproductive endocrinologists
- Gynecologists
- Urologists
- Surgeons with training in fertility preservation

Psychologists or therapists can also help patients with the decision-making process and facilitate conversations with couples and families.

#### Questions to Ask Members of Your Healthcare Team

- What are the chances that treatment will affect my fertility?
- Have other patients been able to get pregnant without medical intervention after receiving this treatment?
- Have other patients been able to contribute to a pregnancy without medical intervention after receiving this treatment?
- Are there alternative treatments that will not affect my fertility?
- What can I do to protect fertility before treatment begins, during treatment and/or after treatment ends?
- How much time do I have to take measures to preserve my fertility before I need to start treatment?
- Can you recommend a fertility specialist that I can speak with?
- How will I know if treatment has affected my fertility? Are there any tests I can take?
- If I have a period of infertility after treatment, should I have my fertility status re-evaluated? If yes, how soon should I have a follow-up evaluation?
- Are either premature ovarian failure or hormone deficiencies possible side effects of my treatment? If so, how could these be treated?
- If my fertility cannot be preserved, what are my options to start a family after treatment is over?

- Is pregnancy safe for me after treatment? How long should I wait after treatment ends to try to get pregnant?
- Are there any risks to my future children based on the type of cancer I have and the treatment I received?

Learning that you have cancer-treatment-related infertility may bring up feelings of sadness, anger, and/or grief. Some people find it helpful to talk about their feelings. Consider asking your healthcare team the following questions:

- Can you suggest a local support group of people who have been through the same challenges?
- Can you recommend a mental health specialist I can speak with?

### Talking With a Partner or Spouse

If you are already in an established relationship, you may want to discuss future plans for parenthood and options to preserve fertility with your partner. These conversations may also include other complex topics such as financial concerns related to fertility preservation.

In addition to affecting fertility, cancer treatment can also affect sexual function. You both may need to prepare for changes to your intimate relationship and learn to work through them. Talk to your doctor about any changes you experience that are related to your sexual health. You may even wish to ask for a referral to a sex therapist.

**Visit [www.LLS.org/booklets](http://www.LLS.org/booklets) to view *Sexual Health and Intimacy*.**

People react to difficult situations, such as a cancer diagnosis and treatment, differently. Throughout your cancer journey, your partner may be your biggest source of practical and emotional support. Your partner may also have a difficult time coping. Either way, your relationship will probably change. If you hit a rough patch, it may be beneficial for you and your partner to do couples counseling. Ask your healthcare team for resources and recommendations.

You and your partner may find it helpful to attend a support group. There are support groups for people with cancer and their families. There are also support groups for people facing infertility. To find an infertility support group, use Resolve: The National Fertility Association's locator at <https://resolve.org/support/find-a-supportgroup/> to search by location. Your healthcare team and The Leukemia & Lymphoma Society (LLS) can also help you access local or online support resources.

### Dating and Fertility

Dating and new relationships can be challenging no matter what your situation is. When and how you tell someone about your cancer diagnosis and fertility status is your choice. Some people prefer to tell a potential partner early in the relationship to clear the air. Others prefer to wait until they trust the person. The timing of when you discuss cancer and fertility with your potential partner will likely depend on a number of factors, such as whether this is a new or an established relationship, or whether you or your potential partner already have children from prior relationships. Even for someone without a history of cancer, discussing children and the future can be intimidating. There is no right or wrong way or time to tell someone about your cancer history or fertility status.

Before talking about your diagnosis, you may want to take time to consider how much you would like to disclose about your diagnosis and the impact of treatment on your sexuality and fertility. It may also be helpful to practice what you would like to say in advance. That way, you can try to anticipate questions and plan your answers.

If the person reacts negatively, that is not your fault. People have different histories and understandings of cancer. You may be able to explain what it means to have a cancer diagnosis. For example, clarifying that cancer is not contagious can help dispel a specific concern right away. People also have different desires for their future. It is good to discuss these topics so you can find a partner with similar family plans.

**Visit [www.LLS.org/YoungAdults](http://www.LLS.org/YoungAdults) for more information on dating, sexuality and intimacy.**

### Financial Concerns

Fertility treatments can be expensive, so it is important to find out whether your health insurance plan covers the treatment you need. The current costs of fertility treatments and egg and sperm annual storage can add up to tens of thousands of dollars and make it very challenging for patients to cover these expenses out of pocket. Often, cancer treatment must be started immediately after diagnosis, leaving patients very little time to appeal to insurers for coverage of fertility preservation treatments.

