

Investigating Health Disparities of Prostate Cancer in Mississippi Compared to National Trends

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Advancing Mississippi Conference

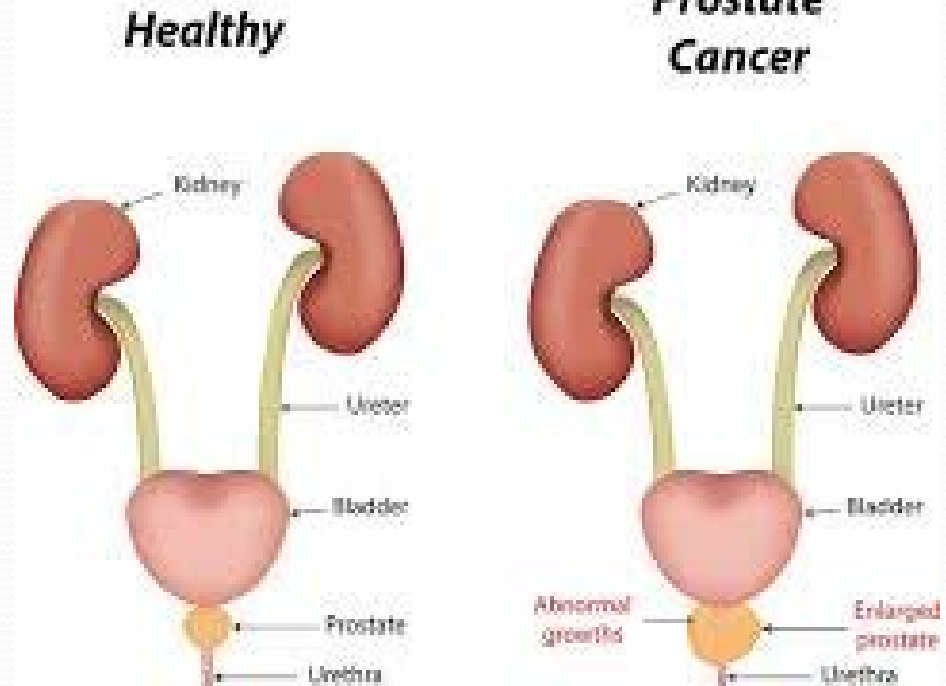
June 7, 2018

Introduction

Prostate cancer

a non-skin disease that occurs only in males, more specifically in the prostate gland of the male reproductive system.

Prostate Cancer

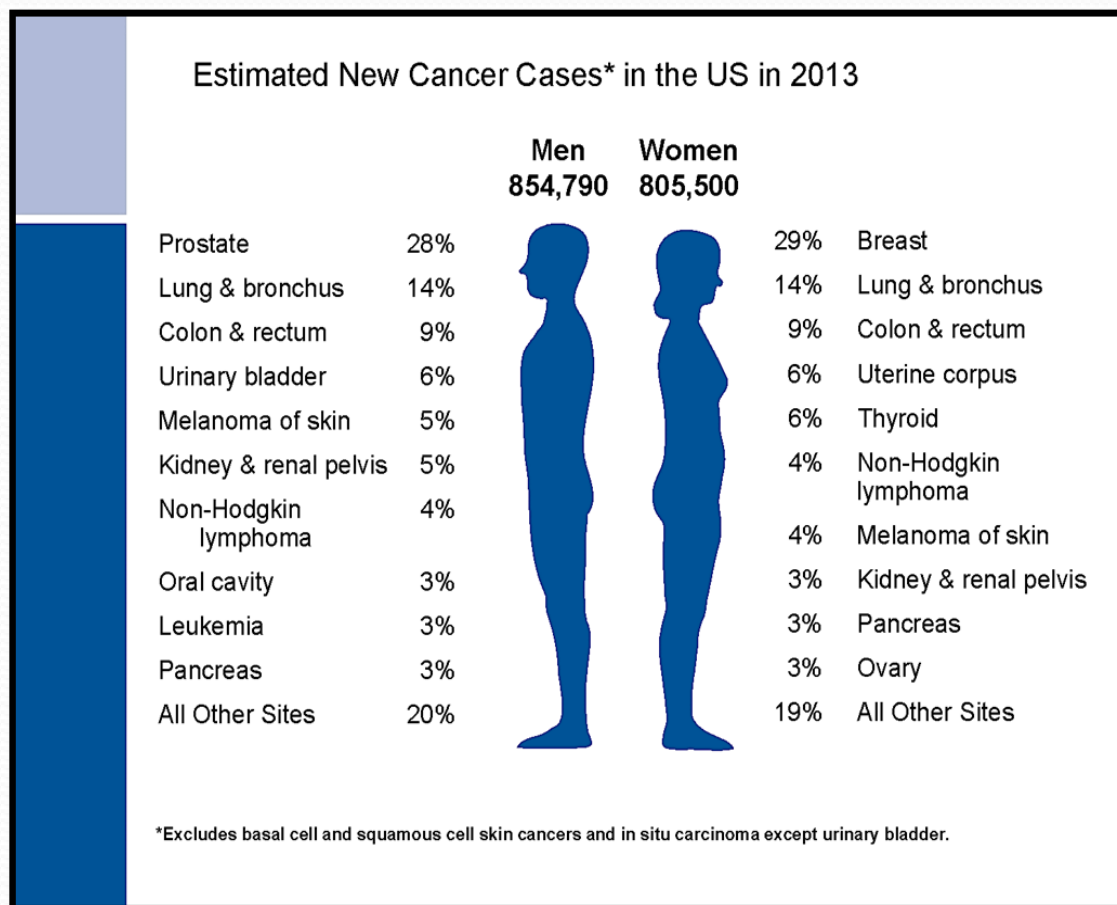


Northtexasurologist.com, 2018

National Incidence Rates By Gender

Most common new cases/rates are in:

- Prostate cancer in men
- Breast cancer in women
- Lung and colon cancers are the second and third most common new cases/rates in both men and women.
- The leading cause of cancer mortality in men, but is the third leading cause overall.



