A Guide to Prostate Cancer Screening

What is prostate cancer?

Prostate cancer occurs when cells in the prostate gland start to grow out of control. In the U.S., prostate cancer is the most common type of cancer diagnosed in men. It's also the second leading cause of cancer death in men after lung cancer. Most prostate cancers grow slowly and may not need to be treated. Other prostate cancers grow and spread quickly.¹⁻³

What increases your risk of prostate cancer?

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These are some of the well-known risk factors for prostate cancer. Knowing what your risk factors are can help you understand your chances of getting prostate cancer. $^{1-4}$

- Older age. More than half (60%) of prostate cancer cases is diagnosed in men over age 65.
- African ancestry. In the U.S., African American men are more likely to get prostate cancer than white men. They are also more likely to die from the disease. This higher death rate among African American men may be due to a couple of factors:
 - They tend to get prostate cancer at a younger age
 - They tend to be diagnosed when the cancer is more advanced
- Family history of prostate cancer. Having a first-degree relative (father, brother) who has had prostate cancer, especially if he was diagnosed before age 60.
- Certain inherited genetic conditions. Lynch syndrome, BRCA 1 and BRCA 2 gene mutations.



- Benign prostatic hyperplasia (BPH) Enlargement of the prostate⁵
- Digital rectal exam (DRE) An exam of the rectum in which a health care professional checks for lumps or anything else that seems unusual⁶
- Magnetic resonance imaging (MRI) A type of body scan that uses a magnet, radio waves, and a computer to make detailed images of the organs and tissues in your body⁷
- Prostate biopsy A procedure in which small pieces of the prostate are removed and examined to look for cancer¹
- Prostatitis Inflammation of the prostate⁵

About prostate specific antigen

Prostate specific antigen (PSA) is a protein that's made in the prostate gland. PSA levels are usually elevated in men with prostate cancer. A PSA blood test can be used to screen men for prostate cancer, even if they don't have any symptoms. For some men a digital rectal exam (DRE) may also be a part of screening.⁵



Screening guidance





A number of medical organizations have guidelines for prostate cancer screening. These groups recommend that men talk with their doctor about the potential risks

and benefits of prostate cancer screening before making the decision to be screened. They may not always agree about the exact age men should begin screening and how often screening should occur.^{2,4,8,9}

The American Cancer Society (ACS) recommends that the discussion about screening take place at:9

- Age 50 For men who are at average risk of prostate cancer and are expected to live at least 10 more years
- Age 45 For men at high risk of developing prostate cancer. This includes African Americans and men who have a first-degree relative (father or brother) diagnosed with prostate cancer at an early age (younger than age 65)
- Age 40 For men at even higher risk. This includes men with more than one first-degree relative who had prostate cancer at an early age.

Things to consider when screening for prostate cancer^{1-3,5}



- As more was learned about the benefits and risks of prostate cancer screening, many medical organizations began to caution against routine screening for men at average risk of prostate cancer. Most organizations now recommend that men first discuss the risks and benefits with their doctors before deciding to get screened for prostate cancer.
- 1. American Cancer Society. About prostate cancer. Accessed April 14, 2022. https://www.cancer.org/content/dam/CRC/PDF/Public/8793.00.pdf
- 2. National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology, prostate cancer early detection – version 1.2022. Published February 16, 2022. Accessed April 21, 2022.
- https://www.nccn.org/guidelines/guidelines-detail?category=2&id=1460 3. American Cancer Society. Cancer facts & figures 2022. Atlanta: American Cancer Society; 2022.
- 4. US Preventive Services Task Force. Screening for prostate cancer: US Preventive Services Task Force recommendation statement. JAMA. 2018;319(18):1901-1913. doi:10.1001/jama.2018.3710
- 5. National Cancer Institute. Prostate cancer screening. Updated September 29, 2021. Accessed April 14, 2022.

https://www.cancer.gov/types/prostate/patient/prostate-screening-pdq

- The PSA test is not a perfect test for finding prostate cancer early. It can miss some cancers and may find cancers that may never need to be treated.
- An elevated PSA level may be caused by prostate cancer or other conditions that can cause PSA levels to go up. These include prostatitis and benign prostatic hyperplasia (BPH). This can lead to a false-positive result. A false-positive result is when your PSA level is elevated and suggests you have prostate cancer when you don't have it.
- Your doctor will not diagnose prostate cancer based on the results of your PSA test alone. If your PSA is elevated, other blood tests and imaging (like an MRI) may also be performed to help you and your doctor decide the best path forward. For some men, this means continuing PSA testing to watch for changes over time. For other men, it may mean having a prostate biopsy.

Talking with your doctor



Talk with your doctor about prostate cancer screening. Deciding to be screened is a personal choice. It should be an informed decision, that you and your doctor make together. To make this decision think about:4

- The balance between the benefits and risks of prostate cancer screening
- Your unique risk factors
- Your general overall health
- Your values and preferences



References:

- 6. National Cancer Institute. Prostate-specific antigen (PSA) test. Updated February 24, 2021. Accessed April 14, 2022. https://www.cancer.gov/types/prostate/psa-fact-sheet
- 7. Federal Drug Administration. MRI (magnetic resonance imaging). Updated August 29, 2018. Accessed May 2, 2022. https://www.fda.gov/radiation-emitting-products/medical-imaging/ mri-magnetic-resonance-imaging
- 8. Carter HB, Albertsen PC, Barry MJ, et al. Early detection of prostate cancer: AUA guideline. J Urol. 2013;190:419-426.
- 9. American Cancer Society. American Cancer Society recommendations for prostate cancer early detection. Revised April 23, 2021. Accessed April 14, 2022.

https://www.cancer.org/cancer/prostate-cancer/detection-diagnosisstaging/acs-recommendations.html

