



WOMEN AND INFERTILITY

Why It Happens and
What You Can Do

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CHAPTER ONE

WHAT CAUSES
INFERTILITY IN WOMEN?



Millions of couples and single women and men in the U.S. dream of having children but struggle with infertility. Contrary to the myth that infertility is a “woman’s problem,” infertility occurs at about the same rate in both sexes.

Around one-third of infertility cases are caused by infertility in women; another one-third by infertility problems in men; the remaining cases either have an undetermined cause or are caused by a mix of both male and female infertility—in other words, both partners may have infertility issues.¹

What Is Infertility?

Infertility is generally defined as not being able to get pregnant after 12 months of trying (having unprotected sex). It also means not being able to stay pregnant. Infertility is not the same as sterility though, which means being completely unable to conceive without assisted reproduction.

A woman is considered to have infertility if she is:

- Under age 35 and unable to get pregnant within 12 months of trying (having unprotected sex).
- Age 35 or older and unable to get pregnant within 6 months of trying.

How Common Is Infertility?

It’s common. Around 6% of married women in the U.S. are unable to get pregnant after 12 months of trying, according to the Centers for Disease Control (CDC). And, around 12% of women ages 15-44 (regardless of marital status) have difficulty getting pregnant or carrying a pregnancy to term.²

Many things must happen for a woman to become pregnant—her ovaries must release an egg (ovulation); the egg must travel through one of her fallopian tubes towards the uterus; a man’s sperm must fertilize the egg in the short 24-hour period it takes for the egg to travel through the fallopian tube; finally, the fertilized egg must attach to the uterus.

Infertility can result if there are problems with any of these steps.

Common Causes of Infertility in Women

Fertility declines as a woman ages. Women are born with all the eggs they'll ever have, and egg quality and quantity diminish with age. Based on age, healthy women trying to conceive (having unprotected sex regularly, especially during/around ovulation) have the following chances of becoming pregnant within a year³:

- Under age 25: 90% chance
- Age 25-29: 86% chance
- Age 30-34: 86% chance (although miscarriage rates increase for women in this age group)
- Age 35-39: 78% (esp. before age 37)

After age 40, women generally have a much lower chance of conceiving in any given month. By age 45, only 10% of women will conceive within a year of having regular unprotected sex.⁴

Miscarriage rates also increase significantly among older women—10% of women will miscarry at age 20, while that number jumps to 90% for women 45 years and older.⁴ Maternal risks associated with pregnancy also increase among older women, especially heart problems related to high blood pressure during pregnancy, as well as the risk of delivering a pre-term or low birth weight infant.

It's well understood that older women may have more difficulty conceiving, but what causes infertility in younger women (under age 30)? There are many possibilities.

Ovulation Disorders

Certain conditions may cause a woman to ovulate infrequently or not at all. Ovulation disorders can be caused by problems with reproductive hormones, which are regulated by the hypothalamus and the pituitary gland. They can also be caused by problems with one or both ovaries. Examples of ovulation disorders include:

- **Polycystic ovary syndrome (PCOS)**, which causes a hormone imbalance that affects ovulation. PCOS is one of the most common causes of female infertility.
- **Premature ovarian failure**, which can be caused by an autoimmune response or by the premature loss of eggs from chemotherapy or a genetic problem. Premature ovarian failure can lead to a loss of estrogen production and cause the ovaries to stop producing eggs.
- **Hypothalamic dysfunction**, which can disrupt the production of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), which stimulate ovulation each month.

The "Great Egg Disappearance"

Women are born with millions of eggs in their ovaries, yet this seemingly extraordinary number of eggs declines rapidly with time. Here's a snapshot of the approximate number of eggs women have at different stages of life.⁵

In-utero: 6-7 million

At birth: 2 million

At time of first menstruation: 300,000-400,000

At age 20: 200,000-300,000

At age 30: <200,000

At age 40: <100,000



Damage to the Fallopian Tubes

Infertility caused by damage to the fallopian tubes is called “tubal infertility.” It has several possible causes, including:

Pelvic inflammatory disease (PID), an infection caused by sexually-transmitted infections (STIs)—primarily chlamydia and gonorrhea. While these STIs can be treated, in some cases they can cause irreversible damage to the fallopian tubes or uterus, especially in women who have had multiple infections.

Previous abdominal/pelvic surgery, especially surgery to clear a blocked fallopian tube(s).

Previous ectopic pregnancy, which is when a fertilized egg implants and develops in a fallopian tube instead of the uterus.

