

Prostate-Specific Antigen (PSA) Blood Test

Prostate-specific antigen (PSA) is a substance produced by the prostate gland. Elevated PSA levels may indicate [prostate cancer](#), a noncancerous condition such as [prostatitis](#), or an [enlarged prostate](#).

Most men have PSA levels under four (ng/mL) and this has traditionally been used as the cutoff for concern about the risk of prostate [cancer](#). Men with prostate cancer often have PSA levels higher than four, although cancer is a possibility at any PSA level. According to published reports, men who have a prostate gland that feels normal on examination and a PSA less than four have a 15% chance of having prostate cancer. Those with a PSA between four and 10 have a 25% chance of having prostate cancer and if the PSA is higher than 10, the risk increases to 67%.

In the past, most experts viewed PSA levels less than 4 ng/mL as normal. Due to the findings from more recent studies, some recommend lowering the cutoff levels that determine if a PSA value is normal or elevated. Some researchers encourage using less than 2.5 or 3 ng/mL as a cutoff for normal values, particularly in younger patients. Younger patients tend to have smaller prostates and lower PSA values, so any elevation of the PSA in younger men above 2.5 ng/mL is a cause for concern.

Just as important as the PSA number is the trend of that number (whether it is going up, how quickly, and over what period of time). It is important to understand that the PSA test is not perfect. Most men with elevated PSA levels have noncancerous [prostate enlargement](#), which is a normal part of aging. Conversely, low levels of PSA in the bloodstream do not rule out the possibility of prostate cancer. However, most cases of early prostate cancer are found by a PSA blood test.

Assess Your Risk for Prostate Cancer and 4 Other Common Cancers

How Is The PSA Screening Test Done?

The test involves drawing blood, usually from the arm. The results are usually sent to a lab and most often come back within several days.

When Should I Have My PSA Levels Tested?

The American Cancer Society says men should talk to their doctors about the benefits, risks, and limitations of [prostate cancer](#) screening before deciding whether to be tested. The group's guidelines make it clear that [prostate-specific antigen \(PSA\)](#) blood testing should not occur unless this discussion happens. They recommend that most men at average risk for prostate cancer start the discussion at age 50 and those with higher risk for prostate cancer should start the discussion earlier.

The U.S. Preventive Services Task Force, however, doesn't recommend routine PSA screening for men in the general population, regardless of age. They say the tests may find cancers that are so slow-growing that medical treatments -- which can have serious side effects -- would offer no benefit.

What Is Your Cancer Risk? Take the WebMD Cancer Health Check

Cancer Symptom in Men No. 1: Breast Mass

If you're like most men, you've probably never considered the possibility of having breast cancer. Although it's not common, it is possible. "Any new mass in the breast area of a man needs to be checked out by a physician," Lichtenfeld says.

In addition, the American Cancer Society identifies several other worrisome signs involving the breast that men as well as women should take note of. They include:

- Skin dimpling or puckering
- Nipple retraction
- Redness or scaling of the nipple or breast skin
- Nipple discharge

When you consult your physician about any of these signs, expect him to take a careful history and do a physical exam. Then, depending on the findings, the doctor may order a mammogram, a biopsy, or other tests.

Cancer Symptom in Men No. 2: Pain

As they age, people often complain of increasing aches and pains. But pain, as vague as it may be, can be an early symptom of some cancers. Most pain complaints, though, are not from cancer.

Any pain that persists, according to the American Cancer Society, should be checked out by your physician. The doctor should take a careful history, get more details, and then decide whether further testing is necessary. If it's not cancer, you will still benefit from the visit to the office. That's because the doctor can work with you to find out what's causing the pain and determine the proper treatment.

Cancer Symptom in Men No. 3: Changes in the Testicles

Testicular cancer occurs most often in men aged 20 to 39. The American Cancer Society recommends that men get a testicular exam by a doctor as part of a routine cancer-related checkup. Some doctors also suggest a monthly self-exam

Cancer Symptom in Men No. 3: Changes in the Testicles continued...

Evan Y. Yu, MD, is assistant professor of medicine at the University of Washington and assistant member of the Fred Hutchinson Cancer Research Center in Seattle. Yu tells WebMD that being aware of troublesome testicular symptoms between examinations is wise. "Any change in the size of the testicles, such as growth or shrinkage," Yu says, "should be a concern."

In addition, any swelling, lump, or feeling of heaviness in the scrotum should not be ignored. Some testicular cancers occur very quickly. So early detection is especially crucial. "If you feel a hard lump of coal [in your testicle], get it checked right away," Yu says.

Your doctor should do a testicular exam and an overall assessment of your health. If cancer is suspected, blood tests may be ordered. You may also undergo an ultrasound examination of your scrotum, and your doctor may decide to do a biopsy. A biopsy may require the removal of the entire testicle.

Cancer Symptom in Men No. 4: Changes in the Lymph Nodes

If you notice a lump or swelling in the lymph nodes under your armpit or in your neck -- or anywhere else -- it could be a reason for concern, says Hannah Linden, MD. Linden is a medical oncologist and an associate professor of medicine at the University of Washington School of Medicine. She is also a joint associate member of the Fred Hutchinson Cancer Research Center in Seattle. "If you have a lymph node that gets progressively larger, and it's been longer than a month, see a doctor," she says.

