



# Infertility & Women

## WHAT IS INFERTILITY?

Infertility is the inability of a sexually active couple, not using any birth control, to get pregnant after one year of trying.

For pregnancy to occur, several things have to happen:

- An egg must develop in the woman's ovary.
- The ovary must release an egg each month (ovulation). The egg must then be picked up by one of the fallopian tubes.
- A man's sperm must travel through the uterus to the fallopian tube to meet and fertilize the egg.
- The fertilized egg must travel through the fallopian tube and attach (implant) in the lining of the uterus.

If any of these events does not happen or is disrupted, infertility will result.

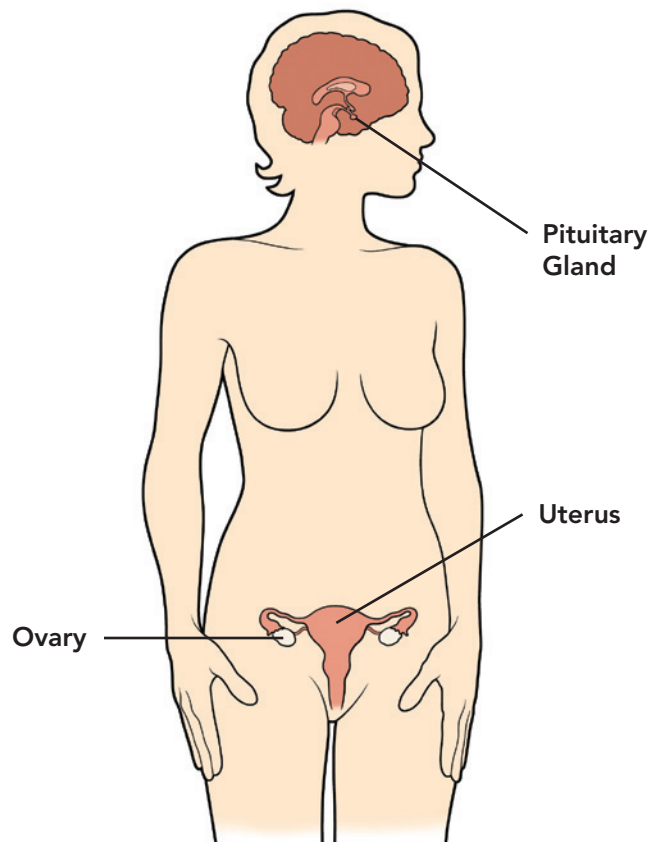
## DID YOU KNOW?

**About 40 percent of infertility cases are due to male infertility—problems with production or quality of sperm.**

About 35 to 40 percent of infertility cases are due to female infertility, but just as many cases are due to male infertility. Therefore, before you have a lot of testing and treatment, your partner should have a semen analysis done to make sure his sperm is normal. Even if it is abnormal, many treatments are available.

## WHAT CAUSES FEMALE INFERTILITY?

About 25 percent of women with infertility have infrequent or absent ovulation. These women usually have irregular periods or no periods at all. Ovulation can be disrupted by changes in the way certain hormones are released from the pituitary gland (a gland at the base of the brain). These hormones—luteinizing hormone (LH) and follicle-stimulating hormone (FSH)—signal an egg to develop and be released from the ovary.



Problems that interfere with normal LH and FSH release include

- injuries to the hypothalamus (a part of the brain that works with the pituitary gland)
- pituitary tumors
- being too thin or too heavy
- exercising too much
- extreme stress

Other hormonal conditions that interfere with ovulation or affect fertility are

- polycystic ovary syndrome (PCOS)
- an overactive or underactive thyroid
- diabetes
- early menopause
- sometimes, Cushing's syndrome (a disorder that causes very high levels of cortisol, sometimes called "the stress hormone")

A woman's ability to get pregnant can also be affected by her age, since the number and quality of her eggs gradually decreases beginning in the mid-30s. Other factors include

- problems with the reproductive tract, like blocked or damaged fallopian tubes, scarring of the uterine lining, polyps or fibroids in the uterus, and endometriosis
- sexually transmitted diseases, like chlamydia and gonorrhea, that can cause tubal blockages
- smoking, drinking alcohol, or using recreational drugs like cocaine and marijuana
- certain medications like antidepressants, tranquilizers, calcium channel blockers, narcotics, and anti-cancer drugs
- chronic medical conditions like kidney disease, liver disease, sickle cell disease, HIV/AIDS, and hepatitis B or C

## HOW IS INFERTILITY DIAGNOSED?

Your doctor will begin with a medical history about your menstrual cycle, past illnesses, sexually transmitted diseases, surgeries, and any drugs you are taking.

The next step is usually a pelvic exam to make sure your reproductive tract (vagina, uterus, and ovaries) is normal, and blood tests to measure your hormone levels. Your partner will also have a semen analysis and medical history. Depending on what these tests find, your doctor may do further tests, including one to make sure your fallopian tubes are not blocked.

## HOW IS INFERTILITY TREATED?

Treatment of infertility depends on the cause and your age. It falls into two main categories: one helps fertility through medications or surgery, and the other uses assisted reproductive technologies.

**Fertility drugs** (clomiphene, taken as a pill, and FSH and LH hormone injections) are the main treatment for women with ovulation disorders. Women with no clear cause of their infertility might also use these drugs. Sometimes doctors use drug treatment with intrauterine insemination (IUI), when sperm are released into the uterus through a catheter (a thin flexible tube) inserted through the vagina. IUI is done at the time of ovulation.

**Surgery** may help women with fibroids, uterine polyps, scarring, or endometriosis. Surgery may also be an option for some women with blocked fallopian tubes, but it depends on your age and the type of blockage. You should be aware that surgery to unblock a fallopian tube may increase the risk of ectopic (tubal) pregnancy.

**Assisted reproductive technology** uses techniques such as mixing sperm with an egg outside the body (*in vitro* fertilization or IVF) or injecting a single sperm into an egg, then transferring the resulting embryo back into the uterus. Some women with very few remaining eggs in their ovaries choose IVF using a donor egg.

## Questions to ask your doctor:

- If my partner is infertile, what treatments are available to him?
- What tests do I need to find the cause of my infertility?
- Which treatment is best for me? How successful are these treatments?
- How much does treatment cost? Does insurance cover infertility treatment?
- Should I see a specialist like a reproductive endocrinologist?

## RESOURCES

- Find-an-Endocrinologist: [www.hormone.org](http://www.hormone.org) call 1-800-HORMONE
- Hormone Health Network Infertility and Men fact sheet: [www.hormone.org/Resources/upload/infertility-and-men-081210.pdf](http://www.hormone.org/Resources/upload/infertility-and-men-081210.pdf)
- Hormone Health Network information on female reproductive health problems: [www.hormone.org/Reproductive/female.cfm](http://www.hormone.org/Reproductive/female.cfm)
- American Society for Reproductive Medicine: [www.asrm.org](http://www.asrm.org)
- Society for Assisted Reproductive Technology: [www.sart.org](http://www.sart.org)

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society ([www.endo-society.org](http://www.endo-society.org)). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at [www.hormone.org/Spanish](http://www.hormone.org/Spanish).

