

# Swedish model for PSA testing has little effect on mortality

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The spontaneous PSA testing that has been applied in Sweden in recent decades has only had a marginal effect on mortality. An organized screening focused on those who have the most to gain would, however, reduce the risk of dying from prostate cancer by over 40 percent. This is shown by studies at the University of Gothenburg.

In Sweden, national programs for [screening](#) of both cervical cancer (Pap smear tests) and breast cancer (mammography) are applied. A corresponding program for the screening of prostate cancer does not exist.

## **Opportunistic screening**

Many men instead have PSA tests on their own initiative, so-called opportunistic screening. However, there is no national recommendation on how such a test program should be formulated.

In several large studies, researchers at the Sahlgrenska Academy, University of Gothenburg, have tested organized PSA screening of 10,000 randomly chosen men in the Gothenburg region, and compared with the outcome in opportunistic screening.

## **Reduces risk of dying**

The studies show that an organized test program both identifies more cancer cases in an early, curable phase and sharply reduces the risk of

dying:

- In the group of men that was offered organized PSA screening, the risk of dying from prostate cancer decreased by 42 percent. In the group that was exposed to opportunistic screening, only a marginally reduced mortality was seen.
- Converted to a calculation example, one prostate cancer death per 13 men diagnosed with prostate cancer was prevented in organized screening compared with one prostate cancer death per 23 diagnosed men prevented in opportunistic screening.

### **Small effects**

"The opportunistic PSA screening that we have used in Sweden for 20 years is simply not effective, and has only marginally reduced the risk of men dying from the disease," says Rebecka Arnsrud Godtman who is publishing the studies in her dissertation.

The opportunistic screening also leads to a larger proportion of men being unnecessarily diagnosed with [prostate cancer](#). Besides the mental strain from being diagnosed with cancer, these men are at risk of living with the side-effects of a treatment for the rest of their lives, without actually getting any positive effects, according to Rebecka Arnsrud Godtman.

### **Active surveillance**

The Gothenburg researchers' conclusion is that the PSA screening in Sweden should take place in an organized program where men are regularly invited for tests. Screening should start at a relatively young age, around 50, and take place with frequent checks. To minimize the risks of overdiagnosis, older men and men with other diseases should not undergo PSA screening.

The risk of overtreatment can be reduced through so-called [active surveillance](#), where diagnosed [men](#) are under careful observation and only treated if the tumor shows signs of becoming more aggressive. According to the dissertation, a full 60 percent of the tumors found in organized PSA screening can be handled with active monitoring.

**More information:** Link to dissertation:  
[gupea.ub.gu.se/handle/2077/36913](https://gupea.ub.gu.se/handle/2077/36913)

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