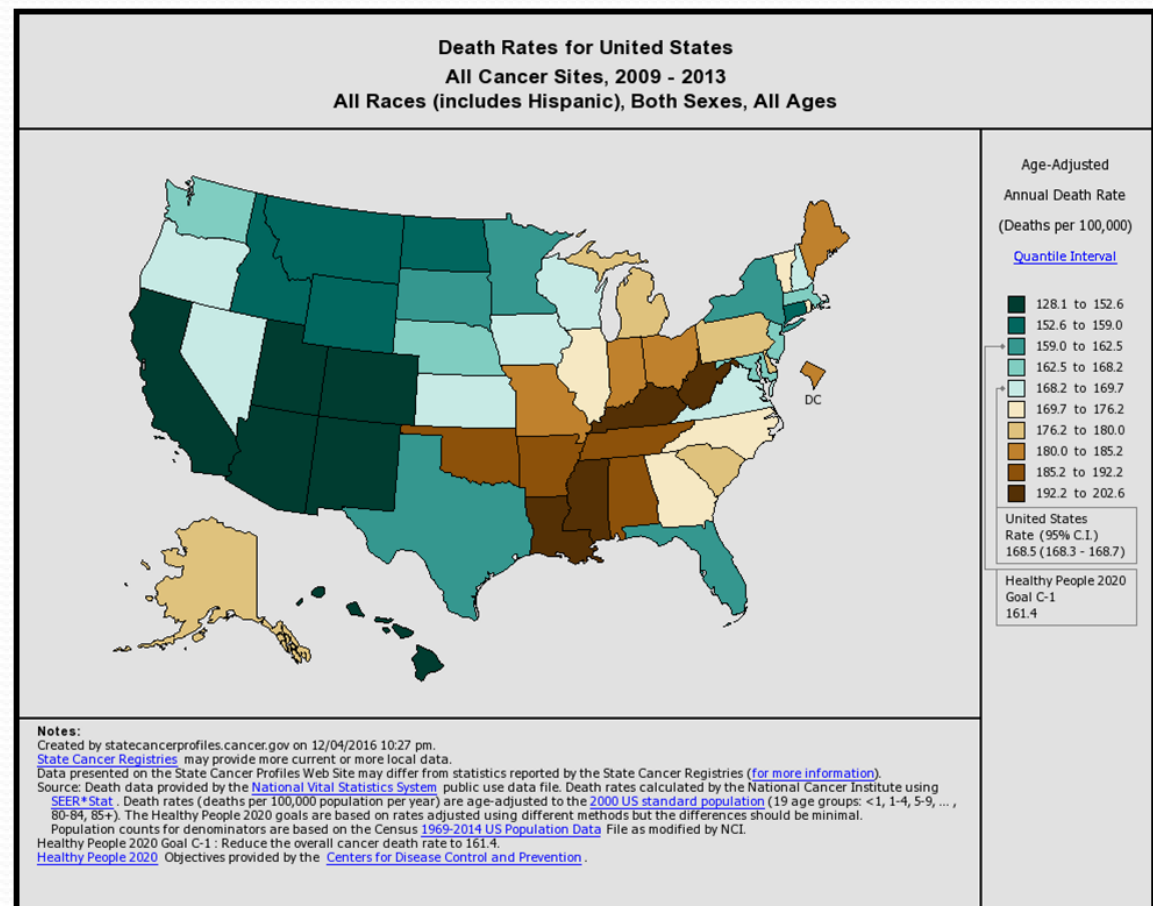
American Cancer Society, 2013

National Mortality Rates By State

2000-2013

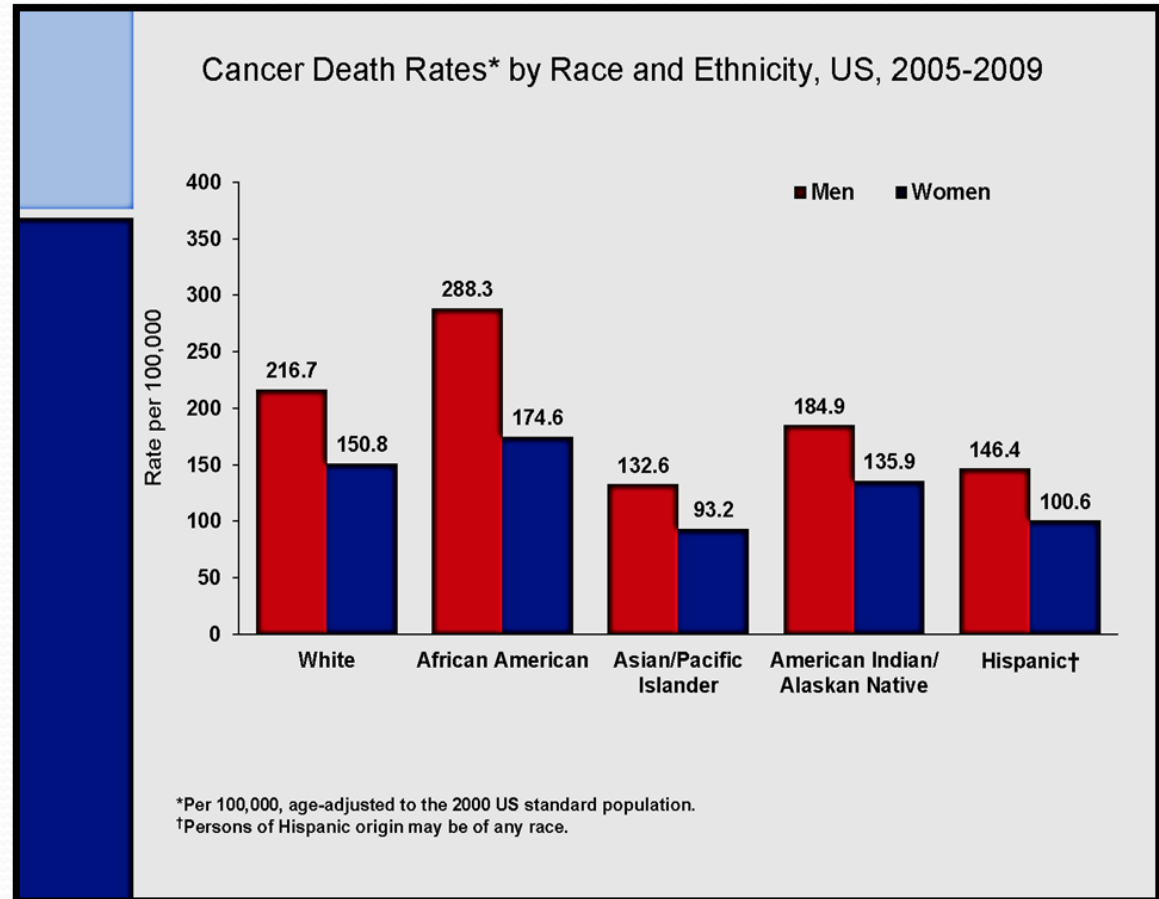
States with the highest cancer mortality rates (per 100,000).

- Kentucky- 202.6
- Mississippi- 198.6
- West Virginia- 196.1
- Louisiana- 193.5
- Arkansas- 192.2



National Mortality Rates By Race/Ethnicity and Gender

- Cancer death rates are higher in men than in women for every racial and ethnic category.