Damage to the Uterus or Cervix

Issues with the cervix or uterus can interfere with egg implantation or increase the likelihood of miscarriage. Possible causes of uterine or cervical issues include:

Benign polyps or tumors on the uterus, which are common; in some cases, the growths can cause fallopian tube blockage or interfere with egg implantation.

Abnormalities with the uterus, including an abnormally-shaped uterus, which may cause problems getting pregnant or staying pregnant.

Scarring or inflammation of the uterus from endometriosis, which can impair egg implantation.

Problems with cervical mucus production or cervical stenosis (a narrowing of the cervix), both of which can prevent sperm from making their way into the uterus.

Endometriosis

An often-painful condition that affects one in 10 women in the U.S., endometriosis is when tissue that normally lines the uterus (called endometrial tissue) grows in places where it shouldn't.

In some cases, this extra tissue growth causes scarring that blocks the fallopian tubes and prevents eggs and sperm from uniting. Endometriosis can also affect the lining of the uterus, preventing the implantation of a fertilized egg. It may also damage eggs and/or sperm.

Endometriosis is frequently missed by doctors and is commonly misdiagnosed. One of its most common symptoms is heavy, painful, long-duration periods. If this describes you, don't assume it's normal—talk with your doctor about these and any other symptoms you're having, including nausea or vomiting, pain during sex, and fatigue.

Unexplained Infertility

Sometimes doctors aren't able to determine the cause of infertility. It could be that several minor factors in one or both partners are to blame. Not having a diagnosis can be very frustrating for couples.

Sometimes unexplained infertility corrects itself over time. Other times it doesn't. It's important to not delay seeing a doctor for infertility treatment if you've been trying for more than a year, especially if you're a woman over the age of 35.

Risk Factors for Infertility

Certain things can put women at higher risk of infertility. They include:



Age; quality and quantity of eggs decline as a woman ages.



Weight, including being underweight or having obesity, both of which can disrupt ovulation.



History of sexually-transmitted infections (STIs), including gonorrhea and chlamydia, which can damage the fallopian tubes.



Alcohol; heavy consumption may impact fertility; more research is needed. Doctors recommend abstaining from alcohol while trying to become pregnant.



Smoking, which can damage the cervix and fallopian tubes and increase the risk of miscarriage and ectopic pregnancy.

Spotlight on PCOS: One of the Most Common Causes of Infertility in Women

Polycystic ovary syndrome, or PCOS, is a hormonal condition that can cause female infertility. It's common and is thought to affect as many as 5 million women in the U.S. Obesity is a leading risk factor for PCOS.

PCOS causes irregular and/or infrequent periods (along with other symptoms, which may include excess facial/body hair, and acne). It can also cause the ovaries to become enlarged; as a result, they may fail to function properly, leading to infertility.

PCOS can be treated with lifestyle changes, especially weight loss, as well as medications. The PCOS Awareness Association reports that losing as little as 5% of excess body weight can help women ovulate more regularly.⁶

If you have infertility, ask your doctor about whether PCOS might be the cause.

CHAPTER TWO

WHEN TO SEE A DOCTOR



We've all heard stories about women who tried for years to get pregnant, or who suffered through several miscarriages, or who underwent one or more IVF attempts, only to later become pregnant on their own (with no interventions).

Most couples do get pregnant within a year of trying, and approximately half of those trying will become pregnant during the second year.

How Long Should Women Wait Before Seeing a Doctor?

Not getting pregnant within the first year does not mean you or your partner is sterile, but it could indicate a problem.

This is why fertility experts recommend that women see a specialist after trying for 12 months (or 6 months if age 35 or older). If you're older than 40, you may consider testing or treatment right away, especially if you've been unable to conceive for 3-6 months.

If tests exclude obvious problems, such as an ovarian cyst or uterine abnormality, the doctor may recommend that you keep trying for a second year before pursuing alternatives, which might include in-vitro fertilization or working with a surrogate parent (note that surrogates are not legal parents—they act as substitutes who agree to become pregnant on your behalf; we'll explore surrogacy in detail ahead).

How Is Infertility Diagnosed?

If you have a history of irregular or painful periods, miscarriages, endometriosis, or other conditions, your doctor will likely want to begin testing and treatment right away. Diagnostic tests may include the following:

Pelvic exam: A visual and physical exam of your reproductive organs, including the vulva, vagina, cervix, fallopian tubes, ovaries, and uterus. A pelvic exam can help reveal obvious problems, such as cervical stenosis, but more tests may be needed.

