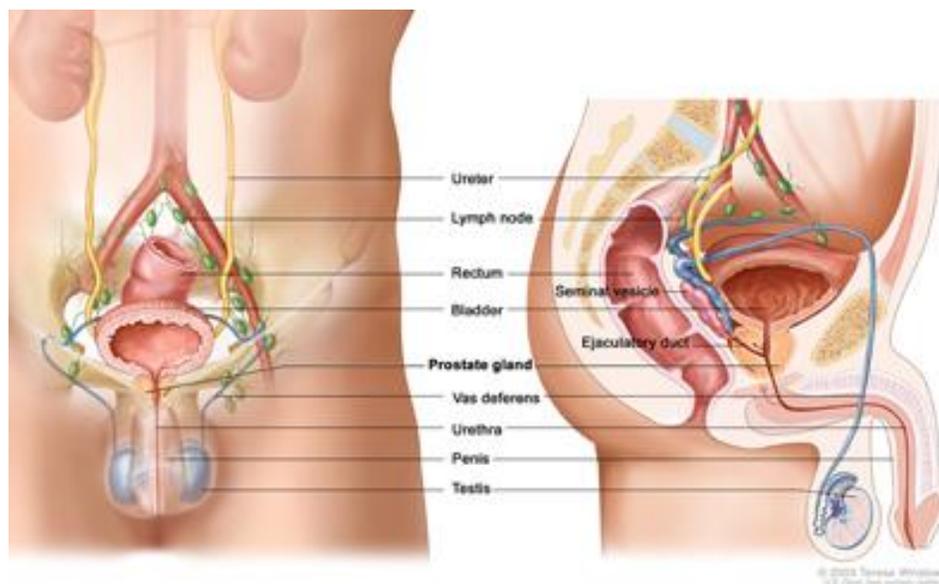


## Male Infertility

In the US, problems with fertility affect approximately 12% of couples. Half of these couples will be unable to become pregnant due to male fertility problems. Infertility is usually defined as the inability to conceive after one year of well timed intercourse, though many infertility specialists will begin fertility testing when a couple is concerned about their fertility or if the couple is trying to start their family later in life.

Normal male reproductive anatomy is made of the testes, epididymes, vas deferens, seminal vesicles, prostate and urethra. Sperm are made in the testes which are located in the scrotum. To occur normally, the process of sperm production requires certain hormones and genes. After the sperm are made they are transported to the epididymes. Within these glands, which are attached to the testes, the sperm are stored, mature and gain the ability to swim. The end or tail of the epididymis is attached to the vas deferens and sperm move into the vas deferens after they make their way through the epididymis. The vas deferens is a small muscular tube that takes the sperm to the prostate. During ejaculation, the fluid containing sperm from the vas deferens and fluid from the seminal vesicles as well as prostate are mixed and forced through the prostate and urethra to be deposited in the vagina.



Problems with male fertility may occur at any point along this process from production of sperm in the testes to transportation of sperm from the testis to the vagina during ejaculation. Problems with sperm production may occur due to hormonal deficiencies or imbalances. Men who have had undescended testes as children can have problems with sperm production. Dilated veins draining the testes called varicoceles may cause low sperm production in some men. In some men genetic problems may impair sperm production. In regards to transportation of sperm from the testicle to the vagina, problems may

occur in the epididymis due to prior scrotal surgery or infections, vas deferens (most commonly caused by vasectomy), or sometimes the problem may occur with insufficient ejaculation (for instance in men with spinal cord injuries and sometimes diabetes).

For couples who desire fertility testing, typically the male partner is evaluated first. This is done because traditionally infertility was always considered a female problem. Witness the number of royal wives who were cast aside because they could not produce an heir—Trey it would be fun to list a few here. A complete male fertility evaluation includes a thorough reproductive history, physical exam, two semen analyses and bloodwork (hormone testing). Male fertility testing identifies disorders in sperm production and delivery. In many cases these problems can be identified and treated to improve a couple's chances to conceive naturally or with assisted reproductive techniques. Also, 1% of men who are evaluated for their fertility are found to have a serious medical condition, which illustrates the importance of a thorough evaluation of infertile males.

After the cause of infertility has been identified, discussion with your doctor will allow you to make an informed decision regarding your treatment options. For many couples more than one option may be available. Many times patients with varicoceles or obstruction to sperm transportation can be surgically repaired, resulting in the ability to conceive naturally. Some patients with hormonal disorders may be treated with medicines to improve their fertility. Some couples may choose to proceed with assisted reproductive techniques such as intrauterine insemination or in vitro fertilization.

For more information on male infertility:

<http://www.urologyhealth.org/adult/index.cfm?cat=11&topic=38>

For more information on treatment of male infertility and varicoceles:

<http://www.urologyhealth.org/adult/index.cfm?cat=11&topic=129>

For more information on vasectomy reversal:

<http://www.urologyhealth.org/adult/index.cfm?cat=11&topic=154>