- African American men and women have higher rates than every other racial and ethnic group.
- Asian American/Pacific Islander men and women have the lowest rates, which in turn is half the rate of African American men and women.



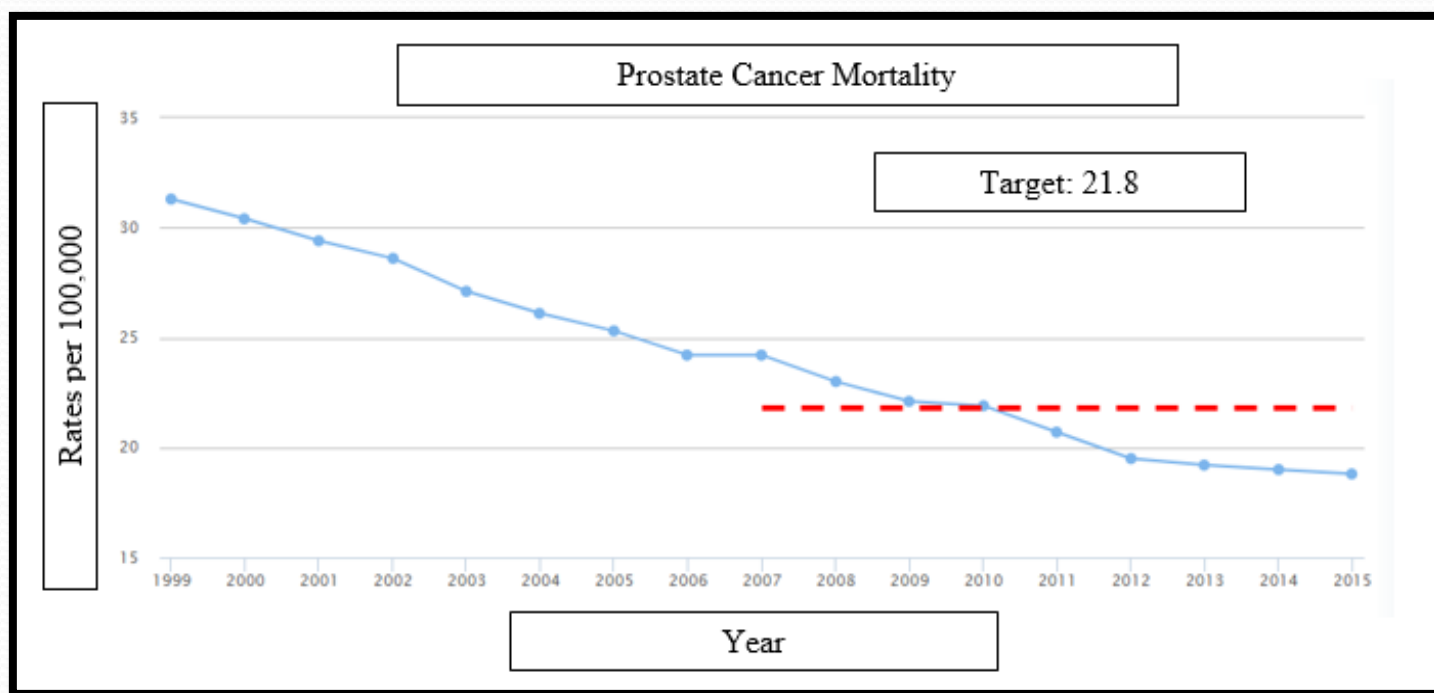
Economic Burden of Cancer

- The total health care costs for cancer in the U.S. were \$80.2 billion.
- 52% of this cost is for hospital outpatient or doctor office visits.
- 38% of this cost is for inpatient hospital stays.



