

Reproductive Facts

Patient fact sheet developed by the American Society for Reproductive Medicine



Male Fertility Evaluation: What do I need to know?

What is the definition of infertility?

The inability to achieve a successful pregnancy is based on multiple different factors, including but not limited to your health, age, physical findings, and test results. Infertility can be defined by:

1. The need for medical help to conceive, like using donor eggs, donor embryos, or donor sperm to become pregnant, either on your own or with a partner.
2. For heterosexual couples, if you're having regular, unprotected sex and are unable to become pregnant, it's time to seek help. This should start after 12 months if the person with ovaries is under 35 years old and after 6 months if the person with ovaries is 35 or older.

How often are male factors involved?

Male factors alone are the cause of infertility in 20–30% of couples and contribute to infertility in another 20–30% of couples. Taken together, about one half of infertile couples have male factor causes.

How is male infertility evaluated?

Initial male infertility evaluation starts with a medical and reproductive history and one or more semen analyses (sperm counts). If any abnormalities are found on initial evaluation, then the man should see a urologist specializing in male infertility.

The specialist will collect further information, perform a physical examination, and may recommend further testing.

What other testing should a man have?

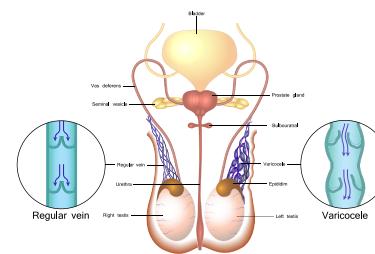
If the sperm count is low (less than 15 million total motile sperm), reproductive hormonal testing should be considered. If the sperm count is very low (less than 5 million total motile sperm), specific genetic testing may be needed.

What male factors can cause infertility?

Common problems that can cause male infertility include genetic abnormalities, hormonal issues, ejaculation problems, varicocele, obstruction, and certain medications. Several of these issues are discussed in further detail below.

Varicocele

A varicocele is an abnormal dilation of veins within the scrotum and is detected on physical examination. It is more common on the left, but it can occur on either or both sides. In addition to infertility, sometimes a varicocele can cause discomfort.



Varicocele repair may be recommended for men struggling with fertility, findings of an abnormal semen analysis, and if there are no significant female infertility issues. Most men with a varicocele, however, are not infertile and have no problems related to the varicocele. For more information about varicoceles, see the ASRM fact sheet titled Varicocele.

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Obstruction

Another common cause of male infertility is obstruction, or a blockage in the reproductive tract. The most common reason is vasectomy, but other conditions such as trauma, infection, or previous groin or pelvic surgeries can also lead to blockage.

Medications

Common medications that cause male infertility include testosterone and chemotherapy (for cancer). Both types of medications cause infertility by suppressing sperm production. In most men, stopping testosterone will allow sperm production to return to the same level as before starting the medicine. Depending on the amount and type of chemotherapy, some men will recover sperm production over time. Because many men will not recover sperm production after chemotherapy, however, it is important for affected men to consider freezing sperm prior. For more information, see the ASRM fact sheet titled *Male cancers, cryopreservation, and fertility*.

Other causes of male infertility include hormone abnormalities and ejaculation problems. These problems are less common but often are treatable. Men with some hormonal problems may need specialized testing to rule out an underlying problem such as a pituitary (brain gland) disorder.

Some men will have an underlying genetic problem that is the cause of their infertility and should be counseled about how these problems may affect them or their children. In a significant number of men, the cause of infertility cannot be identified and is termed "idiopathic."

How can these male infertility problems be treated or corrected?

The treatment depends on the cause. A varicocele can be corrected surgically or with other procedures. As many as 40% of men can have a pregnancy after varicocele correction depending on the degree of improvement in sperm count and motility and on female factors contributing to infertility.

Vasectomy causes an obstruction in sperm flow but surgery to reverse it can often be done if interested in having further children. Success after vasectomy reversal depends on how long ago the vasectomy was performed, what surgical technique was used, and female factors, such as age.

Hormonal problems and some ejaculation problems may be treated with medications, depending on the underlying cause.

Is it possible to have a child if one of these problems cannot be corrected?

Yes. Some men with an uncorrectable problem, or one that they do not want corrected, can have their own biological children. As long as sperm can be obtained, then pregnancy is possible with specialized fertility treatments. Some men may need sperm retrieved from the reproductive tract (testicle or epididymis). If the sperm count is low or sperm has to be surgically retrieved, assisted reproduction with *in vitro* fertilization (IVF) may be required. For more information about IVF, see the ASRM fact sheet titled *In vitro fertilization (IVF)*.

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