



Treating Infertility

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What is infertility?

Infertility is defined as not getting pregnant after 1 year of having regular **sexual intercourse** without using **birth control** (see [FAQ136 Evaluating Infertility](#)). If you are older than 35, an evaluation is recommended after 6 months of trying. If you are older than 40, talk with your **obstetrician–gynecologist (ob-gyn)** now about an evaluation.

What causes infertility?

The most common cause of female infertility is a problem with **ovulation**. The most common cause of male infertility is a problem with **sperm** cells and how they function. Other factors that may affect fertility include

- age
- lifestyle
- health conditions

Sometimes no cause is found. This is called unexplained infertility.

How does age affect fertility?

For healthy couples in their 20s or early 30s, the chance that a woman will get pregnant is about 25 to 30 percent in any single **menstrual cycle**. This percentage starts to decline in a woman's early 30s. By age 40, a woman's chance of getting pregnant drops to less than 10 percent per menstrual cycle. A man's fertility also declines with age, but not as predictably.

How can lifestyle affect fertility?

Women who are underweight, overweight, or exercise too much may have a harder time getting pregnant. In women, smoking and drinking alcohol at moderate or heavy levels may reduce fertility. In men, smoking, heavy drinking, and using marijuana can reduce sperm count and movement.

How can health conditions affect fertility?

In women, several health problems can affect women's fertility, including

- problems with reproductive organs or **hormones**
- scarring or blockages of the **fallopian tubes** (from past **sexually transmitted infections [STIs]** or **endometriosis**)
- problems with the **thyroid gland** or **pituitary gland**

In men, infertility can be caused when the tubes that carry sperm from the **testicles** are blocked.

What kind of doctor treats infertility?

When you seek treatment for infertility, you may start with your ob-gyn. Or you may see a **reproductive endocrinologist**, an ob-gyn with special training in infertility. Men may see a **urologist**. It is important to find a specialist you are comfortable with.

What treatment options are available for infertility?

Your treatment options will depend on the type of problem found. Recommendations may include

- lifestyle changes
- surgery, or
- medication

Some treatments may be combined. In some cases, infertility can be successfully treated even if no cause is found.

What lifestyle changes may help improve my chances for pregnancy?

Staying at a healthy weight and eating a healthy diet can be helpful for both men and women with infertility. If you and your male partner smoke, use drugs, or drink alcohol, you should stop.

How is surgery used to treat infertility in women?

In women, surgery may be used to

- repair blocked or damaged fallopian tubes
- treat endometriosis, which is commonly associated with infertility (see [FAQ013 Endometriosis](#))
- remove **polyps** or **fibroids** in the **uterus**

How is surgery used to treat infertility in men?

A common problem that leads to male infertility is swollen veins in the **scrotum**. These sometimes can be treated with surgery.

How are hormone problems treated in women?

Abnormal levels of hormones can cause problems with ovulation. Your specialist may check your hormone levels. If a hormone problem is found, treatment often can correct it. This treatment also may improve your chances of getting pregnant.

What is ovulation stimulation?

Ovulation stimulation is the use of drugs to help your **ovaries** release an egg. This treatment is used when ovulation is not regular or does not happen at all and other causes have been ruled out. Ovulation stimulation may be used with other infertility treatments.

How is ovulation stimulation done?

Oral drugs used to stimulate ovulation include clomiphene citrate and aromatase inhibitors. While taking these drugs, you will be monitored to see if and when ovulation occurs. This can be done by tracking your menstrual cycle or with an ovulation-predictor kit (an at-home urine test). You may be asked to visit your doctor for a blood test or **ultrasound exam**.

What are gonadotropins?

Gonadotropins are another drug used to trigger ovulation. Gonadotropins are used if other drugs are not successful or if many eggs are needed for infertility treatments.

Gonadotropins are given in a series of shots early in the menstrual cycle. Blood tests and ultrasound exams are used to track the development of the **follicles**. When test results show that the follicles have reached a certain size, another drug may be given to signal a follicle to release its matured egg.

What are the risks of ovulation stimulation?

- **Multiple pregnancy** is a risk when women are treated with clomiphene citrate, aromatase inhibitors, and gonadotropins. The risk is higher with gonadotropins. If too many eggs are developing, your specialist may postpone the cycle to reduce the chance of a multiple pregnancy.
- Ovulation stimulation, especially with gonadotropins, can lead to **ovarian hyperstimulation syndrome**. Most cases of this condition are mild. In severe cases, a hospital stay may be needed. Women taking medication to stimulate ovulation are monitored for this condition.

What is intrauterine insemination?

In **intrauterine insemination (IUI)**, healthy sperm is placed in the uterus as close to the time of ovulation as possible. IUI can be used with ovulation stimulation. The woman's partner or a donor may provide the sperm.

What are the risks of intrauterine insemination?

If ovulation drugs are used with IUI, multiple pregnancy can occur. If too many eggs are developing at the time of insemination, the insemination may be postponed.