Healthy People 2020

Healthy People
2020

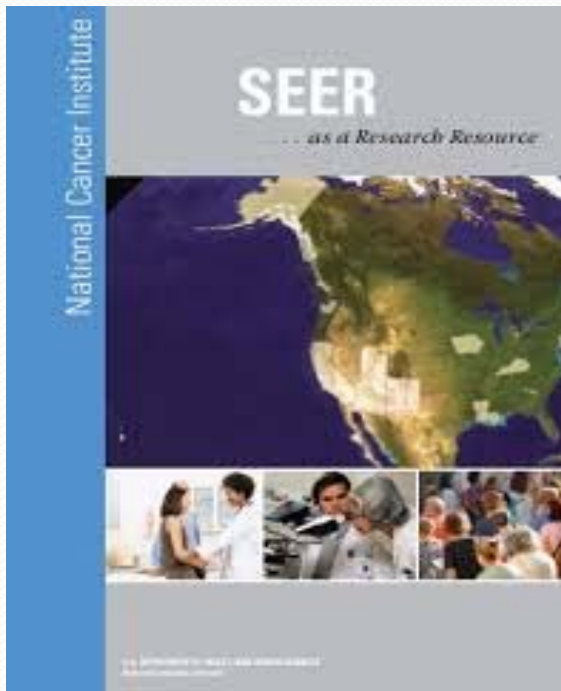


A federal initiative that indicates a plan for improving health objectives for Americans every 10 years.

The Healthy People 2020 graph indicates that nationally the target was reached in 2010, with a prostate cancer mortality rate of 20.7 per 100,000 and a steady decline over the years; Healthy People 2020 (2018). The Healthy People 2010 target was set at 28.2.

Methods

National Cancer Institute's Surveillance,
Epidemiology, and End Results (SEER)
program



National Incidence and Mortality
Rates (2000-2014) for Prostate Cancer
by race

Mississippi Cancer
Registry operated by the
University Of Mississippi
Medical Center



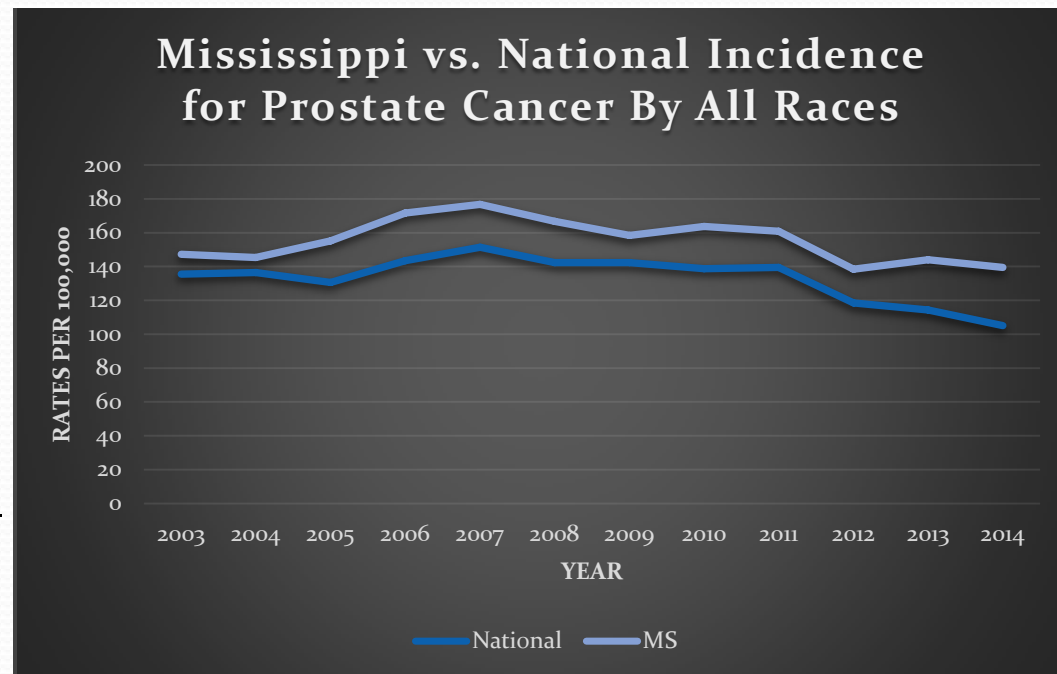
State-level Incidence and Mortality
(2000-2014) for Prostate Cancer by race



Results

Incidence for Prostate Cancer By All Races

- The average national incidence rate:
133.2 per 100,000
- The average Mississippi incidence rate:
155.7 per 100,000

