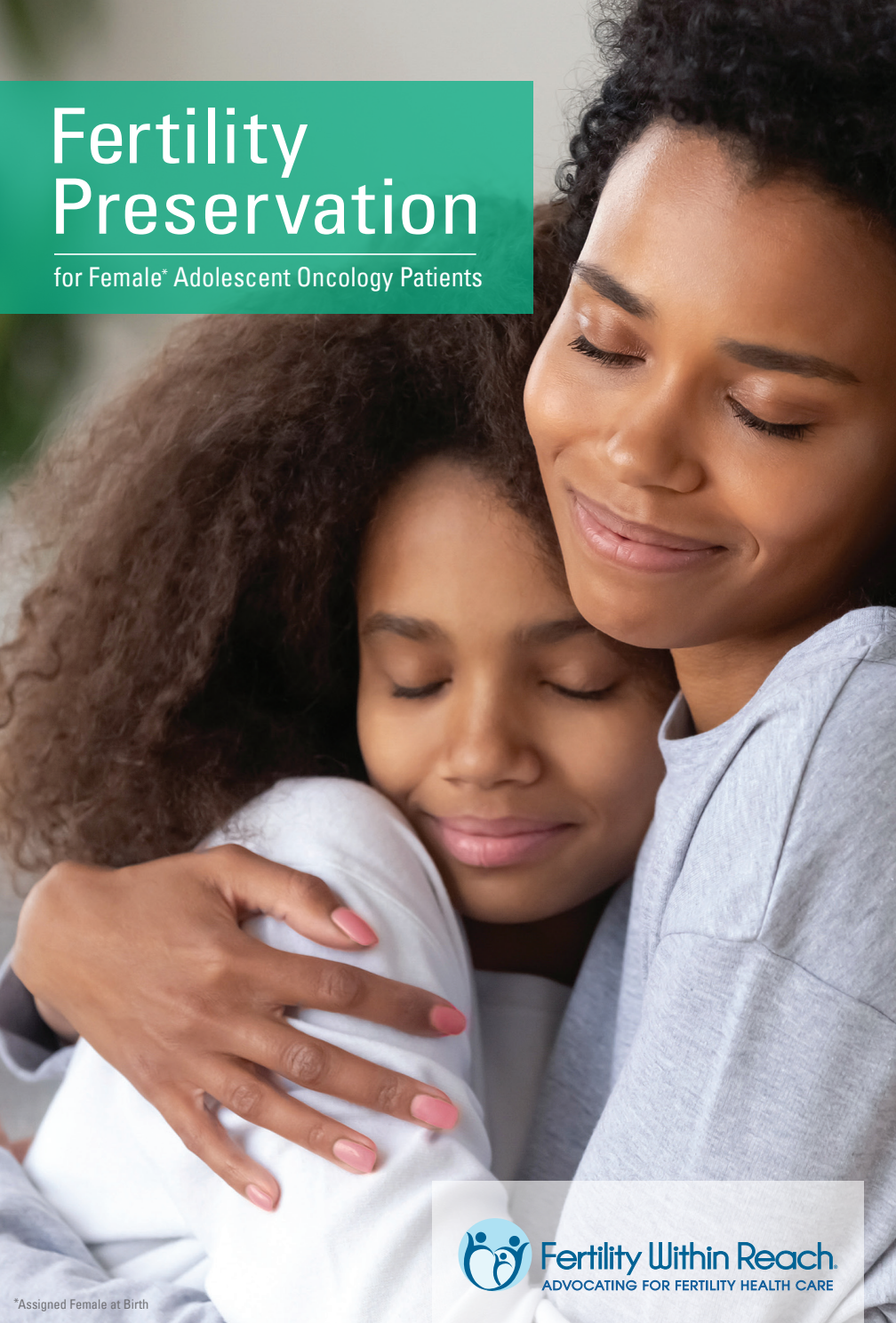


Fertility Preservation

for Female* Adolescent Oncology Patients



Fertility Within Reach.
ADVOCATING FOR FERTILITY HEALTH CARE

*Assigned Female at Birth



An Important & Necessary Conversation

Fertility preservation can be the last thing on a person's mind as they navigate the challenges of cancer. Many treatments used to defeat cancer can impact fertility, but reproductive technologies have given children, adolescents, and young adults hope that their reproductive material (eggs, sperm, or reproductive tissue) can be saved for future reproduction, if and when they decide they want children.

