

IVF

In vitro fertilization (IVF) is a complex series of procedures used to help with fertility or prevent genetic problems and assist with the conception of a child.

During IVF, mature eggs are collected (retrieved) from ovaries and fertilized by sperm in a lab. Then the fertilized egg (embryo) or eggs (embryos) are transferred to a uterus. One full

cycle of IVF takes about three weeks. Sometimes these steps are split into different parts and the process can take longer.

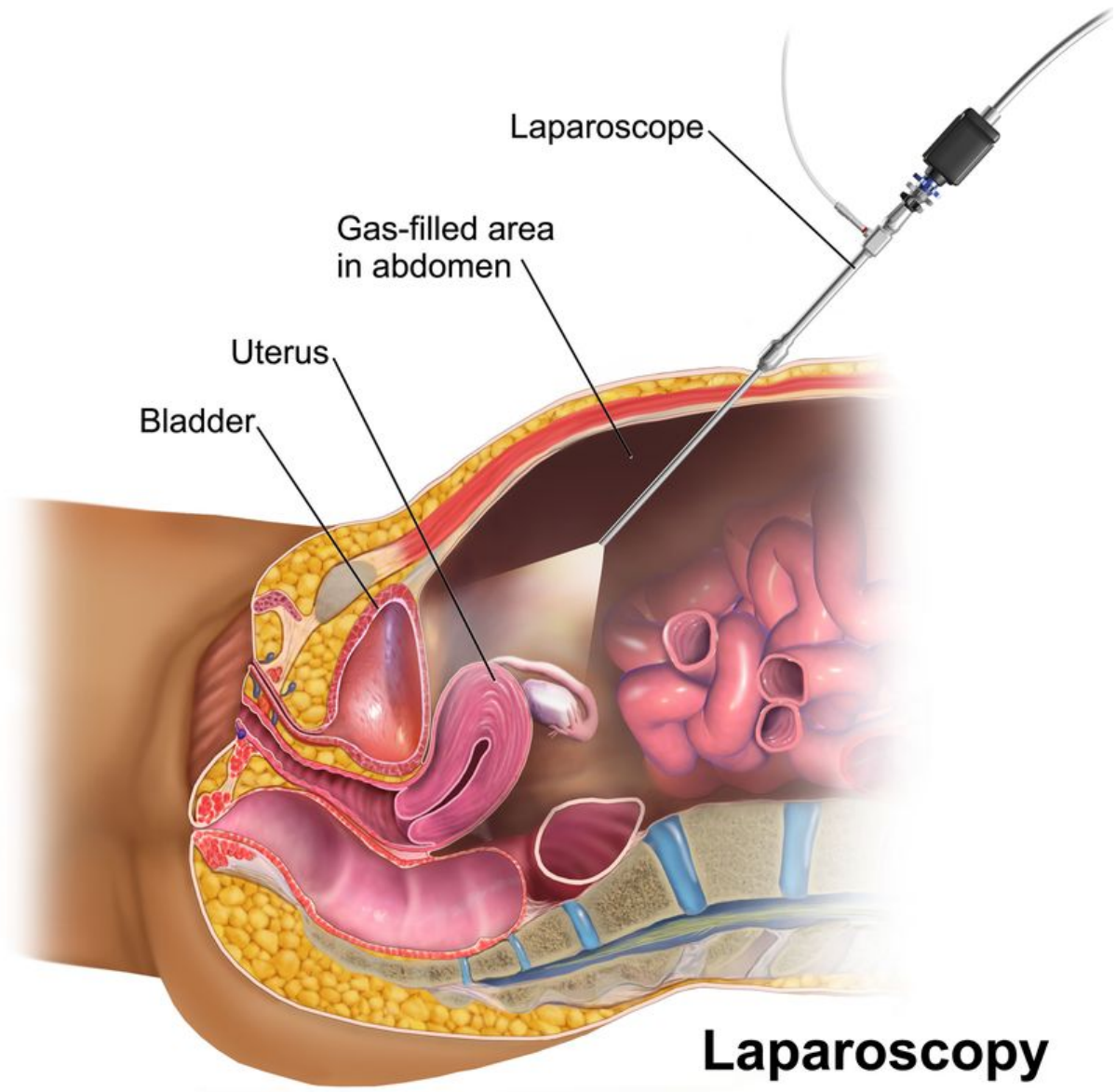
IVF is the most effective form of assisted reproductive technology. The procedure can be done using your own eggs and your partner's sperm.

Or IVF may involve eggs, sperm or embryos from a known or anonymous donor. In some cases, a gestational carrier — a woman who has an embryo

implanted in her uterus —
might be used.

Your chances of having a healthy baby using IVF depend on many factors, such as your age and the cause of infertility. In addition, IVF can be time-consuming, expensive and invasive. If more than one embryo is transferred to your uterus, IVF can result in a pregnancy with more than one fetus (multiple pregnancy).

Your doctor can help you understand how IVF works, the potential risks and whether this method of treating infertility is right for you.



Laparoscopy

Why it's done

In vitro fertilization (IVF) is a treatment for infertility or genetic problems. If IVF is performed to treat infertility, you and your partner might be able to try less-invasive treatment options before attempting IVF, including fertility drugs to increase production of eggs or intrauterine insemination — a

procedure in which sperm are placed directly in your uterus near the time of ovulation.

Sometimes, IVF is offered as a primary treatment for infertility in women over age 40. IVF can also be done if you have certain health conditions.

For example, IVF may be an option if you or your partner has:

- **Fallopian tube damage or blockage.** Fallopian tube damage or blockage makes it difficult for an egg to be fertilized or for an embryo to travel to the uterus.
- **Ovulation disorders.** If ovulation is infrequent or

absent, fewer eggs are available for fertilization.

- **Endometriosis.** Endometriosis occurs when the uterine tissue implants and grows outside of the uterus — often affecting the function of the ovaries, uterus and fallopian tubes.
- **Uterine fibroids.** Fibroids are benign tumors in the wall of the uterus and are

common in women in their 30s and 40s. Fibroids can interfere with implantation of the fertilized egg.

- **Previous tubal sterilization or removal.** If you've had tubal ligation — a type of sterilization in which your fallopian tubes are cut or blocked to permanently prevent pregnancy — and want to conceive, IVF may be

an alternative to tubal ligation reversal.

- **Impaired sperm production or function.** Below-average sperm concentration, weak movement of sperm (poor mobility), or abnormalities in sperm size and shape can make it difficult for sperm to fertilize an egg. If semen abnormalities are found, your partner might need to

see a specialist to determine if there are correctable problems or underlying health concerns.

- **Unexplained infertility.** Unexplained infertility means no cause of infertility has been found despite evaluation for common causes.
- **A genetic disorder.** If you or your partner is at risk of

passing on a genetic disorder to your child, you may be candidates for preimplantation genetic testing — a procedure that involves IVF. After the eggs are harvested and fertilized, they're screened for certain genetic problems, although not all genetic problems can be found. Embryos that don't contain identified problems

can be transferred to the uterus.

- **Fertility preservation for cancer or other health conditions.** If you're about to start cancer treatment — such as radiation or chemotherapy — that could harm your fertility, IVF for fertility preservation may be an option. Women can have eggs harvested from their

ovaries and frozen in an unfertilized state for later use. Or the eggs can be fertilized and frozen as embryos for future use.

Women who don't have a functional uterus or for whom pregnancy poses a serious health risk might choose IVF using another person to carry the pregnancy (gestational

carrier). In this case, the woman's eggs are fertilized with sperm, but the resulting embryos are placed in the gestational carrier's uterus.

