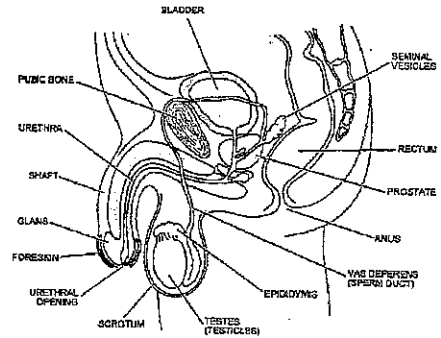


# The Male Reproductive System

## The three purposes of the male reproductive system:

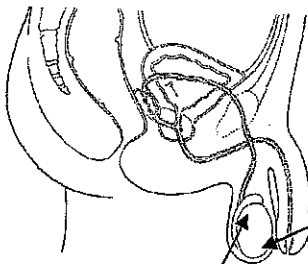
- 1.
2. Produces hormones
- 3.




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## Parts of the Male System For Sperm Production

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- To maintain needed temperature for healthy sperm these involuntary muscles of the scrotum contract with fright, cold, etc. to raise or lower the testes to warm up or cool down.

**Scrotum-** A visible sac behind and below the penis that holds the testes. The muscles in this structure allow testicles to stay 3-4 degrees lower than body temperature as required for sperm production.

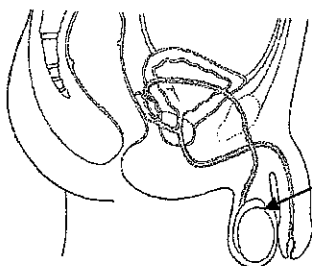
- The primary sex gland of the male that produce sperm and the male hormone, testosterone.

**Sperm-** The male sex cell, which has 23 chromosomes and unites with an ova to create a human being. The average male produces over 200 million sperm per day. Sperm are comprised of 3 physical parts: the head(DNA), body(ENERGY) & tail(MOVEMENT).

- Up to 300 of the pie shaped structures are contained in each testicle, holding up to four seminiferous tubules.

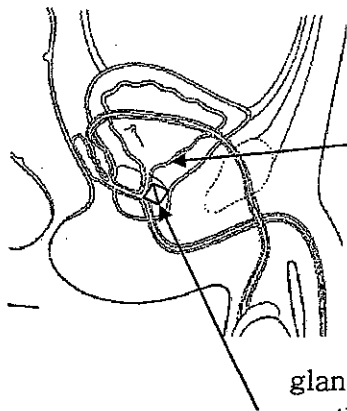
- **These tubules** (thread-like tubes) in the lobules where the sperm are produced. There are almost 700 feet of these tubules.

**Collecting Tubules or Transport Canals-**Area in each testicle that collects sperm and then feeds them into the epididymis.



A long, coiled canal leading to the vas deferens located at the top of each testicle where sperm are sorted, mature, and are stored before ejaculation. Any sperm that are not ejaculated die and are absorbed into the body.

**Vas Deferens-** The tubes which carry sperm from the epididymis, past the seminal vesicles, prostate gland, and the Cowper's gland and the resulting semen to the urethra during ejaculation.



- The upper part of the vas deferens that stores mature sperm prior to ejaculation.

- A sponge-like gland which produces an alkaline fluid that is part of semen. In the adult male, it is about the size of a golf ball and is a common site of cancer. The prostate has a valve that closes off the bladder to keep urine from mixing with semen during ejaculation.

**Cowper's Glands- (bulbourethral glands)** A pair of pea-sized glands at the base of the penis, that lay behind and to the side of the urethra that discharge pre-ejaculate fluid to cleanse the urethra. This often contains small amounts of sperm. They are counterparts of the Bartholin's gland in the female anatomy.

- Sac-like structures attached to the vas deferens to the side of the bladder that house mature sperm. Also an alkaline fluid, these secretions contain fructose, a type of sugar, which give sperm energy, thereby allowing them to move faster and aid them in their swim up through the uterus. Provide about 60% of seminal fluid.

**Semen (Seminal Fluid)**-Thick white liquid made up of sperm and fluids from the seminal vesicles, prostate gland, and Cowper's glands that are ejaculated through the urethra to exit from the penis. Approximately  $\frac{1}{2}$  to 1 teaspoon is in the average ejaculate and contains from 40 million to 600 million sperm.