Hysterosalpingography: This test uses x-rays and a contrast dye injected into your uterus, which enables the doctor to view the inside of your uterus and fallopian tubes. It can help the doctor determine if your uterus has a normal shape and size, and it can reveal (and sometimes even clear) blockages in the fallopian tubes.

Ovulation testing: Your doctor may have you use an over-the-counter ovulation prediction kit at home, which detects surges in luteinizing hormone (LH) that occur before ovulation.

Blood tests: Your doctor may order a blood test to determine the presence of certain hormones; these include progesterone, a hormone produced after ovulation; and prolactin, a hormone that plays a role in fertility by inhibiting the release of hormones that trigger ovulation and allow eggs to develop and mature.

Hormone tests: Your doctor may order tests to check your thyroid and pituitary hormones, which can affect fertility.

Ovarian reserve testing: Your doctor may order a test to determine how many eggs you have and their quality, especially if you're over age 35 and/or have other risk factors for depleted egg supply.

Imaging tests: Your doctor may order a pelvic ultrasound, which uses sound waves to create images of your internal organs and tissues; a pelvic ultrasound can help your doctor identify problems with the uterus or fallopian tubes. You may also need a hysterosonography, which can reveal more than a regular ultrasound, as well as a hysteroscopy, which also helps reveal problems with your uterus or fallopian tubes.

Laparoscopy: If your doctor suspects you have endometriosis or another condition that can't be diagnosed with other tests, he or she may order a laparoscopy, a minimally invasive procedure that involves inserting a tiny camera through a very small incision below your navel; the images are displayed on a screen, which help the doctor see any scarring, blockages, or other problems with the fallopian tubes, ovaries, or uterus.

Genetic testing: Your doctor may order genetic tests to determine whether genetic problems may be causing infertility.



How Is Infertility Treated?

Infertility treatment depends on several factors, including your age, how long you've been trying to get pregnant, and your personal preferences. Infertility is a complex disorder. What's appropriate for one woman might not be right for the next.

Some women may need just one or two therapies to restore fertility, while others may need several. Some women may not be able to get pregnant or carry a pregnancy to term regardless of treatment. These women may turn to surrogates, which we'll discuss ahead.

Once any infections that can impair fertility are ruled out (infections are treated with antibiotics), fertility treatments generally fall into one of two categories:

1

Fertility restoration with medications or surgery

2

Reproductive assistance

Fertility Drugs & Surgery

If you are infertile due to an ovulation disorder, your doctor may recommend fertility drugs that regulate or stimulate ovulation by mimicking natural hormones (FSH and LH).

Fertility drugs work in different ways. Some stimulate the release of the fertility hormones FSH and LH (such as clomiphene and letrozole), some stimulate the ovaries to produce more eggs (such as gonadotropins), and some help improve insulin resistance, which can cause infertility.

Which medications you'll need will depend on your specific circumstances.

Fertility drugs have risks, including pregnancy with multiples, ovarian hyperstimulation syndrome (OHSS), which causes painful and swollen ovaries, and ovarian tumors (long-term risk). Ask your fertility specialist about possible risks, complications, and side effects of fertility drugs in order to make an informed decision.

Surgery to restore fertility can include:

Tubal surgeries, including procedures to clear blocked or fluid-filled fallopian tubes; for some women, surgery to remove the tubes (called a salpingectomy) can help improve the chances of conceiving with IVF.

Laparoscopic or hysteroscopic surgery, including procedures to remove or correct abnormalities with the reproductive organs, such as removing polyps/fibroids, removing pelvic adhesions, and correcting an abnormal uterine shape.

Reproductive Assistance

If medications and surgery are not an option or are not enough, your doctor may recommend reproductive assistance. Common procedures include:

Intrauterine insemination (IUI), which involves placing sperm (numbering in the millions) inside the uterus around the time of ovulation. IUI is also called artificial insemination.

Assisted reproductive technology (ART), which, in the case of female infertility, involves retrieving mature eggs from the ovaries, fertilizing them with a man's sperm (either your partner or a donor) in the lab, and then transferring the resulting embryo into the uterus. This is called in-vitro fertilization with embryo transfer, or IVF-ET. In-vitro fertilization is the most effective form of assisted reproductive technology.

CHAPTER THREE

WHEN YOU'VE TRIED
EVERYTHING: HOPE FOR
WOMEN WITH INFERTILITY



Sometimes despite trying everything—even IVF treatments—a woman can't conceive or carry a pregnancy to term.