Fertility preservation gives many families a chance to look forward, allowing them to imagine a future beyond cancer where they do not need to lose hope of having a biological child. Studies have shown that childhood cancer survivors express regret if their fertility is affected by prior therapy and they were not counseled at diagnosis and during their treatment. **Fertility Within Reach** aims to support youth and their families through this journey, expand the options for parenthood, and provide financial support for fertility preservation.

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“I wish we would have thought of fertility preservation sooner. It’s hard to wrap your brain around it all when you are thinking of your child’s treatment. But it is important... and gives hope.”

Margaret McDermott
mother of fertility
preservation patient

Fertility Preservation*

WHAT IS FERTILITY PRESERVATION?

Fertility is the ability to conceive or induce conception naturally. Some cancer treatments, like radiation,* chemotherapy, and surgical removal of reproductive organs, can cause future fertility problems. It is difficult to predict exactly how fertility will be affected by cancer treatments—your risk for infertility depends on your age, cancer type, your type of treatment, the dose and duration of chemotherapy, the dose and location of radiation, and the potential for relapse.

There are ways to protect fertility through fertility preservation. This rapidly advancing field is a safe and dependable method of extracting and storing a person's reproductive material (eggs, sperm, or reproductive tissue) until they are ready to access it. Discussions of fertility preservation should begin during consultations for a newly diagnosed patient or a long-term survivor. There are several different options available for fertility preservation, and it's important to be aware of all the methods available as you decide if fertility preservation is the right choice for you.

FOR NEWLY DIAGNOSED PATIENTS

As a newly diagnosed patient with cancer, fertility preservation may be an option for you. Your healthcare team can review the infertility risks of your recommended treatments.

FOR LONG-TERM SURVIVORS

If you have already completed therapy for cancer, you can ask your long-term survivorship team for information on how your prior therapy might have affected your fertility. In certain situations, chemotherapy, radiation, and/or surgery can cause fertility difficulties and early referral to a specialist to discuss medical options can help increase the chances you will be able to have children in the future. Further discussion is helpful and encouraged, even if you are not currently planning on starting a family.

*See Glossary on page 14 for definition.



Preservation of Female Reproductive Material

Female infertility can be caused by a low number of oocytes* or damage to the reproductive system leading to the inability to get pregnant. Several options for fertility preservation are available for females that may allow for a successful pregnancy in the future.

NON-PROCEDURAL METHODS

Lead Shielding

Lead shielding is done by placing a lead barrier, in the form of a drape or blanket, over the ovaries during radiation treatment to protect the tissue from damage.

Hormonal Suppression

Hormonal suppression involves taking hormones to stop the menstrual cycles during cancer treatment. It is primarily used to stop heavy menstrual bleeding on therapy. It is also thought to protect the ovaries by making them less active while on therapy. There is limited data and information about using hormonal suppression alone for fertility preservation.

PROCEDURES METHODS

Oocyte (Egg) Cryopreservation*

Hormonal injections cause the ovaries to increase the number of eggs developed, which are then collected while the patient is under anesthesia. This process takes approximately two weeks and eggs can be frozen and stored indefinitely. The eggs can be used for future pregnancy in her own uterus, for implantation in a partner with a uterus, or a gestational carrier. This may not be an option for some patients prior to therapy, because in some cases, it is not safe to delay starting cancer treatment.

*See Glossary on page 14 for definition.

Ovarian Tissue Cryopreservation

This preservation option is available for patients before or after puberty. This process involves a procedure under anesthesia in which ovarian tissue is removed and then safely stored for future use. When the patient is ready to expand her family, the ovarian tissue can be thawed and transplanted back in the pelvis or in a site outside the pelvis, allowing for the oocytes to develop into mature eggs. Oocytes within the replaced ovarian tissue can be released and fertilized by sperm naturally.

Embryo* Cryopreservation

This is a similar process to oocyte cryopreservation, except the egg is fertilized with sperm before freezing and stored for later use. It is important to note that both oocyte and embryo cryopreservation require a controlled ovarian stimulation which involves medication and repeated measurements taken by transvaginal ultrasound. This evaluation may be uncomfortable or emotionally distressing. There are smaller ultrasounds made for adolescent patients or pelvic ultrasounds in patients who cannot tolerate transvaginal or who are transgender. The reproductive specialist will talk about the various methods for monitoring their patients.



