

## Infertility

### How common is infertility?

About 10% of couples in the United States are infertile. Couples may be infertile if the woman has not been able to conceive after 6-12 months of having sex without the use of birth control. The number of months depends on many factors, such as your age, your partner's age, and how long you have been trying to get pregnant.

### What causes infertility?

Infertility may be caused by more than one factor. Some are easy to find and treat, while others are not. The factor may relate to the woman (65%) or the man (20%). In some cases, no cause can be found in either partner (15%).

### How is age a factor in infertility?

For healthy, young couples, the odds are about 20% that a woman will conceive in any one menstrual cycle. This figure starts to decline in a woman's late 20s and early 30s and decreases even more after age 35 years. A man's fertility also declines with age, but not as early. For this reason, older couples may not want to wait 6-12 months to seek care if they are having problems conceiving.

### What are the other male and female factors that affect fertility?

Male factors most often involve problems with the amount or health of the sperm. Abnormal hormone levels may be a cause. Infection or scarring from a **sexually transmitted disease (STD)** also may be a cause. Female factors also may involve abnormal hormone levels. The **ovaries** may not produce an egg at the right time. Scarring or blockages in the **cervix** or **fallopian tubes** also may be a cause.

### What lifestyle factors for women contribute to infertility?

Lifestyle factors, such as poor nutrition, **anorexia**, and obesity can play a part in infertility. Exposure to a drug called diethylstilbestrol (DES) can cause problems. DES was a drug given to pregnant women between 1940 and 1971 to prevent miscarriage. Women born to mothers who took DES may have problems with infertility. Other health problems also can play a role.

### What should be considered when deciding whether to be tested for infertility?

The decision to begin testing depends on a number of factors. They include your age and your partner's age, as well as how long you have been trying to get pregnant. You and your partner will receive care as a couple.

### What does testing involve?

Testing involves the following evaluations:

- Physical exam
- Medical history
- Semen analysis
- Ovulation check

- Tests to check for a normal **uterus** and open fallopian tubes
- Discussion about how often and when you have sex

The basic workup of an infertility evaluation can be finished within a few menstrual cycles in most cases. Ask your doctor about the costs involved. Find out whether they are covered by your insurance.

### How are men evaluated for infertility?

A semen analysis is a key part of the basic workup for a man. It may need to be done more than once. The semen sample is obtained by **masturbation**. Sometimes it can be obtained at home. Sometimes it is obtained in a lab. Your doctor will give you instructions.

The semen sample then is studied in a lab. The doctor will study the sperm for the following:

- Number
- Shape
- Movement
- Signs of infection

The man may be referred to a urologist (a doctor trained in treating problems of the urinary tract). The urologist will perform an exam and tests may be done.

### How are women evaluated for infertility?

The workup for a woman begins with a physical exam and health history. The health history will focus on key points:

- Menstrual function, such as irregular bleeding and pain
- Pregnancy history
- STD history
- Birth control

A **Pap test** and blood tests also may be done.

### What tests evaluate ovulation?

There are many tests to see if ovulation occurs. Some are done by the woman, and others are done by the doctor.

- Urine test—This test can be done by the woman at home with a kit. It is a way to predict ovulation. This test measures **luteinizing hormone (LH)**, a hormone involved in ovulation. If the test result is positive, it means ovulation is about to occur. Sometimes these kits are used with basal body temperature charts.
- Basal body temperature—This test can be done by the woman at home. It is a way to tell that ovulation has occurred. After a woman ovulates, her body temperature increases a bit. To measure it, a woman takes her temperature by mouth every morning before she gets out of bed (basal temperature). She records it on a chart for two or three menstrual cycles.

Other tests may be done, depending on a woman's risk factors.

## What procedures evaluate a woman's reproductive organs?

Certain procedures check if the uterus is normal and the fallopian tubes are open:

- **Hysterosalpingography (HSG)**—This test is an X-ray that shows the inside of the uterus and fallopian tubes. In most cases, it is done right after a menstrual period. A small amount of dye is placed in the uterus through a thin tube inserted through the cervix. An X-ray is then taken. The dye outlines the inside of the uterus and fallopian tubes. If it spills from the tubes, it shows that the tubes are open.
- **Transvaginal ultrasound**—This test checks the ovaries and uterus by using sound waves to produce pictures of pelvic organs. First a device (a transducer) shaped like a wand is lubricated and inserted into the **vagina**. A machine displays an image of the organs.
- **Hysteroscopy**—This procedure lets the doctor look inside the uterus. A thin telescope-like device, called a hysteroscope, is placed through the cervix. The uterus may be filled with a gas or liquid to reveal more information. During this procedure, the doctor can correct minor problems or get a sample of tissue to study. The doctor also may decide other procedures are needed.
- **Laparoscopy**—This procedure lets the doctor view the tubes, ovaries, and the outside of the uterus. A small telescope-like device, called a laparoscope, is inserted through a small cut (about ½ inch or less) at the lower edge of the navel. Fluid is placed in the uterus to see if it spills from the ends of the tubes. This shows if the tubes are open or blocked. The doctor also can look for pelvic problems, such as **endometriosis** or scar tissue.

You may be given pain relief for some of these procedures.

## Glossary

**Anorexia:** An eating disorder in which a distorted body image leads a person to diet excessively.

**Cervix:** The lower, narrow end of the uterus, which protrudes into the vagina.

**Endometriosis:** A condition in which tissue similar to that normally lining 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.

**Luteinizing Hormone (LH):** A hormone produced by the pituitary glands that helps an egg to mature and be released.

**Masturbation:** Self-stimulation of the genitals, usually resulting in orgasm.

**Ovaries:** Two glands, located on either side of the uterus, that contain the eggs released at ovulation and that produce hormones.

**Pap Test:** A test in which cells are taken from the cervix and vagina and examined under a microscope.

***Sexually Transmitted Disease (STD):*** A disease that is spread by sexual contact, including chlamydia, gonorrhea, genital warts, herpes, syphilis, and infection with human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

***Uterus:*** A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

***Vagina:*** A passageway surrounded by muscles leading from the uterus to the outside of the body, also known as the birth canal.

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