Some couples consider adoption but run into complications in their state.

Others may have a strong desire to have a child that is genetically related to them. For these couples, surrogacy may be the best option.

What Is Surrogacy?

A surrogate is a woman who agrees to become pregnant on behalf of someone else—whether it's an individual or a couple. Surrogacy is a form of assisted reproduction. There are two types of surrogates: traditional and gestational.

Traditional surrogacy involves artificially inseminating the surrogate with the intended father's sperm (or donor sperm). Traditional surrogates are the genetic mothers of the resulting children, which can lead to possible legal complications.

Gestational surrogacy involves collecting eggs from the intended mother or donor and fertilizing them in a lab with semen from the intended father or donor. The resulting embryo is then implanted onto the uterus of the gestational carrier (another name for surrogate). In gestational surrogacy cases, the surrogate is the "birth mother" but not the "biological mother."

Gestational surrogacy is the most popular surrogacy option in the U.S. today, in large part because it allows both parents to have a genetic relationship with their child, as long as both have viable egg/sperm. It's also less legally complicated than traditional surrogacy.

How Does Surrogacy Work?

Some couples will ask a close friend or family member to be a surrogate (or accept an offer from a family member or friend to be a surrogate), but most singles and couples will rely on a professional surrogacy agency to pair them with a healthy, reliable, and trustworthy gestational surrogate.

Couples who opt to find a surrogate on their own—especially a traditional surrogate—should strongly consider hiring a skilled attorney who knows reproductive law in their state.

Couples who work with an agency, such as 3 Sisters Surrogacy, will be guided through the process (see the Surrogacy Timeline in this section). As soon as the surrogate delivers the baby, the intended parent(s) assume full legal custody and take on all parental responsibilities.

Surrogacy Timeline

Week 1

Fill out the Initial Intended Parent Application.

Week 2

The intended parent or parents should schedule a physical exam.

Weeks 3 through 5

Find a potential surrogate. Meet and interview your surrogate.

Week 6

Clinic approves your surrogate and deposit it paid.

Week 7

Finalize the surrogate decision and sign contract.

Weeks 8 through 9

Sign legal contracts and retain an attorney.

Week 10

Fund the escrow account.

Week 11

Prepare to cycle by completing tests, gathering documents, and making travel arrangements.

Week 12

Start the cycle!

Week 52

Take your new baby home!

What Makes a Good Surrogate?

There are many things to consider when selecting a surrogate, including:

- **Physical Health:** Always review a candidate's medical records before agreeing to choose them as your surrogate. If you work with an agency, they will screen surrogates carefully for you.
- **Mental Wellbeing:** Potential surrogates should undergo a psychosocial exam to ensure that they're mentally fit to be birth mothers.
- **Reliability:** If you're choosing a surrogate on your own, does she make good lifestyle choices? Is she healthy? Does she drink or do drugs?
- **Trustworthiness:** Can you trust your surrogate to follow through on her promises and honor the terms of the contract?
- **Motives:** Is your surrogate motivated by money or by altruism? Does she empathize with your situation and understand your needs?
- **Experience:** Women who have already been pregnant and given birth make some of the best candidates, particularly if they have kids of their own.

Before you decide on a course of action, make sure you're making an informed decision. That means doing your research, considering all your options, weighing **surrogacy pros and cons**, and understanding your own needs.

Benefits of Using a Surrogacy Agency

Choosing a surrogate is a serious decision, and one that can have substantial ethical and legal consequences. A reputable surrogacy agency can help you avoid conflict, help you understand the legal consequences of surrogacy, and guide you through the process from start to finish.

While it's rare for one party to pull out of the contract at the last minute, it does happen. A surrogacy agency can help you avoid this by pairing you with an experienced, trustworthy surrogate. If you do decide to find a surrogate on your own, it's best to choose someone who is unrelated to you. This puts distance between you and the surrogate to prevent conflicts and possible irreparable damage to familial relationships.



What Now?

Think surrogacy might be the right option for you? 3 Sisters Surrogacy encourages you to learn more about the surrogacy process, including what to expect and costs.

Our [FAQ](#) page answers some of the most common questions about surrogacy. If you choose to entrust us with your surrogacy journey, we'll work closely with you to craft an individualized surrogacy plan and provide support every step of the way.

[Schedule now to receive a FREE consultation.](#)

3 Sisters Surrogacy. Matching Intended Parents With Gestational Surrogates.



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