

# Overdiagnosis since introduction of prostate cancer screening

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The introduction of prostate-antigen screening, or PSA, has resulted in over 1 million additional men over the last 23 years being diagnosed and treated for prostate cancer—most of whom were likely overdiagnosed, researchers reported in a new study published online August 31 in the *Journal of the National Cancer Institute*.

Overdiagnosis has been associated with early diagnosis in [prostate cancer](#), but there have been no previous national estimates of its magnitude.

Using data from the National Cancer Institute's Surveillance, Epidemiology, and End Results program, H. Gilbert Welch, M.D., MPH, of the White River Junction VA and The Dartmouth Institute for Health Policy & Clinical Practice., and Peter C. Albertsen, M.D., of the University of Connecticut, examined age-specific prostate cancer incidence rates to determine the excess (or deficit) in the number of American men diagnosed and treated in each year after 1986. PSA screening was introduced in 1987.

According to the study, an additional 1.3 million men were diagnosed—that would otherwise have never been diagnosed absent screening—and more than 1 million have been treated since 1986.

"Given the considerable time that has passed since PSA screening began, most of this excess incidence must represent overdiagnosis," the authors write. "All overdiagnosed patients are needlessly exposed to the hassle factors of obtaining treatment, the financial implications of the

diagnosis, and the anxieties associated with becoming a cancer patient..."

The increased diagnosis has been most dramatic among younger men: more than tripling since 1986 in men aged 50-59 (from 58.4 to 212.7 per 100, 000) and more than a sevenfold increase in men under age 50 (from 1.3 to 9.4 per 100,000).

In an accompanying editorial, Otis W. Brawley, M.D., chief medical officer of the American Cancer Society, discusses how screening practices for prostate cancer have surged over the last 20 years, despite little evidence that it has saved lives.

According to Brawley, the highly pushed early-detection message has skewed public opinion and de-legitimized the questions concerning screening, causing many men to be overdiagnosed. Mortality has decreased since the early 1990s, the editorialist points out, but reasons for this decline are unclear.

"We desperately need the ability to predict which patient has a localized cancer that is going to metastasize and cause suffering and death and which patient has a cancer that is destined to stay in the patient's prostate for the remainder of his life," he writes.

More information: [jnci.oxfordjournals.org](http://jnci.oxfordjournals.org)

Source: [Journal of the National Cancer Institute](#) ([news](#) : [web](#))

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