Unfortunately, many private insurance plans and government-funded health plans and services including Medicaid, Tricare (for active duty service members and retirees) and the Veterans Administration do not cover

fertility preservation treatment. The current laws and regulations define infertility as “an inability to conceive after one year of trying to get pregnant,” and do not include the infertility caused by cancer therapy. In addition, due to the experimental nature of certain fertility techniques, health insurers are not required to cover these services.

Fortunately, in recent years there has been a slight increase in the number of insurers covering fertility preservation treatments on a case-by-case basis. Furthermore, legislation in a few states has started to support the needs of cancer patients interested in fertility preservation. Some states have laws requiring insurance coverage of fertility preservation services for patients about to undergo a medical treatment (surgery, radiation or chemotherapy) that may have a negative effect on fertility. Insurance coverage of fertility preservation is slowly changing.

Contact your insurance provider to learn if your policy covers fertility preservation. If you are denied coverage, you may be able to appeal for reimbursement of your fertility preservation costs. Your healthcare team can also refer you to other resources and organizations that can provide financial assistance or discounted prices for patients.

Some questions you may want to ask your health insurance carrier are:

- Does my plan pay for a consultation visit with a fertility specialist?
- Does my plan cover fertility preservation before cancer treatment?
- Does my plan cover infertility treatments? If yes, what are the conditions for coverage?
- Do I need to see a doctor from a particular list of doctors (also called “in-network”) in order to receive insurance coverage?
- Do any visits need to be pre-authorized (approved by the insurance company before the patient sees the doctor)? Do I need to complete claim forms or other paperwork?
- What is my copayment (the amount of money I pay out-of-pocket) for the services needed?

Various organizations offer programs to help patients offset the costs of fertility preservation. In addition, some fertility specialists offer their own discount programs for cancer patients. See the *Other Helpful Resources* on page 15 for more information.

**Feedback.** To make suggestions about the content of this booklet, visit [www.LLS.org/PublicationFeedback](http://www.LLS.org/PublicationFeedback).

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## Resources and Information

The Leukemia & Lymphoma Society (LLS) is the world's largest voluntary health organization dedicated to funding blood cancer research, education and patient services. LLS has chapters throughout the United States and in Canada. To find the chapter nearest to you, visit our website at [www.LLS.org/ChapterFind](http://www.LLS.org/ChapterFind) or contact an Information Specialist at (800) 955-4572.

LLS offers free information and services for patients and families affected by blood cancers. This section lists various resources you may find helpful.

### **For Help and Information**

**Consult with an Information Specialist.** Information Specialists can assist you through cancer treatment, financial and social challenges and give accurate, up-to-date disease, treatment and support information. Our Information Specialists are highly trained oncology social workers, nurses and health educators. Language services are available. For more information, please:

- Call: (800) 955-4572 (Monday through Friday, 9 a.m. to 9 p.m. ET)
- Email and Live chat: [www.LLS.org/nformationSpecialists](http://www.LLS.org/nformationSpecialists)

**Clinical Trials (Research Studies).** Research is ongoing to develop new treatment options for patients. LLS offers help for patients and caregivers in understanding, identifying and accessing clinical trials. Pediatric and adult patients and caregivers can work with Clinical Trial Nurse Navigators who will help find clinical trials and provide personalized support throughout the entire clinical trial process. Visit [www.LLS.org/CTSC](http://www.LLS.org/CTSC) for more information.

**Nutrition Consultations.** Schedule a free one-on-one nutrition consultation provided by a registered dietitian with experience in oncology nutrition. Dietitians assist patients and caregivers with information about

healthy eating strategies, side effect management, and survivorship nutrition. They also provide additional nutrition resources. Please visit [www.LLS.org/nutrition](http://www.LLS.org/nutrition) for more information.

**Free Information Booklets.** LLS offers free education and support booklets that can either be read online or ordered. Please visit [www.LLS.org/booklets](http://www.LLS.org/booklets) for more information.

**Telephone/Web Education Programs.** LLS offers free telephone/Web and video education programs for patients, caregivers and healthcare professionals. Please visit [www.LLS.org/programs](http://www.LLS.org/programs) for more information.

**Financial Assistance.** LLS offers financial support to eligible individuals with blood cancer for insurance premiums, co-pays, and non-medical expenses like travel, food, utilities, housing, etc. For more information, please:

- Call: (877) 557-2672
- Visit: [www.LLS.org/finances](http://www.LLS.org/finances)

**Resources for Families.** Blood cancer occurs in a small number of children. Families face new challenges, and the child, parents and siblings may all need support. LLS has many materials for families including a caregiver workbook, *Wiskurs* (an emotion flipbook), dry erase calendar, coloring books and a coloring app, a school reentry program, and other resources. For more information, please:

- Call: (800) 955-4572
- Visit: [www.LLS.org/FamilyWorkbook](http://www.LLS.org/FamilyWorkbook)

**Podcast.** *The Bloodline with LLS* is here to remind you that after a diagnosis comes hope. Listen in as patients, caregivers, advocates, doctors and other healthcare professionals discuss diagnosis, treatment options, quality-of-life concerns, treatment side effects, doctor-patient communication and other important survivorship topics. Visit [www.LLS.org/TheBloodline](http://www.LLS.org/TheBloodline) for more information and to subscribe to access exclusive content, submit ideas and topics, and connect with other listeners.