Your doctor should examine you and determine any associated issues that could explain the lymph node enlargement, such as infection. If there is no infection, a doctor will typically order a biopsy.

Cancer Symptom in Men No. 5: Fever

If you've got an unexplained fever, it may indicate cancer. Fever, though, might also be a sign of pneumonia or some other illness or infection that needs treatment.

Most cancers will cause fever at some point. Often, fever occurs after the cancer has spread from its original site and invaded another part of the body. Fever can also be caused by blood cancers such as lymphoma or leukemia, according to the American Cancer Society.

It's best not to ignore a fever that can't be explained. Check with your doctor to find out what might be causing the fever and to determine its proper treatment.

Cancer Symptom in Men No. 6: Weight Loss Without Trying

Unexpected weight loss is a concern, Lichtenfeld says. "Most of us don't lose weight easily." He's talking about more than simply a few pounds from a stepped up exercise program or to eating less because of a busy schedule. If a man loses more than 10% of his body weight in a time period of 3 to 6 months, it's time to see the doctor, he says.

Your doctor should do a general physical exam, ask you questions about your diet and exercise, and ask about other symptoms. Based on that information, the doctor will decide what other tests are needed.

Cancer Symptom in Men No. 7: Gnawing Abdominal Pain and Depression

"Any man (or woman) who's got a pain in the abdomen and is feeling depressed needs a checkup," says Lichtenfeld. Experts have found a link between depression and pancreatic cancer. Other symptoms of pancreas cancer may include jaundice, a change in stool color -- often gray -- a darkening of the urine. Itching over the whole body may also occur.

Expect your doctor to do a careful physical exam and take a history. The doctor should order tests such as an ultrasound, a CT scan or both, as well as other laboratory tests.

Cancer Symptom in Men No. 8: Fatigue

Fatigue is another vague symptom that could point to cancer in men. But many other problems could cause fatigue as well. Like fever, fatigue can set in after the cancer has grown. But according to the American Cancer Society, it may also happen early in cancers such as leukemia, colon cancer, or stomach cancer.

If you often feel extremely tired and you don't get better with rest, check with your doctor. The doctor should evaluate the fatigue along with any other symptoms in order to determine its cause and the proper treatment.

Cancer Symptom in Men No. 9: Persistent Cough

Coughs are expected, of course, with colds, the flu, and allergies. They are also sometimes a side effect of a medication. But a very prolonged cough -- defined as lasting more than three or four weeks -- or a change in a cough should not be ignored, says Ranit Mishori, MD, assistant professor and director of the family medicine clerkship at Georgetown University School of Medicine in Washington, D.C. Those cough patterns warrant a visit to the doctor. They could be a symptom of cancer, or they could indicate some other problem such as chronic bronchitis or acid reflux.

Your doctor should take a careful history, examine your throat, listen to your lungs, determine their function with a spirometry test, and, if you are a smoker, order X-rays. Once the reason for the coughing is identified, the doctor will work with you to determine a treatment plan.

Cancer Symptom in Men No. 10: Difficulty Swallowing

Some men may report trouble swallowing but then ignore it, Lichtenfeld says. "Over time, they change their diet to a more liquid diet. They start to drink more soup." But swallowing difficulties, he says, may be a sign of a GI cancer, such as cancer of the esophagus.

Let your doctor know if you are having trouble swallowing. Your doctor should take a careful history and possibly order a chest X-ray and a barium swallow. The doctor may also send you to a specialist for an upper GI endoscopy to examine your esophagus and upper GI tract.

Cancer Symptom in Men No. 11: Changes in the Skin

You should be alert to not only changes in moles -- a well-known sign of potential skin cancer -- but also changes in skin pigmentation, says Mary Daly, MD. Daly is an oncologist and head of the department of clinical genetics at the Fox Chase Cancer Center in Philadelphia.

Daly also says that suddenly developing bleeding on your skin or excessive scaling are reasons to check with your doctor. It's difficult to say how long is too long to observe skin changes, but most experts say not to wait longer than several weeks.

To find out what's causing the skin changes, your doctor should take a careful history and perform a careful physical exam. The doctor may also order a biopsy to rule out cancer.

Cancer Symptom in Men No. 12: Blood Where It Shouldn't Be

"Anytime you see blood coming from a body part where you've never seen it before, see a doctor," Lichtenfeld says. "If you start coughing up blood, spitting up blood, have blood in the bowel or in the urine, it's time for a doctor visit."

Mishori says it's a mistake to assume blood in the stool is simply from a hemorrhoid. "It could be colon cancer," he says.

Your doctor should ask you questions about your symptoms. The doctor may also order tests such as a colonoscopy. This is an examination of the colon using a long flexible tube with a camera on one end. The purpose of a colonoscopy is to identify any signs of cancer or precancer or identify any other causes of the bleeding.

