



What is fertility preservation?

Fertility preservation refers to the cryopreservation and storage of reproductive cells (gametes—either eggs or sperm) or embryos (eggs fertilized by sperm) for future use. The advanced technique of **vitrification**, or flash-freezing, has improved the ability to efficiently preserve eggs and embryos for best chances of future success.

Who should consider fertility preservation?

- Individuals diagnosed with cancer in their reproductive years should consider fertility preservation prior to starting treatment.
 - Chemotherapeutic agents can be toxic to reproductive organs, specifically ovaries and testicles where the reproductive cells are produced and stored. Preserving gametes prior to treatment can give patients peace of mind that they can still start or expand their family in the future.
- Individuals who choose to delay becoming pregnant for social reasons – career choices, continuing education, lack of partner, or other personal reasons – and who want to give themselves access to “younger” eggs allowing for higher chances at pregnancy.
- Transgender individuals who wish to preserve genetic gametes prior to transition.
- Individuals with autoimmune disorders who must be on medications that may destroy reproductive function.
- Individuals who have been advised to have their ovaries removed (for example, due to severe endometriosis.)

What is involved in freezing eggs?

- Egg freezing should be done prior to undergoing any cancer treatment.



- The first step is a consult with one of our specialty physicians to discuss the procedure and the risks and benefits. While egg freezing is not a guarantee of future pregnancy, our goal is to maximize your chances of success by using the latest cryopreservation technique.
- An egg freezing cycle is similar to undergoing the first steps of in-vitro fertilization (**IVF**) and is customized by the physician with the timing of a patient's plans in mind. You will undergo:
 1. Ovarian stimulation with injectable medications
 2. Monitoring via ultrasound and blood work
 3. Egg retrieval.
- All mature eggs that are retrieved will be vitrified the same day utilizing the latest cryopreservation techniques to most efficiently and effectively store your eggs for future use.
- Future use of stored eggs involves: warming the eggs, fertilizing the eggs via **ICSI**, and creating embryos in the laboratory for future embryo transfer.

How many eggs should I aim to freeze?

A meaningful number of eggs depends on both your age, and how many future children you desire to have.

Research in this area estimates that to achieve a 70% chance of 1 live birth:

- Age 30-34 years: at least 12-14 mature oocytes
- Age 35-37 years: at least 15-16 mature oocytes
- Age 38-40 years: 25+ mature oocytes.

What is involved in freezing sperm?



- It is preferable to collect and store sperm prior to the initiation of any cancer treatment; however, samples collected after starting certain forms of treatment have been shown to be viable.
- The first step is to consult with one of our specialists to discuss risks and benefits to sperm freezing. Bloodwork for infectious disease testing is required prior to sperm banking.
- Prior to collection, patients should abstain from ejaculation for 2-5 days.
- Patients can choose to collect several times in order to bank more samples (it may take more than one sample for a future cycle).
- Depending on how many samples you freeze, options for future conception may include intrauterine insemination (**IUI**) or **IVF**.

Who should consider freezing *embryos* (eggs fertilized by sperm)?

- Any female described above who has a male partner-- and together, you wish to preserve your fertility as a couple.
- The decision of freezing eggs versus freezing embryos can be complex and depends on your particular situation- schedule an appointment with one of NRM's physicians to discuss how your needs will best be met.

Why choose NRM?

Our Ovation embryologists utilize vitrification, a flash-freeze technique used to prevent ice crystal formation and damage to vulnerable eggs and embryos. With modern techniques and state-of-the art technology, our team at NRM and Ovation strives to offer you the best chances for future reproductive success.