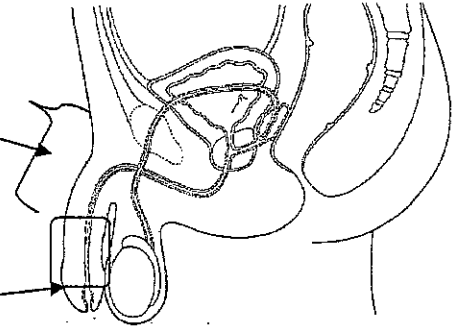
## Parts of the Male System For Erection and Stimulation

- The male sex organ that becomes erect during sexual stimulation and discharges semen. Urine also passes through the penis via the urethra.

- Three spongy cylinders in the penis that become engorged with blood to produce an erection. Two lie side by side above the third, which encloses the urethra.

- The head of the lower (Erectile) cylinder at the end of the penis. This cone-shaped structure covered by the foreskin in an uncircumcised male.

- This surrounds the erectile cylinders of the penis. The skin is loose on all but the glans of the penis to allow for increased size in erection.



## Parts of the Male System For Elimination

- The cylinder shaped male organ that holds the urethra and Erectile cylinders.

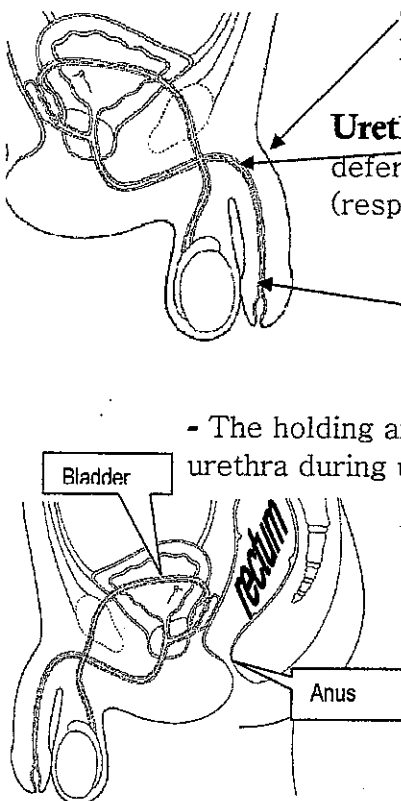
**Urethra-** The tube in the penis that connects to the bladder and vas deferens through which urine (liquid body waste) and semen (respectively) pass out of the body.

-The opening at the end of the urethra in the glans penis allowing for the passage of urine and semen from the body.

- The holding area for urine before being expelled from the body through the urethra during urination.

**Anus-** The opening through which feces exits the body.

**Rectum-** The last section of the large intestine, where feces are stored.



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### Miscellaneous Terms Related to the Male Reproductive Anatomy

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- A skin fold that conceals the glans penis that is sometimes removed during circumcision.
- An operation sometimes performed for social, religious or medical reasons to remove part of the foreskin.
- Glands in the wall of the foreskin that produce smegma.
- A waxy, oily substance that can cause infection and/or odor.
- The male sex hormone responsible for male characteristics.

**Pubic Bone-** A bone at the base of the penis.

- Ejaculation of semen during sleep.
- A physician who specializes in diseases of the urinary organs and the urinary tract and sex organs in males. They also treat females with urinary problems.
- Surgically cutting the vas deferens so that sperm cannot join semen in an ejaculation. This is the surgical sterilization procedure for men that can sometimes be reversed.

**Prostate Examination-** A physician completes a digital (finger) rectal exam by inserting a finger into the rectum and checking the prostate gland for any swelling, pain, growth or other abnormalities. A blood test is available to check for prostate cancer if anything is suspicious.

- a way for men to check their own testicles to make sure there aren't any unusual lumps or bumps - which can be the first sign of testicular cancer. Testicular cancer is more common in younger men (ages 15-35).
- during fetal development the testicles are in the lower abdomen. Before birth they descend into the scrotum but if this does not happen before birth or 6 months after birth, surgery is considered. This condition tends to run in families and increases the risk of testicular cancer.