Cancer Symptom in Men No. 13: Mouth Changes

If you smoke or chew tobacco, you need to be especially alert for any white patches inside your mouth or white spots on your tongue. Those changes may indicate leukoplakia, a pre-cancerous area that can occur with ongoing irritation. This condition can progress to oral cancer.

You should report the changes to your doctor or dentist. The dentist or doctor should take a careful history, examine the changes, and then decide what other tests might be needed.

Cancer Symptom in Men No. 14: Urinary Problems

As men age, urinary problems become more frequent, says Yu. Those problems include the following:

- The urge to urinate more often, especially at night
- A sense of urgency
- A feeling of not completely emptying the bladder
- An inability to start the urine stream
- Urine leaking when laughing or coughing
- A weakening of the urine stream

"Every man will develop these problems as he gets older," Yu says. "But once you notice these symptoms, you should seek medical attention." That's especially true if the symptoms get worse.

Your doctor should do a digital rectal exam, which will tell him whether the prostate gland is enlarged or has nodules on it. The prostate gland often enlarges as a man ages. It's most often caused by a noncancerous condition called benign prostatic hyperplasia or BPH.

Your doctor may discuss doing a blood test to check the level of prostate-specific antigen or PSA. PSA is a protein produced by the prostate gland, and the test is used to help determine the possibility of prostate cancer.

If the doctor notices abnormalities in the prostate or if the PSA is higher than it should be, your doctor may refer you to a urologist and perhaps order a biopsy. Prostate cancer may be present even with a normal PSA level.

Cancer Symptom in Men No. 15: Indigestion

Many men, especially as they get older, think "heart attack" when they get bad indigestion. But persistent indigestion may point to cancer of the esophagus, throat, or stomach. Persistent or worsening indigestion should be reported to your doctor.

Your doctor should take a careful history and ask questions about the indigestion episodes. Based on the history and your answers to the questions, the doctor will decide what tests are needed.

How Can Men Get Breast Cancer?

Even though men don't have breasts like women, they do have a small amount of breast tissue. In fact, the "breasts" of an adult man are similar to the breasts of a girl before [puberty](#), and consist of a few ducts surrounded by breast and other tissue. In girls, this tissue grows and develops in response to female hormones, but in men -- who do not secrete the same amounts of these hormones -- this tissue doesn't develop.

However, because it is still breast tissue, men can develop [breast cancer](#). In fact, men get the same types of breast cancers that women do, although cancers involving the milk producing and storing regions of the breast are rare. An estimated 2,190 cases of breast cancer will be diagnosed in men in 2012.

Why Don't I Hear About Breast Cancer in Men as Much as I Hear About Breast Cancer in Women?

Breast cancer in men is uncommon. This is possibly due to their smaller amount of breast tissue and the fact that men produce less hormones such as estrogen that are known to affect breast cancers in women.

In fact, only about 1 in 100 breast cancers affect men and only about 10 men in a million will develop breast cancer.

Which Men Are More Likely to Get Breast Cancer?

It is rare for a man under age 35 to get breast cancer. The likelihood of a man developing breast cancer increases with age. Most male breast cancers are detected between the ages of 60 to 70 years. Other risk factors of male breast cancer include:

- Family history of breast cancer in a close female relative.
- History of radiation exposure of the chest.
- An abnormal enlargement of breasts (called gynecomastia) in response to drug or hormone treatments, or even some infections and poisons.
- A rare genetic condition called Klinefelter's syndrome.
- Severe liver disease.
- Diseases of the testicles such as mumps orchitis, a testicular injury, or an undescended testicle.

How Serious Is Breast Cancer in Men?

Doctors used to think that breast cancer in men was a more severe disease than it was in women, but it now seems that for comparably staged breast cancers, men and women have similar outcomes.

The major problem is that breast cancer in men is often diagnosed later than breast cancer in women. This may be because men are less likely to be suspicious of an abnormality in that area. In addition, their small amount of breast tissue is harder to feel -- making it more difficult to catch these cancers early, and allowing tumors to spread more quickly to the surrounding tissues.

What Are the Symptoms of Breast Cancer in Men?

Symptoms of breast cancer in men are very similar to those in women. Most male breast cancers are diagnosed when a man discovers a lump on his chest. However, unlike women, men tend to go to the doctor with more severe symptoms that may include bleeding from the nipple and abnormalities in the skin above the cancer. At that point the cancer may have already spread to the lymph nodes.

How Is Breast Cancer Diagnosed and Treated in Men?

The same techniques that are used to diagnose breast cancer in women are also used in men, such as physical exams, mammography, and biopsies (examining small samples of the tissue under a microscope).

Likewise, the same treatments that are used in treating breast cancer in women -- [surgery](#), [radiation](#), [chemotherapy](#), and endocrine therapy -- are also used to treat breast cancer in men. The one major difference is that men with breast cancer respond much better to hormone treatments than women do. Approximately 77% of male breast cancers have hormone receptors, that is, they have specific sites on the cancer cells where specific hormones like estrogen can act. In addition, 71% of male breast cancers are BRCA positive (usually BRCA-2). As a result, hormonal treatment is more likely to be effective.