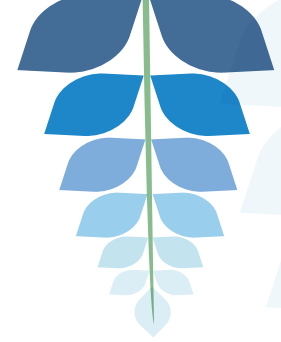


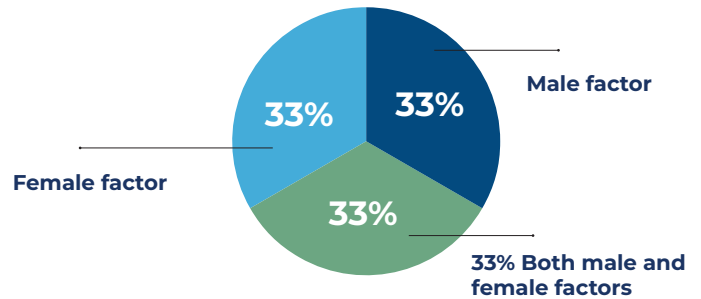
Fertility Testing

If you're struggling to get pregnant, you're not alone. Infertility is more common than you think. **In fact, about 1 in 5 couples have trouble getting and staying pregnant.**¹ The good news is there are now several fertility treatment options for people trying to get pregnant, including IVF. Testing is the first step to help you understand your options and see if IVF is right for you.



The importance of testing

Infertility is not singularly caused by a female or male issue.² Anyone can experience fertility struggles, for different reasons—that's why testing is so important. It's the best way for your fertility specialist, or reproductive endocrinologist (RE), to figure out which treatment approach could be right for you.



For females

Ovarian reserve testing

Your doctor will estimate the number of eggs remaining in your ovaries and anticipate how well your ovaries may respond to stimulation.^{3,4} Some tests that they may recommend for you are:

- Blood work to check anti-Mullerian hormone (AMH), follicle-stimulating hormone (FSH), and other hormone levels related to egg supply, or the ovarian reserve^{5,6}
- An ultrasound to count the number of small follicles in the ovary, a test called antral follicle count (AFC)^{5,6}

Ovulation testing

Your doctor will check to see if you are ovulating (releasing an egg from the ovary) normally and monitor hormone levels to see when you are fertile. Here are some of the tests your doctor may recommend:

- Blood work to check estrogen, luteinizing hormone, and progesterone levels³
- Ultrasounds to track follicular growth⁶
- Tracking basal body temperature to help determine if you have ovulated^{7,8}
- Home ovulation tests to determine when you are most fertile³

Examining your reproductive organs

Your doctor will also want to check your uterus for any masses or abnormalities that may be contributing to infertility. This may require one or more of the following procedures:

- Transvaginal ultrasound^{3,9}
- Hysterosalpingogram (HSG)^{3,9}
- Sonohysterogram^{3,9}
- Hysteroscopy^{3,9}
- Magnetic resonance imaging (MRI)¹⁰

For males

Semen analysis

Your doctor will analyze a sample of your semen to determine if the number, shape, and movement of the sperm are normal.^{3,11}

Other fertility tests for men

- Blood work to check for hormonal abnormalities or genetic factors that can contribute to infertility¹²
- Scrotal ultrasound to look for abnormalities or blockages that affect semen production or quality¹³
- Sperm antibody testing to check for immune cells (antibodies) that attack sperm¹⁴
- Testicular biopsy to determine if sperm production is normal¹⁵

**1 in 5
couples**
have trouble
getting and
staying pregnant.¹



IVF Explained

In vitro fertilization (IVF) is not simply a procedure, but rather a carefully timed set of steps called a “cycle.” Your body will be primed to produce multiple eggs for retrieval, fertilization, and finally, an embryo will be transferred into the uterus.⁶ **Find out what to expect through each step of the process.**



STEP 1. Controlled ovarian stimulation⁶

To increase chances of creating a healthy embryo, the ovaries are stimulated to produce multiple eggs.

- Your doctor will prescribe one or more fertility medications to help stimulate follicle growth (follicles contain immature eggs)
- Over the next 8-14 days, your doctor will monitor your hormone levels and use an ultrasound to see how the follicles are developing
- When your follicles have grown to an appropriate size, you'll receive a “trigger shot”—a hormone injection that causes the eggs to reach full maturity before they can be retrieved



STEP 2. Egg retrieval⁶

Just prior to ovulation, your mature eggs will be retrieved from the follicles in your ovaries.