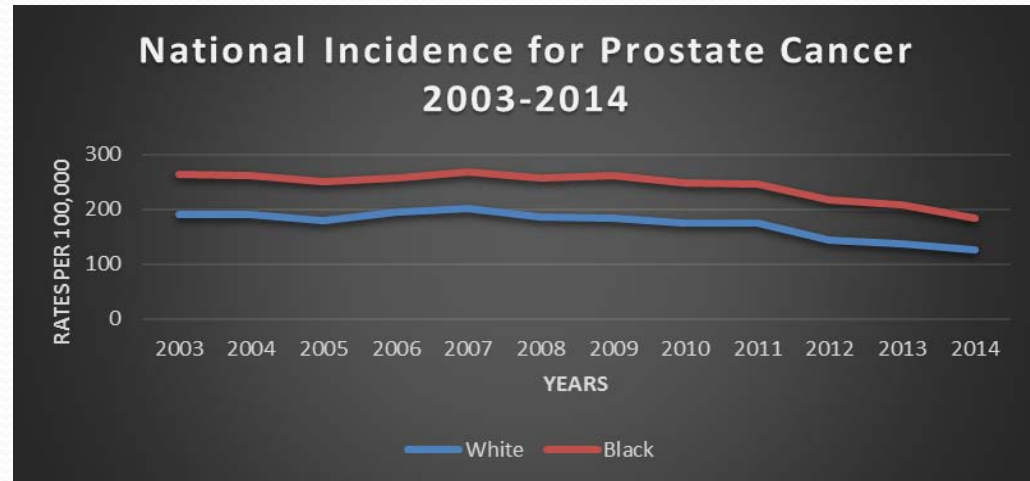


Incidence for Prostate Cancer By Race

The average national incidence rate:

Caucasian men: **173.5 per 100,000**

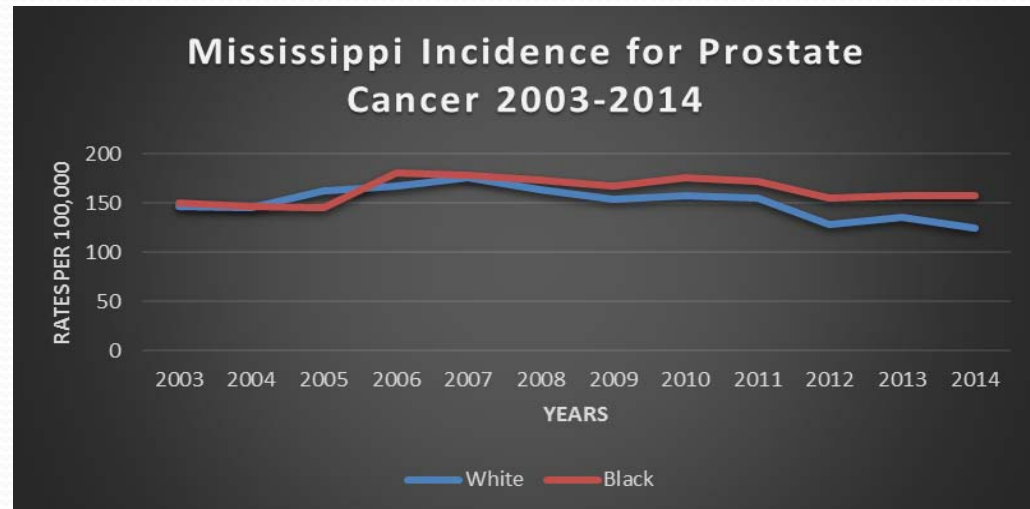
African American men: **243.8 per 100,000**



The average Mississippi incidence rate:

Caucasian men: **151.7 per 100,000**

African American men: **163.5 per 100,000**



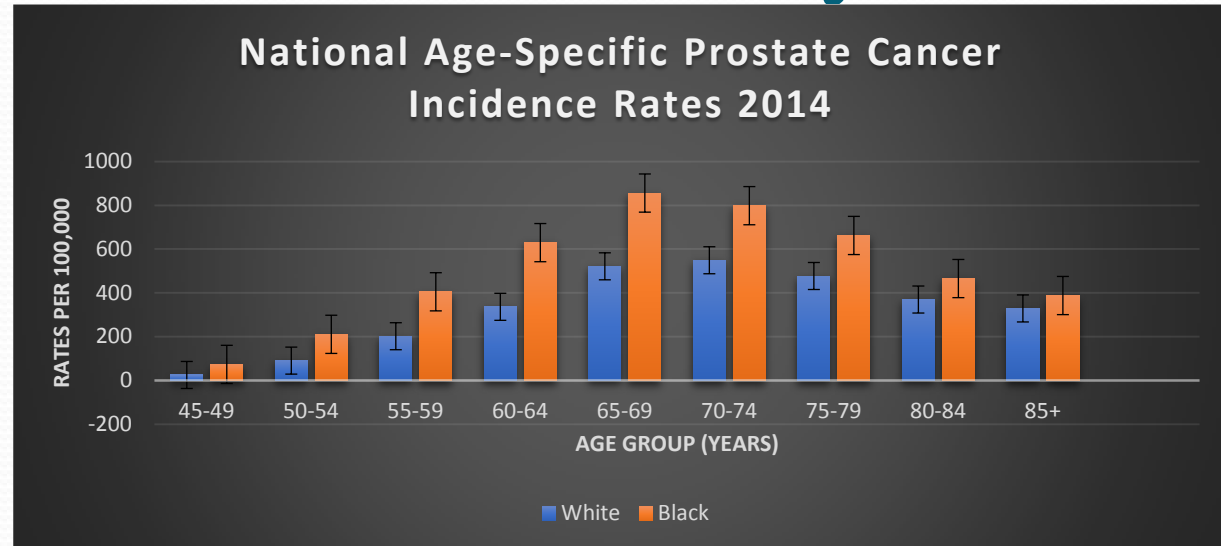
Age-Specific Incidence By Race

Age 65-69 (per 100,000)

- Black: **peaked @ 855.9**

Age 70-74 (per 100,000)

