

Infertility: Frequently Asked Questions

What is infertility?

- Most experts define infertility as not being able to get pregnant after at least one year of trying.
- Women who are able to get pregnant but then have repeat miscarriages are also said to be infertile.

Pregnancy is the result of a complex chain of events. In order to get pregnant:

- A woman must release an egg from one of her ovaries (ovulation).
- The egg must go through a fallopian tube toward the uterus (womb).
- A man's sperm must join with (fertilize) the egg along the way.
- The fertilized egg must attach to the inside of the uterus (implantation).

Infertility can result from problems that interfere with any of these steps.

Is infertility just a woman's problem?

No, infertility is not always a woman's problem. In about one-third of cases, infertility is due to the woman (female factors). In another third of cases, infertility is due to the man (male factors). The remaining cases are caused by a mixture of male and female factors or by unknown factors.

What causes infertility in men?

Infertility in men is most often caused by:

- Problems making sperm -- producing too few sperm or none at all
- Problems with the sperm's ability to reach the egg and fertilize it -- abnormal sperm shape or structure prevent it from moving correctly
- Sometimes a man is born with the problems that affect his sperm.
- Other times problems start later in life due to illness or injury. For example, cystic fibrosis often causes infertility in men.

What increases a man's risk of infertility?

The number and quality of a man's sperm can be affected by his overall health and lifestyle. Some things that may reduce sperm number and/or quality include:

- Alcohol
- Drugs
- Environmental toxins, including pesticides and lead
- Smoking cigarettes
- Health problems
- Medicines
- Radiation treatment and chemotherapy for cancer
- Age

What causes infertility in women?

Problems with ovulation account for most cases of infertility in women. Without ovulation, there are no eggs to be fertilized.

 Some signs that a woman is not ovulating normally include irregular or absent menstrual periods.

Less common causes of fertility problems in women include:

- Blocked fallopian tubes due to pelvic inflammatory disease, endometriosis, or surgery for an ectopic pregnancy
- Physical problems with the uterus
- Uterine fibroids

What things increase a woman's risk of infertility?

Many things can affect a woman's ability to have a baby. These include:

- Age
- Stress
- Poor diet
- Athletic training
- Being overweight or underweight
- Tobacco smoking
- Alcohol
- Sexually Transmitted Infections (STIs)
- Health problems that cause hormonal changes

How does age affect a woman's ability to have children?

More and more women are waiting until their 30s and 40s to have children. Actually, about 20% of women in the United States now have their first child after age 35. So age is an increasingly common cause of fertility problems.

• About one-third of couples in which the woman is over 35 have fertility problems. Aging decreases a woman's chances of having a baby in the following ways:

• The ability of a woman's ovaries to release eggs ready for fertilization declines with

age.

- The health of a woman's eggs declines with age.
- As a woman ages she is more likely to have health problems that can interfere with fertility.
- As a women ages, her risk of having a miscarriage increases.

How long should women try to get pregnant before calling their doctors?

Most healthy women under the age of 30 shouldn't worry about infertility unless they've been trying to get pregnant for <u>at least a year</u>. At this point,

- women should talk to their doctors about a fertility evaluation
- men should also talk to their doctors if this much time has passed.

In some cases, women should talk to their doctors sooner. Women in their 30s who've been trying to get pregnant for six months should speak to their doctors to discuss possible concerns.

Some <u>health issues</u> also increase the risk of fertility problems. So women with the following issues should speak to their doctors as soon as possible:

- Irregular periods or no menstrual periods
- Very painful periods
- Endometriosis
- Pelvic inflammatory disease
- More than one miscarriage

No matter how old you are, it's always a good idea to talk to a doctor before you start trying to get pregnant. Doctors can help you prepare your body for a healthy baby. They can also answer questions on fertility and give tips on conceiving.

How will doctors find out if a woman and her partner have fertility problems?

- Sometimes doctors can find the cause of a couple's infertility by doing a complete fertility evaluation. This process usually begins with physical exams and health and sexual histories.
- If there are no obvious problems, like poorly timed intercourse or absence of ovulation, tests will be needed.
- Finding the cause of infertility is often a long, complex, and emotional process. It can take months for you and your doctor to complete all the needed exams and tests. So don't be alarmed if the problem is not found right away.

For a man, doctors usually begin by testing his semen. They look at the number, shape,

and movement of the sperm. Sometimes doctors also suggest testing the level of a man's hormones.

For a woman, the first step in testing is to find out if she is ovulating each month. There are several ways to do this. A woman can track her ovulation <u>at home</u> by:

- Recording changes in her morning body temperature (basal body temperature) for several months
- \circ Using a home ovulation test kit (available at drug or grocery stores)

Doctors can also check if a woman is ovulating by doing <u>blood tests and an ultrasound of</u> <u>the ovaries</u>. If the woman is ovulating normally, more tests are needed.

Some common tests of fertility in women include:

<u>Hysterosalpingography</u>: In this test, Radiologists use X-rays to check for <u>physical</u> problems of the uterus and fallopian tubes.

- They start by injecting a special dye through the vagina into the uterus.
- This dye shows up on the X-ray and allows the doctor to see if the dye moves normally through the uterus into the fallopian tubes.
- With these X-rays doctors can find <u>blockages</u> that may be causing infertility. Blockages can prevent the egg from moving from the fallopian tube to the uterus. Blockages can also keep the sperm from reaching the egg.

Laparoscopy: During this surgery doctors use a tool called a laparoscope to see inside the abdomen to look at <u>the ovaries</u>, <u>fallopian tubes</u>, <u>and uterus for disease</u> <u>and physical problems</u>..

