



Institute for Women's Health Research

Putting Women's Health First

July 2011

In This Issue

Infertility and Women

Upcoming Events

Health Tip

Related Blogs

[Fertility, Femininity, and Cancer](#)

[Stress and Infertility](#)

[Fertility and the LGBT Community](#)

Dear Friends,

According to the Center for Disease Control and Prevention (CDC), ten percent of US women ages 15-44 have difficulty getting pregnant or staying pregnant. Infertility may be due to conditions in either the man or the women and is often not discovered until a couple is unsuccessful getting pregnant after a year of trying.

In addition, there are fertile young adults, especially those who are undergoing chemotherapy or radiation, who know their fertility may be threatened by their treatments, and for them it is a question of *fertility preservation*. Some very exciting research is taking place across the country that focuses on fertility preservation but can also impact the entire gamut of infertility treatment. We invite you to read about some of the progress that is taking place on this topic at Northwestern and beyond.

The Institute Staff



INSTITUTE FOR
WOMEN'S HEALTH
RESEARCH™

AT NORTHWESTERN UNIVERSITY

INFERTILITY AND WOMEN

FERTILITY AFTER CANCER AND OTHER DISEASES

The treatment of cancer and other serious diseases can impair a woman's future

fertility. About 10% of new cancers occur in people under age 40 and survival rates for these patients more than doubled over the past forty years. As such, survivors often live many decades beyond their cancer treatment.



Unfortunately, common cancer treatments, including chemotherapy, radiation, and surgery, may affect the future fertility of survivors. These treatments are also used with stem cell therapy to treat blood diseases, such as sickle cell anemia, autoimmune disorders, including multiple sclerosis, and others. While survival is the primary goal of treatments, scientists and clinicians also work to prevent fertility loss in these patients.

WHAT IS ONCOFERTILITY?

The field of oncofertility was established to explore the reproductive future of cancer survivors. Research in oncofertility investigates how life-preserving cancer treatment can damage fertility and develops new techniques to preserve a woman's reproductive ability. Oncofertility also investigates other barriers that may prevent women from having a child after cancer, including health care provider communication, insurance issues, and ethical concerns.

FERTILITY PRESERVATION OPTIONS FOR WOMEN

Advances in reproductive technology paved the way for fertility preservation in cancer patients and others, including:

Embryo Banking. Chemotherapy and radiation can destroy the eggs and follicles (immature eggs) stored in the ovaries. In embryo banking, a woman's ovaries are hormonally stimulated for 2-3 weeks to cause the maturation and release of multiple eggs (normally only one egg is released per month). The eggs are retrieved and fertilized with sperm from a partner or donor through [in vitro fertilization \(IVF\)](#). These embryos are then frozen and, once the cancer survivor is ready to have children, can be thawed and implanted into the uterus to begin a pregnancy.

Egg Banking. Women who do not have a partner may choose to preserve just their eggs rather than fertilized embryos. This form of fertility preservation also requires hormonal stimulation to release multiple eggs, which are immediately frozen. This emerging technique is still experimental and maintains lower success rates than embryo banking.

Ovarian transposition. Patients receiving radiation therapy of the pelvis may undergo a surgery that transfers the ovaries to an area of the body away from harmful radiation. While this technique protects from the reproductive effects of radiation, it does not prevent against fertility loss caused by chemotherapy.

Ovarian tissue banking. While embryo and egg banking are the most common forms of fertility preservation, they are not viable options for some women. Patients who have an immediate need to begin treatment, those with cancers that grow in response to hormones (such as estrogen-responsive breast cancers), and prepubertal girls are not candidates for other fertility options. They may instead have an ovary surgically removed, sectioned into small strips, and frozen. Later, the tissue can be transplanted

back and immature follicles within the tissue develop normally. This experimental option has resulted in successful pregnancies and births. When transplanting the ovary, there is a small risk for reintroducing cancer cells. Therefore, ovarian tissue banking is not appropriate for women with pelvic or blood-borne cancers, such as leukemia.

While these options can be used to preserve the fertility of many cancer patients, some women do not currently have fertility preservation options. As such, oncofertility researchers are developing a technique called *in vitro* follicle maturation. In this process, ovarian tissue is banked until the survivor is ready to start a family, when the tissue is thawed and immature [ovarian follicles](#) are isolated and grown in a laboratory setting. Eggs can be obtained from mature follicles and fertilized with IVF. *In vitro* follicle maturation will allow more women to preserve their fertility prior to cancer treatment. Although this investigational procedure is not yet in clinical use, research around the country is working to make this possibility a reality for young female cancer patients.

HOW WOMEN CAN FIND AN ONCOFERTILITY DOCTOR

The Oncofertility Consortium is a nationwide network of scientists, researchers, and clinicians dedicated to providing fertility care to patients with cancer and other serious diseases. This group, based at Northwestern University, makes fertility preservation available to patients around the country through the FERTLINE fertility hotline at 866-708-FERT (3378). Cancer patients and their providers can contact the FERTLINE to discuss available fertility options and be referred to fertility sites near them. The experienced patient navigators at the FERTLINE coordinate services, usually between oncologists and reproductive endocrinologists, to create a holistic treatment regimen for young cancer patients.



Those interested in learning more about cancer and fertility can also go to MyOncofertility.org or download a free iPhone App at SaveMyFertility.org. For additional questions, please feel free to contact the Oncofertility Consortium through oncofertility@northwestern.edu.

Contributing writers: Kate Timmerman, PhD, Director of the Oncofertility Consortium and Angela Krausfeldt, Program Manager of the Oncofertility Consortium

UPCOMING EVENTS

July 19, 2011

Institute for Women's Health Research Monthly Forum:

[Oncofertility: Translation in Multiple Dimensions](#)

Prentice Women's Hospital, Chicago, Illinois

September 12, 2011, 8:00am - September 14, 2011, 5:00pm

[Oncofertility Consortium Conference](#)

Prentice Women's Hospital, Chicago, Illinois

October 15, 2011, 10:00am

[Aware for All--A Clinical Research Education Day](#)

Robert H. Lurie Medical Research Center, Chicago, Illinois

HEALTH TIP

HEALTH

Beware of Bogus STD Treatments

Untreated sexually transmitted diseases (STD) can lead to [Pelvic Inflammatory Disease](#) (PID), a potential cause of infertility. Recently the Food and Drug Administration (FDA) has issued warnings that some companies are selling products that make unproven claims to treat STDs that are available over the counter and may even be sold as dietary supplements. The FDA is making efforts to remove these products from the market. Only prescription medicines and diagnostic tools available through a health care professional are effective for STDs.

To read more, check out our [blog](#) on the topic.

[Illinois Women's Health Registry News](#)

The Illinois Women's Health Registry welcomes all the new participants who joined after reading about our recently launched Spanish language version of the Registry in the Chicago Tribune. Read the article [here](#). We're so happy to have you, and happy to be a part of Northwestern's growing outreach to the Spanish-speaking/bilingual Hispanic and Latino communities! We would love to have even more Hispanic and Latina participants, so keep spreading the word to your friends and families.

[Forward email](#)



Try it FREE today.

This email was sent to b-cushing@northwestern.edu by instwhr@northwestern.edu | [Update Profile/Email Address](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Northwestern University | Inst for Women's Health Rsrch | 300 E Superior St, Tarry 12-703 | Chicago | IL | 60611