

# PSA Test

The **PSA test** is a blood **test** used primarily to screen for prostate cancer. The **test** measures the amount of **prostate-specific antigen (PSA)** in your blood. **PSA** is a protein produced by both cancerous and noncancerous tissue in the prostate, a small gland that sits below the bladder in men.

The prostate is a walnut-sized gland located between the bladder and the penis. The prostate is just in front of the rectum. The urethra runs through the center of the prostate, from the bladder to the penis, letting urine flow out of the body.

The prostate secretes fluid that nourishes and protects sperm. During ejaculation, the prostate squeezes this fluid into the urethra, and it's expelled with sperm as semen.

The vasa deferentia (singular: vas deferens) bring sperm from the testes to the seminal vesicles. The seminal vesicles contribute fluid to semen during ejaculation.

## Prostate Conditions

- a) Prostatitis: Inflammation of the prostate, sometimes caused by infection. It is typically treated with antibiotics.
- b) Enlarged prostate: Called benign prostatic hypertrophy or BPH, prostate growth affects virtually all men over 50. Symptoms of difficult urination tend to increase with age. Medicines or surgery can treat BPH.
- c) Prostate cancer: It's the most common form of cancer in men (besides skin cancer), but only one in 41 men die from prostate cancer. Surgery, radiation, hormone therapy, and chemotherapy can be used to treat prostate cancer. Some men choose to delay treatment, which is called watchful waiting.

## Prostate Tests

- a) Digital rectal examination (DRE): A doctor inserts a lubricated, gloved finger into the rectum and feels the prostate. A DRE can sometimes detect an enlarged prostate, lumps or nodules of prostate cancer, or tenderness from prostatitis.
- b) Prostate-specific antigen (PSA): The prostate makes a protein called PSA, which can be measured by a blood test. If PSA is high, prostate cancer is more likely, but an enlarged prostate can also cause a high PSA. Recommendations about whether or not a man should be screened and at what age differ. Talk with your doctor about whether you need testing and the potential benefits and risks.
- c) Prostate ultrasound (transrectal ultrasound): An ultrasound probe is inserted into the rectum, bringing it close to the prostate. Ultrasound is often done with a biopsy to test for prostate cancer.
- d) Prostate biopsy: A needle is inserted into the prostate to take tissue out to check for prostate cancer. This is usually done through the rectum.

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## Q.What is the PSA test? Q.What is BPH?

- i) Prostate-specific antigen, or PSA, is a protein produced by normal, as well as malignant, cells of the prostate gland. The PSA test measures the level of PSA in a man's blood.
- ii) For this test, a blood sample is sent to a laboratory for analysis. The results are usually reported as nanograms of PSA per milliliter (ng/mL) of blood.
- iii) The blood level of PSA is often elevated in men with prostate cancer, and the PSA test was originally approved by the US Food and Drug Administration (FDA) in 1986 to monitor the progression of prostate cancer in men who had already been diagnosed with the disease.
- iv) In addition to **prostate cancer**, a number of benign (not cancerous) conditions can cause a man's PSA level to rise. The most frequent benign prostate conditions that cause an elevation in PSA level are **prostatitis** (inflammation of the prostate) and **benign prostatic hyperplasia (BPH)** (enlargement of the prostate).