“ I am so beyond happy I did this. Fertility preservation gave me hope of a future and kept me going during treatment. ”

Kailyn Ruiz
fertility preservation patient

Treatment & My Fertility

Your healthcare team will use this space to assess and document your risk of infertility based on the treatment you are to receive or have already received. This section provides you with important information to make an informed decision related to your fertility preservation options.

PREVIOUS TREATMENTS THAT COULD AFFECT FUTURE FERTILITY

Has the patient previously received treatment?

Yes No

If Yes, the risk for infertility based on previous treatment:

None Minimal Moderate High

PLANNED TREATMENT THAT COULD AFFECT FUTURE FERTILITY

Chemotherapy:

Classic alkylators as Cyclophosphamide Equivalent Dose (CED)
_____g/m²

Heavy metals: Cisplatin _____ mg/m², Carboplatin
_____ mg/m²

Bone marrow transplant /stem cell transplant or gene therapy:

Yes No

Total body irradiation (TBI): _____ Gy

Expected cumulative dose of radiation exposure to the ovaries:

_____ Gy

Expected cumulative dose of radiation to the brain (hypothalamus):

_____ Gy

Expected treatment start date: _____

I am at risk for infertility due to my cancer treatment.

Yes No

My risk for infertility is...

None Minimal Moderate High

Recommended fertility preservation options:

- Lead Shielding
- Hormonal Suppression
- Oocyte Cryopreservation
- Ovarian Tissue Cryopreservation
- Embryo Cryopreservation
- Other _____

I need to use protection to prevent a pregnancy:

Yes No

If I have children, they are more likely to have a birth defect:

Yes No

NOTES

CONTACT INFORMATION FOR FURTHER QUESTIONS

Healthcare Provider Name: _____

Healthcare Provider Phone: _____

Healthcare Provider Email: _____

Other Team Members:

Name: _____

Role: _____

Email: _____

Phone: _____

Name: _____

Role: _____

Email: _____

Phone: _____

Adapted from Children's Healthcare of Atlanta / Aflac Cancer & Blood Disorders Center Fertility Consult form.

Parent's Guide

TALKING TO YOUR KIDS ABOUT FERTILITY PRESERVATION

As a parent, the idea of talking to your adolescent about family building or future fertility during cancer treatment may feel strange or uncomfortable.

It might be helpful to keep in mind some of the following when having these conversations:

- *Take some time to prepare yourself, and perhaps share your ideas and feelings with a friend, family member, partner, social worker, or therapist ahead of time.*
- *Don't rely on a script. Talk as naturally as possible and allow your child to ask questions. Be honest. Sometimes "I don't know. That's a good question, and we'll find out the answer together" is all you can say.*
- *Share your feelings and emotions without projecting them onto your child.*
- *Remember that this conversation is the first of many, and the key is laying a foundation for open, honest, and constructive dialogue.*

Offer the opportunity for your child to make decisions about their fertility preservation and be included in conversations with their medical team as much as possible.

It is also important to remember that there are no guarantees with cancer treatment. As a parent, you may be faced with the difficult responsibility of discarding reproductive cells. Decisions of ownership are complex and can be emotional. This is a possibility that should be discussed prior to fertility preservation.

Adapted from: "For Parents: Talking with Children About Cancer" from Dana-Farber Cancer Institute and "Helping Your Child Adjust to a Cancer Diagnosis" from the American Cancer Society.

Resources

FOR PARENTS

Patient education resources for effects of cancer treatment on fertility:

Save My Fertility
savemyfertility.org

Let's Take Charge
letstakecharge.org

Connecticut Children's Hospital
connecticutchildrens.org

The Oncofertility Consortium
oncofertility.msu.edu

FOR PATIENTS

CancerCare is a non-profit organization that provides free professional counseling and educational programs to cancer patients. cancercares.org

Lacuna Loft is a non-profit organization that provides age-appropriate online support for adolescent and young adult cancer patients, survivors, and caregivers during and after treatment. lacunaloft.org

Elephants & Tea is a media company that supports adolescent and young adult patients and their families through digital support groups and resources. elephantsandtea.com

Stupid Cancer is a non-profit that ends isolation and rallies a community within the world of adolescent. stupidcancer.org/#

First Descents provides outdoor adventure experiences for adolescents with cancer, including hiking, biking, rock climbing, kayaking, yoga, and surfing retreats. firstdescents.org

b-present aims for every adolescent with cancer to feel celebrated, valued, and supported by their community by working within a patient's peer and social networks. b-present.org