- White: **peaked @ 549.2**

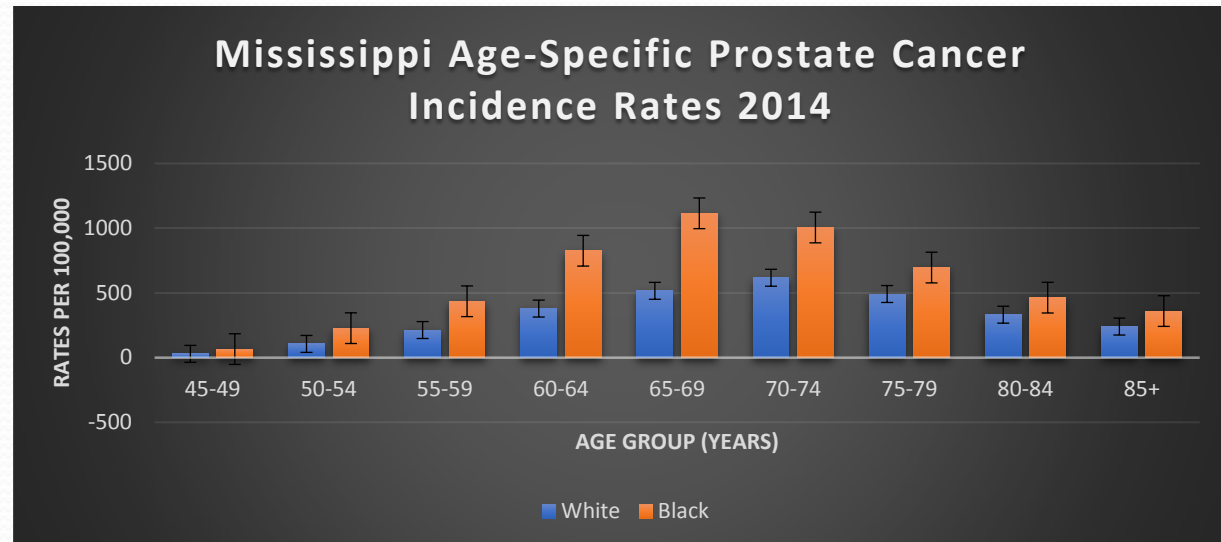


Age 65-69 (per 100,000)

- Black: **peaked @ 1115.16**

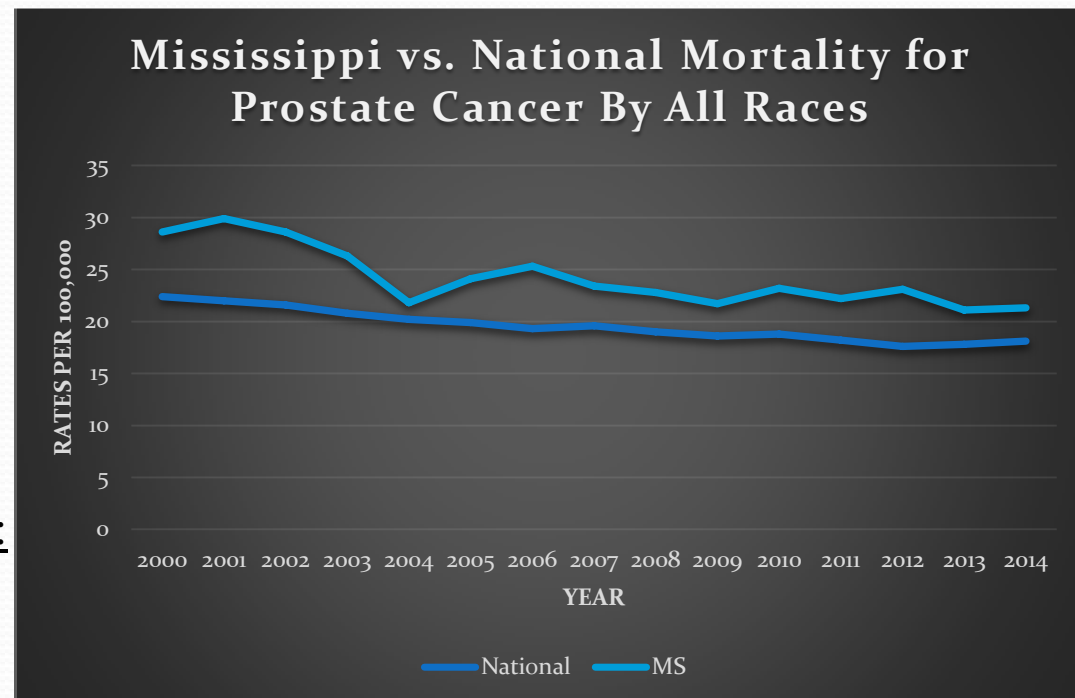
Age 70-74 (per 100,000)

- White: **peaked @ 617.15**



Mortality for Prostate Cancer By All Races

- The average national mortality rate:
19.6 per 100,000
- The average Mississippi mortality rate:
24.2 per 100,000

