

Prostate-Specific Antigen (PSA) Test

Use this grid to help you and your healthcare professional decide whether or not you will have a prostate-specific antigen (PSA) test. This test measures the amount of activity in your prostate. Men usually consider this test when they are aged 50 or older.

Frequently asked questions	Having a PSA test	Not having a PSA test
If my PSA level is high, what are the chances that I have prostate cancer?	For every 1,000 men tested, 102 (10 per cent) will be diagnosed with prostate cancer. Other causes of a high PSA level are inflammation and infection. ¹	If you choose not to get the PSA test then you will not know your PSA level.
If my PSA level is normal, can I be sure that I don't have prostate cancer? Will getting the PSA test reduce my risk of dying from prostate cancer?	No, you cannot be sure. About 15 in every 100 men (15 per cent) with a normal PSA level do have prostate cancer. ² Data from a 13-year follow-up trial showed that approximately one death is prevented for every 700 to	If you choose not to get the PSA test then you will not know your PSA level. Six in every 1,000 men who do not get the PSA test (0.6 per cent) die from prostate cancer.
What are the advantages?	1,000 men who are screened on average once every four years. ³ Thirty-three in every 100 prostate cancers found (33 per cent) are aggressive. 10 in every 100 aggressive cancers treated (10 per	You will avoid the risks associated with the biopsies and treatments that could follow an abnormal PSA test.
What are the risks?	cent) will benefit from early treatment. ² Because it is difficult to tell if a cancer is aggressive, you may have	You lose the small chance of catching an aggressive cancer that
	unnecessary biopsies and/or treatments. Sixty-seven in every 100 prostate cancers (67 per cent) are not aggressive and do not cause problems if left untreated. ²	would be found with a PSA test and would benefit from early diagnosis and treatment.
What risks are associated with a prostate biopsy?	Men may experience some complications following a prostate biopsy, such as minor bleeding or an exacerbation of urinary symptoms. But these complications are usually minor and resolve spontaneously. ⁴ In approximately two to four per cent of cases, men will experience a complication requiring hospitalization within 30 days of the biopsy (usually due to an infection). ^{5,6}	You will avoid these risks if you do not get the PSA test because you will not be offered a prostate biopsy.





Frequently asked questions	Having a PSA test	Not having a PSA test
What are the risks associated with prostate cancer treatment?	For every 1,000 men who receive treatment for prostate cancer: • 114 to 214 will have short-term complications such as infections, additional surgeries, and blood transfusions • 127 to 442 will experience long-term erectile dysfunction • up to 178 will experience urinary incontinence ¹	You will avoid these risks if you do not get the PSA test because you will not be offered treatment.
What are the Ontario recommendations?	Does not apply	Given the potential harms of screening, including over-diagnosis and over-treatment, Cancer Care Ontario does not support an organized, population-based screening program for prostate cancer.
		Men who are concerned about their risk of prostate cancer should talk to their primary care provider. Individual decisions to screen should be made as a part of a shared decision-making process involving a discussion between a man and his primary care provider.

This decision-aid tool has been adapted by a tool published by Option Grid².

References:

- 1. Canadian Task Force on Preventative Health Care; Prostate Cancer Screening Recommendations 2014. Benefits and Harms of PSA Screening. 2014. Retrieved from http://canadiantaskforce.ca/ctfphc-guidelines/2014-prostate-cancer/harms-and-benefits/
- 2. Stewart S, Frosch D, Adams J, et al. Prostate specific antigen (PSA) test; Option grid. 2014. Retrieved from http://www.optiongrid.org/resources/psatest_grid.pdf
- 3. Schroder FH, Hugosson J, Roobol MJ, et al. Screening and prostate cancer mortality: results of the European Randomised Study of Screening for Prostate Cancer (ERSPC) at 13 years of follow-up. Lancet. 2014:384:2027-2035.
- 4. Loeb S, Vellekoop A, Ahmed HU, Catto J, et al. Systematic review of complications of prostate biopsy. Eur Urol. 2013;64(1):876-92.
- 5. Loeb S, van den Heuvel S, Zhu Z et al. Infectious complications and hospital admissions after prostate biopsy in a European randomized trial. Eur Urol. 2012;61(6):1110-14.
- 6. Nam RK, Saskin R, Lee Y et al. Increasing hospital admission rates for urological complications after transrectal ultrasound guided prostate biopsy. J Urol. 2013;189(1 Suppl):S12-7.

Publication date: February 18, 2015

