Prostate Cancer in Massachusetts: Declining Incidence and New Screening Guidelines

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Background: Prostate-specific antigen (PSA) screening practices are reflected in prostate cancer incidence trends. However, population-based screening for prostate cancer has led to screening-related over-diagnosis and overtreatment. Screening guidelines have been evolving as the balance between benefit and harm becomes more established.

Purpose: To describe the declining prostate cancer incidence and the new screening guidelines in Massachusetts.

New Prostate Cancer Screening Guidelines

- **2008:** the US Preventive Service Task Force (USPSTF) recommended against prostate cancer screening for men aged 75 and older. They also stated that there was insufficient evidence to recommend for or against screening for men under 75 years of age.
- **2012:** the USPSTF recommended against prostate-specific antigen (PSA)-based screening for prostate cancer.
- **2012:**, the University of Massachusetts Medical School received a grant from the Patient Centered Outcomes Research Institute (PCORI) to develop Massachusetts prostate cancer screening guidelines. The Massachusetts Prostate Cancer Screening Guideline Panel developed the Massachusetts prostate cancer screening guidelines. The Adult Guideline Committee of the Massachusetts Health Quality Partners (MHQP) approved the recommended guidelines as part of the 2015 Adult Routine Preventive Care Guidelines.
- For average risk men ages 50-69 and high risk men (black men or men with a family history of prostate cancer (brother or father)) starting at age 45:
  - Screening for prostate cancer with the prostate specific antigen (PSA) should not be performed or offered routinely without patient education and informed consent.
  - PSA screening may be offered to men who express a clear preference for screening after demonstrating an understanding of the harms and benefits (e.g. through a shared decision-making process) and who have a life expectancy >10 years.
  - For men who express a clear preference for screening after shared decision- making:
    - Screen with PSA every 2 years.
    - For confirmed PSA>4.0, assess/refer for possible prostate biopsy.
- Providers are encouraged to make men aware that PSA screening is controversial and associated with a significant risk of harm. Providers are also encouraged to facilitate access to information on harms and benefits for men who may be interested in PSA screening. The choice to screen should be a shared decision between the patient and provider.

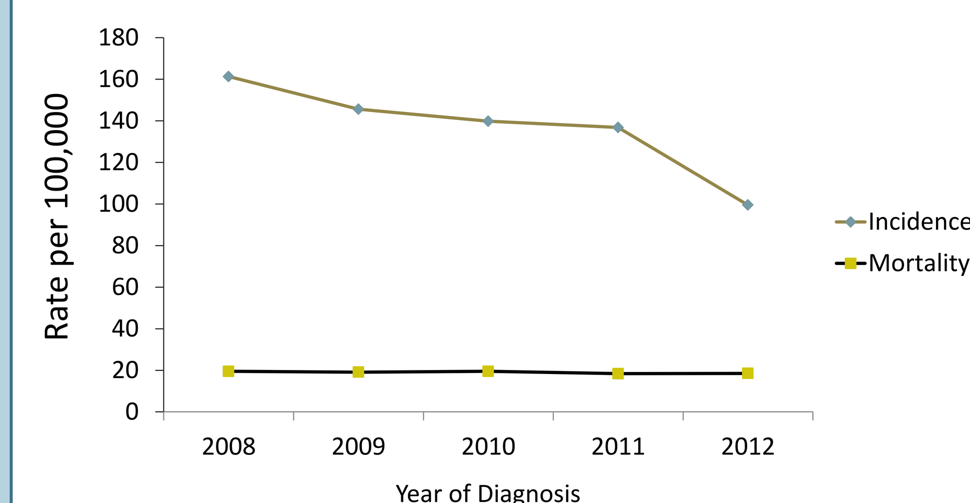
Prostate Cancer Age-adjusted Incidence and Mortality Rates by Race/Ethnicity, Massachusetts Males, 2008-2012

	All Races	White, NH	Black, NH	Asian, NH	Hispanic
Incidence Rate	135.9	125.8	228.8	69.4	152.7
Mortality Rate	20.0	19.6	43.8	8.4	14.0

From 2008 through 2012:

- **Prostate cancer accounted for 26.5% of all newly diagnosed cancers among males.**
- **Prostate cancer incidence decreased by 9.8% per year, a statistically significant decrease.**
- **Black, non-Hispanic males had significantly higher rates of prostate cancer incidence and mortality when compared to all other race/ethnic groups.**
- **Black, non-Hispanic males had the highest total cancer mortality rate, significantly higher compared to other racial/ethnic groups.**

Age-adjusted Prostate Cancer Incidence and Mortality Rates By Year of Diagnosis, Massachusetts Males, 2008-2012



Rates are age-adjusted to the 2000 U.S. Standard Population
Data Sources: Incidence - Massachusetts Cancer Registry;
Mortality – Massachusetts Vital Statistics

How much do you know about Prostate Cancer?

In June 2013, the Massachusetts Comprehensive Cancer Prevention and Control Network convened its first meeting of the Prostate Cancer Workgroup. The major goal of the workgroup is to address strategies for dissemination and adoption of the new Massachusetts prostate cancer screening guidelines. Decision aids developed include:

- a decision aid to be used in the provider office;
- a decision aid that men would take home or be used as a stand along tool in a community setting;
- and an online widget that provides more in-depth information about the risks and benefits of screening.

- Next steps include pilot testing the decision aids, targeted media campaign, education of providers, and a symposium coordinated by the Massachusetts Prostate Cancer Coalition.

What You Can Do:

- Talk to your doctor about your known risk factors and what you can do to lower your risk.
- Starting at age 50, or earlier, talk to your doctor about whether or not you want to be tested.
- Tell other men about the importance of talking to a doctor about the positives and negatives of prostate cancer testing and treatment.

Some Points to Start the Conversation with Your Doctor:

- PSA tests aren't foolproof. It's possible for your PSA levels to be elevated when cancer isn't present, and not to be elevated when cancer is present.
- Some prostate cancers are slow growing and never spread beyond the prostate gland.
- Not all prostate cancers need treatment. Treatment for prostate cancer may have risks and side effects, including urinary incontinence, erectile dysfunction or bowel dysfunction.

Talk with your doctor today.

mass.gov/CancerScreenings

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