- Before the procedure, you will be given pain medication and/or general anesthesia
- Your doctor will insert a probe with a thin needle into your vagina in order to draw the mature egg and surrounding fluid from each follicle
- The procedure occurs in the doctor's office and usually takes less than an hour

If you aren't producing eggs, or if the eggs you are producing aren't able to develop normally, your doctor may suggest using a prescreened, qualified egg donor.⁶



STEP 3. Sperm collection⁶

In this step, the sperm is separated from the semen.

- Semen is obtained by masturbation, or a special condom used during intercourse
- If the semen is devoid of sperm, it may be obtained surgically from the testicles



STEP 4. Fertilization

- The collected sperm will be mixed with your eggs or will be inserted directly into the egg through a procedure called intracytoplasmic sperm injection⁶
- The next day, an embryologist will check that the eggs are fertilized and developing properly, and will continue to monitor the developing embryos⁶

In IVF, your doctor can freeze additional embryos for future cycles (called a frozen embryo transfer, or FET) or freeze unfertilized eggs for future use.⁶



STEP 5. Embryo transfer⁶

Embryos are transferred directly into the uterus.

- An embryologist will monitor the development and quality of the embryos, and you and your doctor will decide how many embryos to transfer
- More than one embryo increases the chance of pregnancy but may also increase the chance of multiples (twins or triplets)
- Once you have decided on how many embryos to transfer, they will be introduced directly into your uterus via a catheter (a narrow, hollow tube)

References

- Centers for Disease Control and Prevention. *Reproductive Health: Infertility*. 2012. <https://www.cdc.gov/reproductivehealth/infertility/index.htm#print>
- American Society for Reproductive Medicine. *Fact Sheet: Male Infertility Evaluation: What Do I Need to Know?* 2015. <https://www.reproductivefacts.org/news-and-publications/patient-fact-sheets-and-booklets/documents/fact-sheets-and-info-booklets/male-infertility-evaluation-what-do-i-need-to-know/>
- American Society for Reproductive Medicine. *Fact Sheet: Diagnostic Testing for Female Infertility*. 2012. https://www.reproductivefacts.org/globalassets/_rf/news-and-publications/bookletsfact-sheets/english-fact-sheets-and-info-booklets/diagnostic_testing_for_female_infertility_factsheet.pdf
- Ulrich ND, Marsh EE. Ovarian reserve testing: a review of the options, their applications, and their limitations. *Clin Obstet Gynecol*. 2019;62(2):228-237.
- American Society for Reproductive Medicine. *Fact Sheet: Does My Age Affect My Fertility?* 2014. https://www.reproductivefacts.org/globalassets/_rf/news-and-publications/bookletsfact-sheets/english-fact-sheets-and-info-booklets/does_my_age_affect_my_fertility_factsheet.pdf
- American Society for Reproductive Medicine. *Assisted Reproductive Technology: A Guide for Patients*. 2015. https://www.reproductivefacts.org/globalassets/_rf/news-and-publications/bookletsfact-sheets/english-fact-sheets-and-info-booklets/art-booklet2.pdf
- Marnach M. What ovulation signs can I look out for if I'm trying to conceive? Mayo Clinic. 2022. <https://www.mayoclinic.org/healthy-lifestyle/getting-pregnant/expert-answers/ovulation-signs/faq-20058000>
- American College of Obstetricians and Gynecologists. *Fertility Awareness-based Methods of Family Planning: Frequently Asked Questions*. 2022. <https://www.acog.org/womens-health/faqs/fertility-awareness-based-methods-of-family-planning>
- American Society for Reproductive Medicine. *Fact Sheet: Evaluation of the Uterus*. 2008. https://www.reproductivefacts.org/globalassets/_rf/news-and-publications/bookletsfact-sheets/english-fact-sheets-and-info-booklets/evaluation_of_the_uterus_factsheet.pdf
- Grover SB, Antil N, Katyan A, et al. Niche role of MRI in the evaluation of female infertility. *Indian J Radiol Imaging*. 2020;30(1):32-45. doi: 10.4103/ijri.IJRI_377_19 Epub 2020 Mar 30.
- OASH Office on Women's Health. *Infertility Fact Sheet*. 2012. <https://www.womenshealth.gov/publications/our-publications/fact-sheet/infertility.html#b>
- American Society for Reproductive Medicine. *Fact Sheet: Diagnostic Testing for Male Factor Infertility*. 2008. https://www.reproductivefacts.org/globalassets/_rf/news-and-publications/bookletsfact-sheets/english-fact-sheets-and-info-booklets/diagnostic_testing_for_male_infertility_factsheet.pdf
- Johns Hopkins Medicine. *Male Infertility*. 2019. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/male-infertility>
- Silva AF, Ramalho-Santos J, Amaral S. The impact of antisperm antibodies on human male reproductive function: an update. *Reproduction*. 2021;162(4):R55-R71. <https://rep.bioscientifica.com/view/journals/rep/162/4/REP-21-0123.xml>