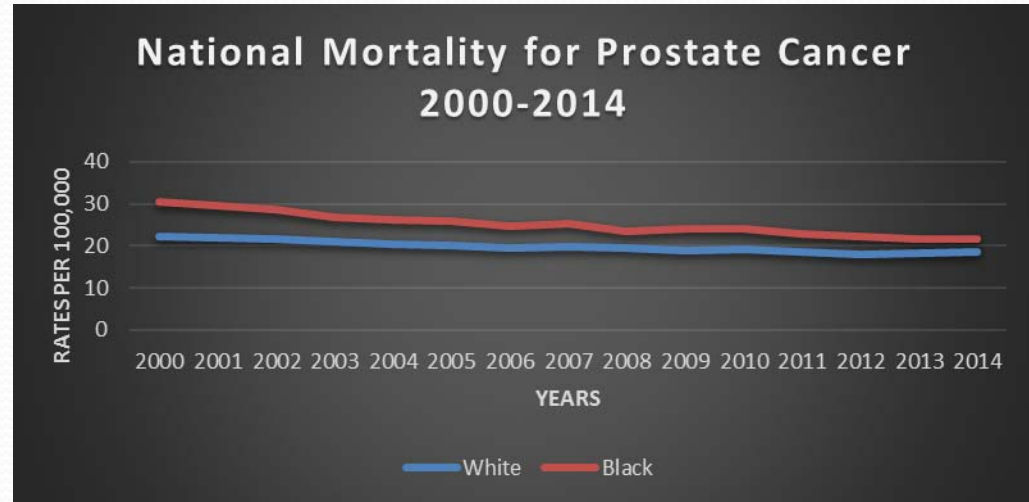


Mortality for Prostate Cancer By Race

The average national mortality rates:

Caucasian men: **19.8 per 100,000**

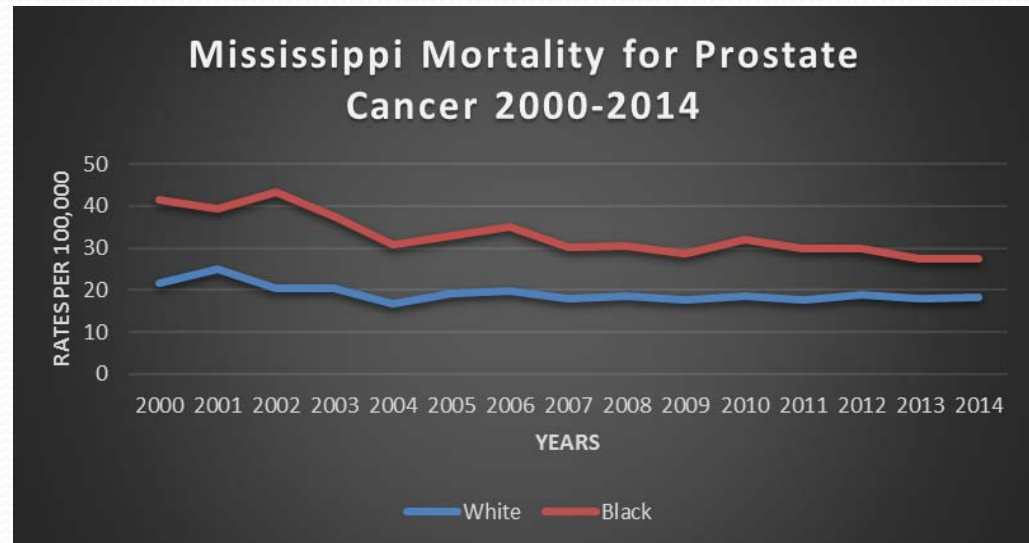
African American men: **25.2 per 100,000**



The average Mississippi mortality rates:

Caucasian men: **19.2 per 100,000**

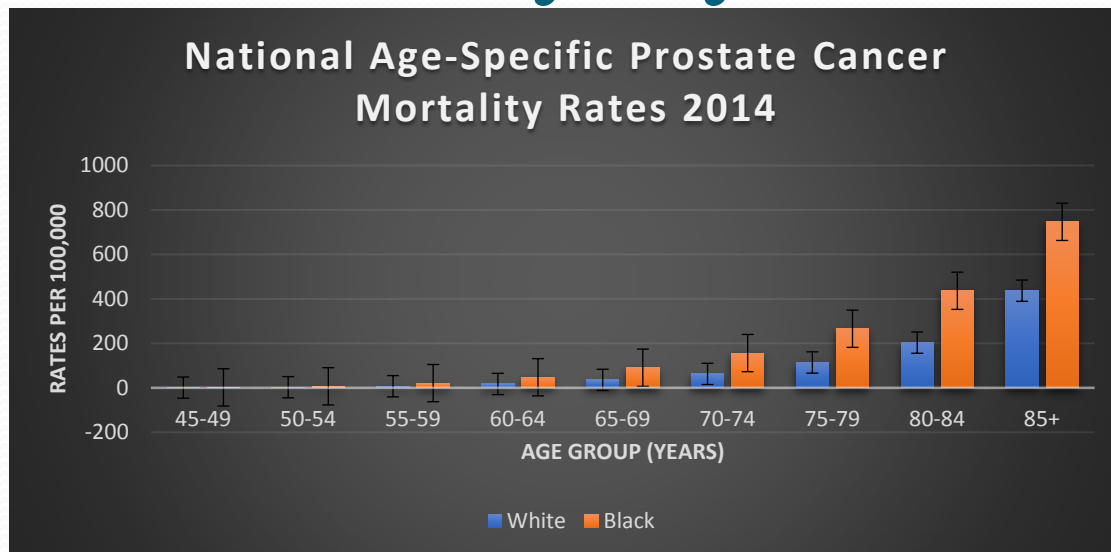
African American men: **33.1 per 100,000**



Age-Specific Mortality By Race

Age 85+ (per 100,000)