- The doctor makes a small cut in the lower abdomen and inserts the laparoscope.
- Doctors can usually find scarring and endometriosis by laparoscopy.

How do doctors treat infertility?

Infertility can be treated with <u>medicine</u>, <u>surgery</u>, <u>artificial insemination</u>, or <u>assisted</u> <u>reproductive technology</u> (ART). Many times these treatments are combined. In most cases infertility is treated with drugs or surgery.

 About two-thirds of couples who are treated for infertility are able to have a baby.

Doctors recommend specific treatments for infertility based on:

- Test results
- How long the couple has been trying to get pregnant
- The age of both the man and woman

- The overall health of the partners
- Preference of the partners

Doctors often treat infertility in men in the following ways:

Sexual problems:

- If the man is impotent or has problems with premature ejaculation, doctors can help him address these issues.
- Behavioral therapy and/or medicines can be used in these cases.

Too few sperm:

- If the man produces too few sperm, sometimes surgery can correct this problem.
- In other cases, doctors can surgically remove sperm from the male reproductive tract.
- Antibiotics can also be used to clear up infections affecting sperm count.

Doctors often treat infertility in women in the following ways:

- Various fertility **medicines** are often used to treat women with ovulation problems.
- It is important to talk with your doctor about the pros and cons of these medicines. You should understand the risks, benefits, and side effects.
- Doctors also may use **<u>surgery</u>** to treat some causes of infertility.
- Problems with a woman's ovaries, fallopian tubes, or uterus can sometimes be corrected with surgery.

Intrauterine insemination (IUI) is another type of treatment for infertility.

- IUI is known by most people as artificial insemination.
- In this procedure, the woman is injected with specially prepared sperm.
- Sometimes the woman is also treated with medicines that stimulate ovulation before IUI.

IUI is often used to treat:

- Mild male factor infertility
- \circ $\,$ Women who have problems with their cervical mucus $\,$
- Couples with unexplained infertility

What medicines are used to treat infertility in women?

Some common medicines used to treat infertility in women include:

<u>Clomiphene citrate (Clomid)</u>: This medicine <u>causes ovulation</u> by acting on the pituitary gland. It is often used in women who have polycystic ovarian syndrome (PCOS) or other problems with ovulation. This medicine is <u>taken by mouth</u>. <u>Human menopausal gonadotropin or hMG (Repronex, Pergonal)</u>: This medicine is often used for <u>women who don't ovulate due to problems with their pituitary</u> gland.

 hMG acts directly on the ovaries to stimulate ovulation. It is an <u>injected</u> medicine.

Follicle-stimulating hormone or FSH (Gonal-F, Follistim): FSH works much like hMG.

 It causes the ovaries to begin the process of ovulation. These medicines are usually <u>injected</u>.

Gonadotropin-releasing hormone (Gn-RH) analog: These medicines are often used for women who <u>don't ovulate regularly each month</u>. Women who <u>ovulate before the egg is ready</u> can also use these medicines.

Gn-RH analogs act on the pituitary gland to change when the body ovulates.
These medicines are usually <u>injected</u> or given with a <u>nasal spray</u>.

Metformin (Glucophage): Doctors use this medicine for women who have insulin resistance and/or polycystic ovarian syndrome (PCOS).

- This drug helps lower the high levels of male hormones in women with these conditions. This helps the body to ovulate.
- Sometimes clomiphene citrate or FSH is combined with metformin. This medicine is usually <u>taken by mouth</u>.

Bromocriptine (Parlodel): This medicine is used for women with ovulation problems due to <u>high levels of prolactin</u>.

Prolactin is a hormone that causes milk production.

Many fertility drugs increase a woman's chance of having twins, triplets, or other multiples. Women who are pregnant with multiple fetuses have more problems during pregnancy. Multiple fetuses have a high risk of being born too early (prematurely). Premature babies are at a higher risk of health and developmental problems.

What is assisted reproductive technology (ART)?

Assisted reproductive technology (ART) is a term that describes several different methods used to help infertile couples.

 ART involves removing eggs from a woman's body, mixing them with sperm in the laboratory, and putting the embryos back into a woman's body.

How often is assisted reproductive technology (ART) successful? Success rates vary and depend on many factors. Some things that affect the success rate of ART include:

- Age of the partners
- Reason for infertility
- Fertility clinic
- Type of ART
- If the egg is fresh or frozen
- If the embryo is fresh or frozen

ART can be

- expensive and time-consuming. But it has allowed many couples to have children that otherwise would not have been conceived.
- The most common complication of ART is multiple fetuses. But this is a problem that can be prevented or minimized in several different ways.

What is the most common type of assisted reproductive technology (ART)? In vitro fertilization (IVF) means fertilization outside of the body.

- IVF is the most effective ART.
- It is often used when a woman's fallopian tubes are blocked or when a man produces too few sperm.
- Doctors treat the woman with a drug that causes the ovaries to produce multiple eggs.
- Once mature, the eggs are removed from the woman.
- They are put in a dish in the lab along with the man's sperm for fertilization.
- After 3 to 5 days, healthy embryos are implanted in the woman's uterus.

ART procedures sometimes involve the use of donor eggs (eggs from another woman), donor sperm, or previously frozen embryos.

- Donor eggs are sometimes used for women who can not produce eggs.
- donor eggs or donor sperm are sometimes used when the woman or man has a genetic disease that can be passed on to the baby.

Our doctors have expertise in performing basic infertility evaluations and have associations with many excellent Reproductive Endocrinologists (Fertility Specialists) to whom you can be referred if it is considered appropriate to do so. 2018