



Cancer Care Ontario Position Statement on Prostate Cancer Screening using the Prostate-Specific Antigen (PSA) Test

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- Systematic reviews of randomized controlled trials of prostate cancer screening using the prostate-specific antigen (PSA) test have shown inconsistent results; some evidence have shown no effect of PSA testing on prostate-cancer mortality while others have shown a small reduction in prostate-cancer mortality. Harms associated with screening are common.^{1,2,3,4}
- The Canadian Task Force on Preventive Health Care (CTFPHC) recommends against screening for prostate cancer with the PSA test for men of all ages.⁵
- In alignment with the CTFPHC recommendations, in April 2017 the U.S. Preventive Services Task Force (USPSTF) recommends against using the PSA test to screen for prostate cancer in men age 70 and older.⁶
- For men ages 55 to 69, the USPSTF recommends that the choice to undergo prostate screening should be an individual decision based upon the overall benefits and harms of PSA-based screening. The USPSTF noted that PSA screening can result in a small benefit of reduced mortality due to prostate cancer; however they noted specific harms such as false-positives and over-diagnosis/ over-treatment.
- Both the CTFPHC and the USPSTF recommend that the decision to screen should be an individual one after considerations of the benefits, harms and individual values and preferences. Some associations such as the Canadian Urological Association (CUA) and American Urological Association (AUA) recommend discussing the value of screening through a shared decision-making process starting at age 40 for men with an increased risk of prostate cancer.^{7,8}
- 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. 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.

¹ Dunfield L, Usman A, Fitzpatrick-Lewis D, et al. Screening for prostate cancer with prostate specific antigen and treatment of early-stage or screen detected prostate cancer: a systematic review of clinical benefits and harms. 2014. Available from: <http://canadiantaskforce.ca/wp-content/uploads/2014/11/2014-prostate-cancer-systematic-review-en.pdf>

² Fenton JJ, Weyrich MS, Durbin S, et al. Prostate-Specific Antigen-Based Screening for Prostate Cancer: A systematic evidence review for the U.S Preventive Services Task Force. 2017. Available from: <https://www.uspreventiveservicestaskforce.org/Page/Document/draft-evidence-review/prostate-cancer-screening1>

³ Ilic D, O'Connor D, Green S, et al. Screening for prostate cancer: an updated Cochrane systematic review. *BJU Int.* 2011; 107:882.

⁴ Djulbegovic M, Byeyth RJ, Neuberger MM, et al. Screening for prostate cancer: systematic review and meta-analysis of randomised controlled trials. *BMJ* 2010; 341:c4543.

⁵ Canadian Task Force on Preventive Health Care, Bell N, Gorber SC, et al. Recommendations on screening for prostate cancer with the prostate specific antigen test. *CMAJ.* 2014;186(16):1225-34.

⁶ U.S. Preventive Services Task Force. Prostate cancer screening draft recommendations. 2017. [published 2017 April 11; cited 2017 April 11]. Available from: <https://screeningforprostatecancer.org/>

⁷ Carter HB, Albertsen PC, Barry MJ, et al. Early detection of prostate cancer: AUA guideline. American Urological Association Education and Research Inc. 2013.

⁸ Izawa JI, Klotz L, Siemens DB, et al. Prostate Cancer Screening: Canadian Guidelines 2011. The Canadian Urological Association, 2011.

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- Discussions about screening decisions should include:
 - The man's risk for prostate cancer, including family history and race
 - The risks associated with biopsy and subsequent treatment, if indicated
 - The changing landscape of management towards active surveillance for low risk disease
 - The man's general health and life expectancy, and personal preferences
 - Cancer Care Ontario will continue to monitor emerging evidence on prostate cancer screening.