### **Free Mobile Apps.**

- LLS Coloring For Kids™ – Allows children (and adults) to express their creativity and offers activities to help them learn about blood cancer and its treatment. Visit [www.LLS.org/ColoringApp](http://www.LLS.org/ColoringApp) to download for free.

- LLS Health Manager™ – Helps you track side effects, medication, food and hydration, questions for your doctor, and more. Visit [www.LLS.org/HealthManager](http://www.LLS.org/HealthManager) to download for free.

**Suggested Reading.** LLS provides a list of selected books recommended for patients, caregivers, children and teens. Visit [www.LLS.org/SuggestedReading](http://www.LLS.org/SuggestedReading) to find out more.

### **Connecting with Patients, Caregivers and Community Resources**

**LLS Community.** The one-stop virtual meeting place for talking with other patients and receiving the latest blood cancer resources and information. Share your experiences with other patients and caregivers and get personalized support from trained LLS staff. Visit [www.LLS.org/community](http://www.LLS.org/community) to join.

**Weekly Online Chats.** Moderated online chats can provide support and help cancer patients and caregivers reach out and share information. Please visit [www.LLS.org/chat](http://www.LLS.org/chat) for more information.

**Local Programs.** LLS offers community support and services in the United States and Canada including the Patti Robinson Kaufmann First Connection® Program (a peer-to-peer support program), local support groups and other great resources. For more information about these programs or to contact your chapter, please:

- Call: (800) 955-4572
- Visit: [www.LLS.org/LocalPrograms](http://www.LLS.org/LocalPrograms)

**Advocacy and Public Policy.** Working closely with dedicated volunteer advocates, LLS's Office of Public Policy elevates the voices of patients to state and federal elected officials, the White House, governors and even courts. Together, we advocate for safe and effective treatments. We pursue policies that would make care more accessible to all patients. And, most of all, we advocate for the hope for a cure. Want to join our work? Visit [www.LLS.org/advocacy](http://www.LLS.org/advocacy) for more information.

**Other Helpful Organizations.** LLS offers an extensive list of resources for patients and families. There are resources that provide help with financial assistance, counseling, transportation, patient care and other needs. For more information, please visit [www.LLS.org/ResourceDirectory](http://www.LLS.org/ResourceDirectory) to view the directory.

### **Additional Help for Specific Populations**

#### **Información en Español (LLS information in Spanish).**

Please visit [www.LLS.org/espanol](http://www.LLS.org/espanol) for more information.

**Language Services.** Let members of your healthcare team know if you need translation or interpreting services because English is not your native language, or if you need other assistance, such as a sign language interpreter. Often these services are free.

**Information for Veterans.** Veterans who were exposed to Agent Orange while serving in Vietnam may be able to get help from the United States Department of Veterans Affairs. For more information, please

- Call: the VA (800) 749-8387
- Visit: [www.publichealth.va.gov/exposures/AgentOrange](http://www.publichealth.va.gov/exposures/AgentOrange)

**Information for Firefighters.** Firefighters are at an increased risk of developing cancer. There are steps that firefighters can take to reduce the risk. Please visit [www.LLS.org/FireFighters](http://www.LLS.org/FireFighters) for resources and information.

**World Trade Center Health Program.** People involved in the aftermath of the 9/11 attacks and subsequently diagnosed with a blood cancer may be able to get help from the World Trade Center (WTC) Health Program. People eligible for help include:

- Responders
- Workers and volunteers who helped with rescue, recovery and cleanup at the WTC-related sites in New York City (NYC)
- Survivors who were in the NYC disaster area and those who lived, worked or were in school in that area
- Responders to the Pentagon and the Shanksville, PA, crashes

For more information, please

- Call: WTC Health Program at (888) 982-4748
- Visit: [www.cdc.gov/wtc/faq.html](http://www.cdc.gov/wtc/faq.html)

**People Suffering from Depression.** Treating depression has benefits for cancer patients. Seek medical advice if your mood does not improve over time, for example, if you feel depressed every day for a two-week period. For more information, please:

- Call: The National Institute of Mental Health (NIMH) at (866) 615-6464
- Visit: NIMH at [www.nimh.nih.gov](http://www.nimh.nih.gov) and enter “depression” in the search box

## Other Helpful Resources

### Fertility and Family-Building Options

#### Alliance for Fertility Preservation

[www.allianceforfertilitypreservation.org](http://www.allianceforfertilitypreservation.org)

Provides information about fertility preservation, costs and financial resources

#### American Society of Reproductive Medicine (ASRM)

[www.reproductivefacts.org](http://www.reproductivefacts.org)

Provides information on reproductive medicine, advocates for patients and supports research

#### Family Equality

[www.familyequality.org](http://www.familyequality.org)

Advocates for LGBTQIA+ families and provides information and support resources

#### Resolve: The National Infertility Association

(866) NOT-ALONE (866668-2566)

[www.resolve.org](http://www.resolve.org)

Provides locators to find support groups and healthcare professionals as well as other information and resources

### Information on Fertility and Family-Building Options for Patients with Cancer

#### Cancer.Net, American Society of Clinical Oncology (ASCO)

[www.cancer.net](http://www.cancer.net)

Provides information for cancer patients and families

- Having a Baby After Cancer: Fertility Assistance and Other Options  
<https://www.cancer.net/survivorship/life-after-cancer/having-baby-aftercancer-fertility-assistance-and-other-options>
- Information on Dating, Sexuality and Reproduction  
<https://www.cancer.net/navigating-cancer-care/dating-sex-and-reproduction>

#### Hope for Two...The Pregnant with Cancer Network

[www.hopefortwo.org](http://www.hopefortwo.org)

Offers free support for people diagnosed with cancer while pregnant

#### SaveMyFertility, The Oncofertility Consortium

[www.savemyfertility.org](http://www.savemyfertility.org)

Provides an online fertility preservation toolkit for patients and their providers

### Fertility Information For Children and Teens with Cancer

#### Cancer.Net, American Society of Clinical Oncology (ASCO)

Provides information for cancer patients and families

[www.cancer.net](http://www.cancer.net)

- Preserving Fertility in Children With Cancer:  
<https://www.cancer.net/navigating-cancer-care/children/preserving-fertility-children-cancer>

#### Children’s Oncology Group (COG)

[www.childrensoncologygroup.org](http://www.childrensoncologygroup.org)

Conducts and supports childhood and adolescent cancer research and provides information for patients and healthcare professionals

- Hormones and Reproduction:  
<https://www.childrensoncologygroup.org/index.php/hormonesandreproduction/>
- Survivorship Guidelines: <https://childrensoncologygroup.org/survivorshipguidelines>

#### Pediatric Oncofertility Research Foundation

[www.porf.org](http://www.porf.org)

Provides information for parents regarding fertility preservation for children undergoing cancer treatment and supports research in this field

#### Stupid Cancer

[www.stupidcancer.org](http://www.stupidcancer.org)

Supports and connects adolescent and young adult cancer survivors and provides resources and information

- Building a Family:  
<https://stupidcancer.org/building-a-family/>

### Financial Assistance

#### Chick Mission

[www.thechickmission.org](http://www.thechickmission.org)

Program that works directly with healthcare practices to provide need-based grants to cover the costs of fertility preservation

### HeartBeat, By Ferring Pharmaceuticals

(888) 347-3415

For residents of AR, MA or NJ: (877) 252-0553

[www.ferringfertility.com/patient-resources](http://www.ferringfertility.com/patient-resources)

Provides select fertility medications at no cost for eligible female cancer patients

### ReUniteRX

<https://reuniterx.com/discount-programs/>

Provides discounted medications for oncology patients undergoing fertility preservation

### LIVESTRONG Fertility

[www.livestrong.org/what-we-do/program/fertility](http://www.livestrong.org/what-we-do/program/fertility)

(855) 220-7777

Provides reproductive information, resources and financial support to cancer survivors whose medical treatments present the risks to their fertility

### Verna's Purse, Reprotech Limited

[www.vernaspurse.org](http://www.vernaspurse.org)

Offers a financial assistance program for those in need of fertility services

For more information, call a ReproTech Storage Location:

- Connecticut: (203) 816-5598
- Florida: (954) 570-7687
- Minnesota: (651) 489-0827
- Nevada: (775) 284-2795
- Texas: (469) 547-2399

### Worth the Wait

<https://worththewaitcharity.com/>

Provides financial support for fertility treatments, adoption and surrogacy for young adult cancer survivors

### Health Insurance and Legal Information

#### Triage Cancer

<https://triagecancer.org/quick-guides/fertility-preservation>

Provides information laws surrounding fertility preservation, cost and insurance coverage

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