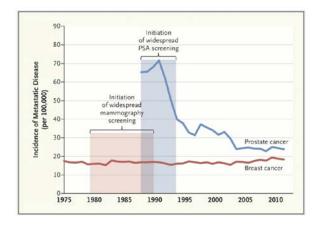
Prostate Cancer Screening: What Men Should Know

Survival rates for men with prostate cancer have improved significantly since the prostate specific antigen (PSA) blood test was introduced as a preventive screening in the early 1990s. And while the PSA test is generally recommended for men age 50 to 70, there are some important things to know about screening and a diagnosis of prostate cancer.



PSA test detects prostate cancer early

With a simple blood test, PSA screening measures the level of prostate-specific antigen, which is a protein produced by the prostate. Because an elevated PSA can indicate the presence of prostate cancer, the test is able to diagnose cancer in the earliest stages—in many cases 10 years before symptoms develop. Unfortunately, symptoms such as bone pain or difficulty urinating occur only after the cancer has metastasized; at this point, there is no cure for the disease. The vast majority of men with difficulty urinating have benign prostate enlargement and do not have cancer at all. PSA screening is important to catch prostate cancer in time for a cure.

"The PSA test is a valuable tool for initial diagnosis and monitoring, but it's important to realize that not all tumors found by PSA require treatment. For example, the most common tumor found is Grade 1 (or what was formerly called Gleason 6), which is a slow-growing tumor that more than half of men will have by the time they die and never know it," said Clint Bahler, MD, MS, an IU Health urologist. "Screening is just as important today, but men need to understand that there is a range of potential results, and that if cancer is detected, immediate treatment may not be necessary for all men. The cure should never be worse than the disease."



Advanced screening methods determine risk

It's important to know that elevated PSA doesn't always indicate cancer is present. A high PSA value can be caused by infection, bicycling or intercourse. If one PSA test reveals a high value, the screening should be repeated in two to three weeks. If it's still high, a urologist may recommend obtaining a 4Kscore—a more sophisticated screening that measures four prostate-specific proteins and combines the results with clinical information to assess a man's personal risk of developing aggressive prostate cancer. Genetic testing also can predict whether the cancer is likely to spread beyond the prostate. Both of these advancements help prevent overtreatment of those prostate cancers that are unlikely to cause death.

Active surveillance is the preferred approach for many low-risk cancers.

With today's advancements in screening and biopsy techniques, prostate cancer treatment is no longer one-size-fits-all. Individual findings through screening—and biopsy, in some cases—are used to develop a customized approach.

"Some prostate cancers are low risk and may never impact a man during his lifetime," said Dr. Bahler. "So, if we're going to screen, it's important to set expectations that there are some tumors that are best managed through monitoring, or what we sometimes call 'active surveillance.'" With regular monitoring and follow up with a urologist, this approach is similar to how chronic diseases like diabetes and heart disease are managed.

"It becomes an ideal opportunity for men to take a look at their overall health and re-evaluate factors like nutrition choices and exercise," Dr. Bahler added. "Research is showing that cancer likes sugar, fat and processed foods. Therefore, we recommend a diet that is low in sugar and limits processed foods, dairy and red meat. The best choices are fruits, vegetables, high-fiber foods, lean meats and fish."

New treatments are reducing side effects

When cancer is detected early, nerve-sparing techniques can be used, which improve both sexual function and urinary control. For example, during robotic prostatectomy the nerve bundles can be swept off the prostate, which is often referred to as a nerve-sparing prostatectomy. The entire prostate is removed, but the nerves are left in place. When cancer is not detected early, it can grow outside the prostate and invade the nerves forcing the removal of the nerves with the prostate. High intensity focused ultrasound (HIFU) is an outpatient procedure that uses focused ultrasound to generate heat and kill cancer cells. HIFU was invented at Indiana University. There are no cuts or incisions with HIFU.

"We see HIFU as a good treatment when cancer is detected early and is only on one side of the prostate," Dr. Bahler said. "When only part of the prostate is treated, the side effects are minimal and erectile dysfunction and incontinence are rare.



PSA screening guidelines—the bottom line

Men between the ages of 50 and 70 should discuss the risks and benefits of PSA screening with their doctor. Those at greater risk of developing prostate cancer, which include African Americans and men with a family history of the disease, should talk with their primary care provider about when PSA screening should begin and how often the test should be completed.

"Unfortunately, prostate cancer has become known as the cancer that doesn't need to be treated, but that's only in some cases," Dr. Bahler said. "Through screening and new treatments, there are proven ways to find those aggressive cancers that need to be treated before they spread outside the prostate, which at that point makes the disease incurable."