GLOSSARY

Cryopreservation: Freezing biological material at cryogenic temperatures

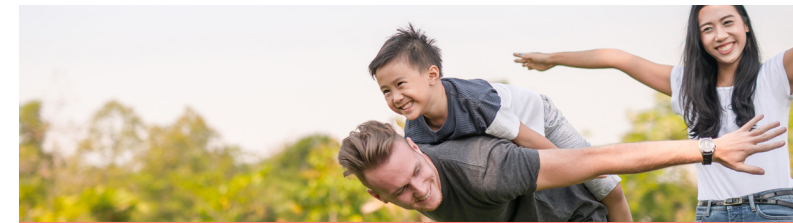
Embryo: The product when an egg is fertilized by a sperm

Oocyte: A cell in the ovary that develops into an egg

Fertility Preservation: The process of saving or protecting eggs, sperm, embryos, or reproductive tissue so that a person can use them to have biological children in the future

Radiation: A cancer treatment that uses energy to kill cancer cells and shrink tumors

Reproductive Tissue/Reproductive Material: Cells that are important in the human reproductive system; Examples: sperm, egg, testicular tissue, ovarian tissue



“I’m still a college student and **Fertility Within Reach** gave me the opportunity to cryobank without breaking the bank.”

H.G.
fertility preservation patient

How *Banking on the Future* Can Help

WHAT IS *BANKING ON THE FUTURE*?

Fertility Within Reach is a national non-profit dedicated to helping individuals increase access to fertility treatment and preservation, as well as fertility insurance benefits. Our goal is to remove costs as a barrier in someone's ability to start a family.

For young adults going through cancer treatment, insurance plans rarely cover fertility preservation. As a result, it is not accessible for many families. **Banking on the Future** is a grant program* established to help cover the costs associated with fertility preservation and cryogenic storage prior to cancer treatment. Through the grant, one year of reproductive material storage is covered, as well as cryobank administration, consultation fees, sperm collection, and freezing. Fertility medications will also be available at reduced rates.

The grant is available to adolescent oncology patients through the age of 21. For subsequent years of storage, deeply discounted rates have been negotiated for grant recipients until age 24.

Fertility Within Reach has partnered with cryobanks, fertility clinics, and pharmacies across the country in order to provide these grants and discounted rates. A copy of the grant application is available on the Fertility Within Reach website, in English and Spanish.

*Grant availability is dependent on program funding



FINANCIAL SUPPORT FOR PRESERVATION & MEDICATION*

FERTILITY PRESERVATION

Banking on the Future, fertilitywithinreach.org/fertility-preservation

Livestrong Fertility, livestrong.org/what-we-do/program/fertility

Team Maggie for a Cure, teammaggieforacure.org

The Chick Mission, thechickmission.org

MEDICATION

Walgreens/AllianceRx Walgreens, <https://www.walgreens.com/topic/pharmacy/specialty-pharmacy/fertility-preservation.jsp>

Compassionate Care, fertilitysavings.com

Heart Beat, ferringfertility.com/patient-resources

ReUnite Oncofertility, reuniterx.com/discount-programs/#oncofertility

Village Fertility Pharmacy, vfppharmacygroup.com/pricing-and-financing/

*Refer to websites for full eligibility requirements, including age limitations.



“**Fertility Within Reach** helped me access resources and helped with costs. This program took a burden off my shoulders, and I am forever grateful.”

Kailyn Ruiz
fertility preservation patient

Cryobanks & Clinics

The following cryobanks and fertility clinics participate in our **Banking on the Future** grant program. The grant covers the cost of the first year of storage, with discounted subsequent years of storage, up until age 24.

REPROTECH

Connecticut, Florida, Minnesota, Nevada, Texas

888-489-8944

33 Fifth Avenue NW, Suite 900, St. Paul, MN 55112

Locations: Trumbull, CT; Coconut Creek, FL; St. Paul, MN; Reno, NV; Garland, TX

Type of Reproductive Cell/Tissue

Storage: sperm, egg, testicular tissue, ovarian tissue, embryo

Collection Methods: mail-in kit, courier

Discounted Subsequent Year Costs:

\$105/year for sperm, egg, ovarian/testicular tissue; \$160/year for embryo

LEGACY

Nationwide At-Home Service

617-514-0901

Locations: Nationwide (at-home service)

Type of Reproductive Cell/Tissue

Storage: sperm

Collection Methods: mail-in kit

Discounted Subsequent Year Costs:

\$115/year for sperm

ARIZONA ANDROLOGY LABORATORY & CRYOBANK

Arizona

520-855-2689

850 North Kolb Road, Tucson, AZ 85710

Locations: Tucson, AZ

Type of Reproductive Cell/Tissue

Storage: sperm

Collection Methods: drop off

Discounted Subsequent Year Costs:

\$200/year for sperm

FAIRFAX CRYOBANK

Virginia, Texas, Pennsylvania, Minnesota, California, Florida

800-338-8407

3015 Williams Drive, Ste. 110, Fairfax, VA 22031

Locations: Fairfax, VA; Austin, TX; Houston, TX; Philadelphia, PA; Roseville, MN; Pasadena, CA; Miami, FL

Type of Reproductive Cell/Tissue

Storage: sperm

Collection Methods: in-house, mail-in kit

Discounted Subsequent Year Costs:

\$200/year for sperm

NOTES

Infectious Disease Testing: For all participating cryobank options, patients have 30 days, from day of collection, to present infectious disease testing results to the cryobank. Without results, patients could face a fee for lack of infectious disease testing.

Additional Sperm Collection:

A maximum of \$100 per additional deposit is owed to the cryobank at the time of the initial collection.

Visit fertilitywithinreach.org for more information.

Pharmacies

The following pharmacies participate in our **Banking on the Future** grant program by providing discounted fertility medication.

ALLIANCERX WALGREENS PHARMACY

United States & Puerto Rico

800-424-9002

7003 Presidents Drive, Suite 260 Orlando, FL 32809

Locations: Ship to All 50 States & Puerto Rico

Discounted Costs: Programs and options discounting select fertility preservation medications

VFP PHARMACY GROUP

Arizona, California, Illinois, Massachusetts

877-334-1610

335 Bear Hill Road

Waltham, MA 02451

Locations: Ship to All 50 States

Discounted Costs: 10% medication discount

WALGREENS

California, Florida, Georgia, Illinois, Minnesota, Missouri, Nebraska, New Jersey, New York, Texas

800-424-9002

Locations: Palo Alto, CA; South Miami, FL; Margate, FL; Sandy Springs, GA; Chicago, IL; Canton, MI; Edina, MN; Creve Coeur, MO; Omaha, NE; Pittsburgh, PA; Summit, NJ; New York, NY; Frisco, TX; Houston, TX

Discounted Costs: Programs and options discounting select fertility preservation medications

Acknowledgments

WISDOM FROM INDUSTRY LEADERS & PATIENTS

Content within this guide is an evidence-based collaborative effort of many incredible organizations dedicated to supporting children and their families. This tool provides credible information by utilizing the knowledge and guidance of medical doctors, social workers, health communication professionals, as well as testimony from policymakers and patients. We are grateful for the contribution of these industry leaders and patients.

JOY BADER
ReproTech

STEPHANIE BRILL
Gender Spectrum

ARLENE BROWN, LCSW
Texas Children's Hospital

DR. BRIAN FRIEND, MD, MS
Texas Children's Hospital

MICHELLE FRITSCH, LMSW-ACP
Texas Children's Hospital

ALICIA HOWELL, RN, MSN,
FNP-C, CPHON
Texas Children's Hospital

MARY LALIBERTE, MSW
*Connecticut Children's
Medical Center*

MARGARET MCDERMOTT
Mother of a Former Patient

DR. OMAR SHAKEEL, MD
Texas Children's Hospital

HEATHER SONI, APRN,
MSN, CPNP
Texas Children's Hospital

KAILYN RUIZ
Former Patient

STELLE SCOTT
Former Patient

DR. NATHANAEL STANLEY, PH.D.
Moffitt Cancer Center

LEA WILCOX
ReproTech

MATTHEW ZACHARY
*Founder, Stupid Cancer
& OffScrip Media*

“I have always wanted to be a mom. When I was diagnosed and told that the chemo and/or radiation could take that opportunity away from me, I knew I had to complete fertility preservation.”

Kailyn Ruiz
fertility preservation patient

Written by Quinn Kilmartin, Former Project Manager for *Fertility Within Reach*.



Fertility Within Reach is a national non-profit dedicated to helping individuals increase access to fertility treatment and preservation. Cost or access to fertility preservation should not be a barrier in someone's ability to start a family when they choose.



www.fertilitywithinreach.org