What is assisted reproductive technology?

Assisted reproductive technology (ART) includes all fertility treatments in which both eggs and sperm are handled. ART usually involves **in vitro fertilization (IVF)**. In IVF, sperm is combined with the egg in a laboratory, and the **embryo** is transferred to the uterus. IVF is done for the following causes of infertility:

- Damaged or blocked fallopian tubes that cannot be treated with surgery
- Severe endometriosis
- **Primary ovarian insufficiency**
- Some male infertility factors
- Unexplained infertility

How is in vitro fertilization done?

IVF is done in cycles. It may take more than one cycle to succeed. The steps include:

1. Obtaining an egg. Ovulation usually is triggered with gonadotropins so that multiple eggs are produced. When your eggs are ready, a needle is used to remove mature eggs from the ovaries.
2. Fertilization of eggs by the sperm. This can be done in two ways: 1) the sperm can be added to the eggs in a laboratory, or 2) a single sperm can be injected into each egg. The eggs are checked the next day to see if they have been fertilized.
3. Embryo transfer. A few days after fertilization, one or more embryos are placed in the uterus through the **vagina**. Healthy embryos that are not transferred may be frozen and stored.

What are the risks of in vitro fertilization?

There is an increased risk of multiple pregnancy with IVF. Several things can be done to help prevent multiple pregnancy. If test results suggest that too many eggs are developing, the shot that triggers ovulation may be delayed or not given. Your specialist also may limit the number of embryos transferred to your uterus.

What else should I know about infertility treatment?

Infertility treatment takes time, and it can have high costs. It takes a big commitment from both partners. Some treatments are expensive and may not be covered by insurance.

Glossary

Assisted Reproductive Technology (ART): Treatments or procedures that are done to start a pregnancy. This may include handling eggs and sperm or embryos.

Birth Control: Devices or medications used to prevent pregnancy.

Embryo: The stage of development that starts at fertilization (joining of an egg and sperm) and lasts up to 8 weeks.

Endometriosis: A condition in which tissue that lines the uterus is found outside of the uterus, usually on the ovaries, fallopian tubes, and other pelvic structures.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

Fibroids: Growths that form in the muscle of the uterus. Fibroids usually are noncancerous.

Follicles: The sac-like structures in which an egg develops inside the ovary.

Hormones: Substances made in the body that control the function of cells or organs.

Infertility: The inability to get pregnant after 1 year of having regular sexual intercourse without the use of birth control.

Intrauterine Insemination (IUI): A procedure in which a man's sperm is placed in a woman's uterus.

In Vitro Fertilization (IVF): A procedure in which an egg is removed from a woman's ovary, fertilized in a laboratory with the man's sperm, and then transferred to the woman's uterus to achieve a pregnancy.

Menstrual Cycle: The monthly process of changes that occur to prepare a woman's body for possible pregnancy. A menstrual cycle is defined as the first day of menstrual bleeding of one cycle to the first day of menstrual bleeding of the next cycle.

Multiple Pregnancy: A pregnancy where there are two or more fetuses.

Obstetrician–Gynecologist (Ob-Gyn): A doctor with special training and education in women's health.

Ovarian Hyperstimulation Syndrome: A condition caused by overstimulation of the ovaries that may cause painful swelling of the ovaries and fluid in the abdomen.

Ovaries: Organs in women that contain the eggs necessary to get pregnant and make important hormones, such as estrogen, progesterone, and testosterone.

Ovulation: The time when an ovary releases an egg.

Pituitary Gland: A gland located near the brain that controls growth and other changes in the body.

Polyps: Abnormal tissue growths that can develop on the inside of an organ.

Primary Ovarian Insufficiency: A condition that causes a woman's ovaries to stop working before age 40.

Reproductive Endocrinologist: An obstetrician–gynecologist with special training to manage disorders related to hormones of the reproductive system. These specialists also treat infertility.

Scrotum: The external genital sac in the male that contains the testicles.

Sexual Intercourse: The act of the penis of the male entering the vagina of the female. Also called “having sex” or “making love.”

Sexually Transmitted Infections (STIs): An infection that is spread by sexual contact. Infections include chlamydia, gonorrhea, human papillomavirus (HPV), herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Sperm: A cell made in the male testicles that can fertilize a female egg.

Testicles: Paired male organs that make sperm and the male sex hormone testosterone. Also called “testes.”

Thyroid Gland: A butterfly-shaped gland located at the base of the neck in front of the windpipe. This gland makes, stores, and releases thyroid hormone, which controls the body's metabolism and regulates how parts of the body work.

Ultrasound Exam: A test in which sound waves are used to examine inner parts of the body. During pregnancy, ultrasound can be used to check the fetus.

Urologist: A physician who specializes in treating problems of the kidneys, bladder, and male reproductive system.

Uterus: A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus.

Vagina: A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.

If you have further questions, contact your obstetrician–gynecologist.

FAQ137: This information was designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. Please check for updates at www.acog.org to ensure accuracy.

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