

Embryo Cryopreservation

Benefits and risks, and what to expect

This handout explains embryo cryopreservation and why you may want to choose this option.



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What is embryo cryopreservation?

An *in vitro fertilization* (IVF) cycle often creates more than 1 *viable* embryo. These are embryos that can result in a normal pregnancy. Some of these embryos can be frozen (*cryopreserved*) and used later. *Embryo cryopreservation* is the process of freezing the embryos that are not used right away.

Before you start the IVF cycle, we will ask if you want any extra embryos to be frozen. Please talk with your provider if you have any questions about this process.

What are the benefits?

With cryopreservation:

- You may be able to have more children without repeating an IVF cycle.
- We can use your viable embryos later. We might do this if it is safer or more effective to freeze your embryos rather than transfer them a few days after the egg retrieval.
- You can choose to do genetic testing on the embryo(s).

How do frozen and fresh embryos compare?

Frozen embryos work just as well as fresh embryos when creating a pregnancy. And these pregnancies are the same as natural pregnancies in the number of miscarriages or birth defects that occur.

Doctors have studied children who were born from frozen embryos and children who were born from fresh embryos. They have not found any more health problems in the children born from frozen embryos.

How do we choose embryos for freezing?

In most IVF treatments, all fertilized embryos are grown for 5 or 6 days (the *blastocyst* stage). If you decide to freeze embryos, we will store any healthy embryos that are not used in the current cycle.

The success of frozen embryos depends on their quality. We will only freeze embryos that grow normally and have good *morphology* (look healthy). This increases the chances of success in future cycles.

Good-quality embryos have a high survival rate. Usually, more than 95% (95 out of 100) survive the freezing and thawing process.

How are embryos frozen?

Embryos are frozen using a method called *vitrification*. This method freezes embryos very quickly. It has higher survival rates than the slower methods that we once used.

How long can they stay frozen?

Frozen embryos are stored in liquid nitrogen, which keeps them extremely cold at -321°F (-196°C). Good-quality frozen embryos can stay healthy for a very long time. Healthy children have been born from embryos that were frozen for many years.

What else do I need to know?

You (and your partner, if included) have full control over what happens with your embryos.

Before starting your IVF cycle and creating embryos, we will ask you to fill out an “embryo disposition” form. This form tells us what you wish to do with your embryos if you do not use them for your own pregnancy. Your choices include:

- Donating the embryos to another person or couple
- Donating the embryos to research
- Discarding the embryos
- Transferring the embryos to a storage facility that is not part of UW Medicine



If you choose to have embryo cryopreservation, we will freeze good-quality blastocysts that are not used in the current IVF cycle.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Center for Reproductive Health and Fertility:

Weekdays 8 am – 5 pm:
Call 206.598.4225

After hours, weekends, and holidays: Call 206.598.6190 and ask to page the CRHF provider on call.