- Black: **peaked @ 746.5**
- White: **peaked @ 436.7**

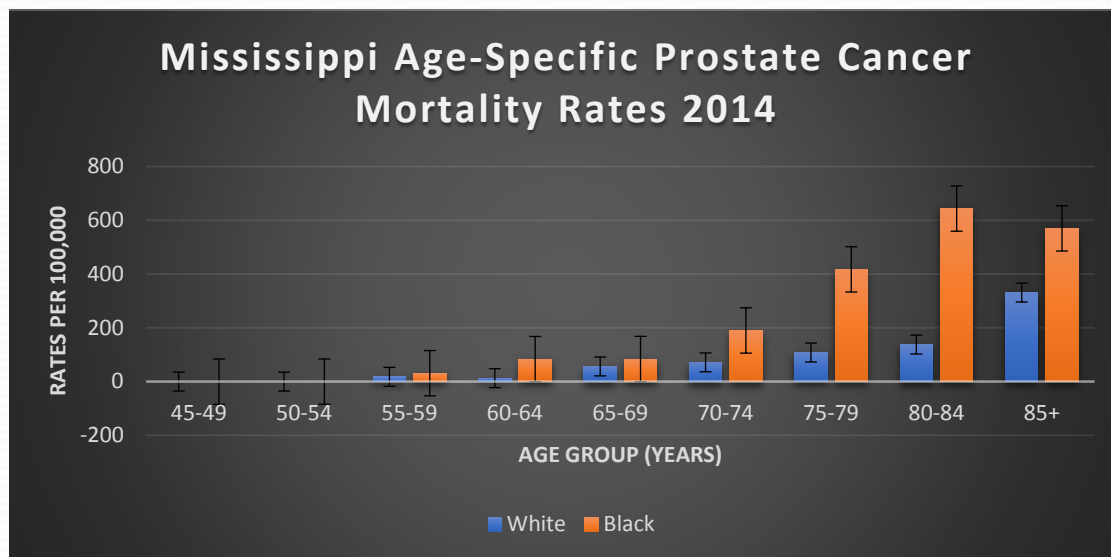


Age 80-84 (per 100,000)

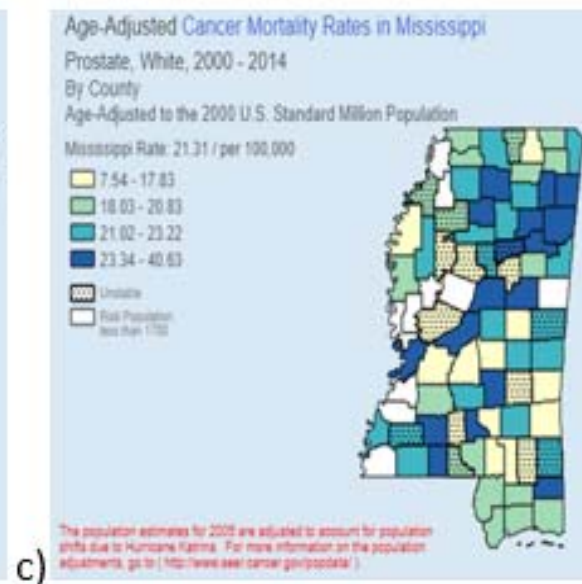
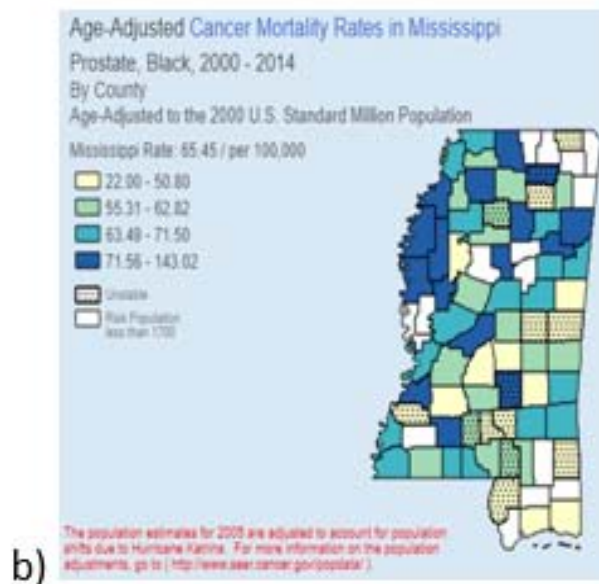
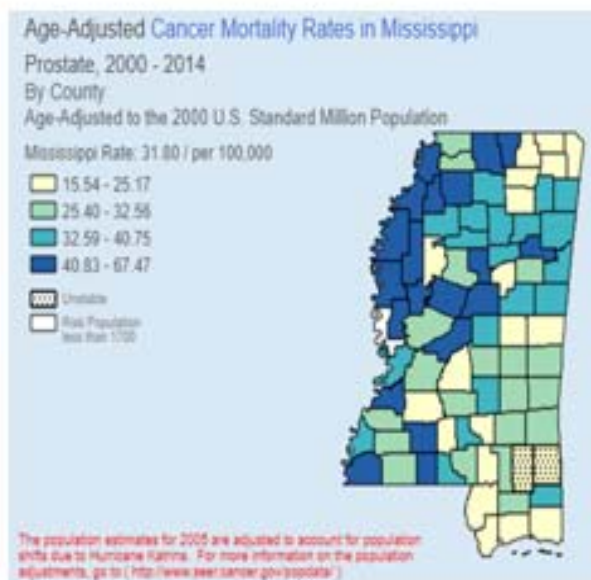
- Black: **peaked @ 643.8**

Age 85+ (per 100,000)

- White: **peaked @ 331.24**



Mississippi Prostate Cancer Mortality



a) The concentration of higher mortality rates among all races combined is focused in Mississippi Delta counties.

b) The Mississippi prostate cancer mortality rates of African American men are higher in the Delta than any other region.

c) The Mississippi prostate cancer mortality rates of Caucasian men are vastly different than African American men.

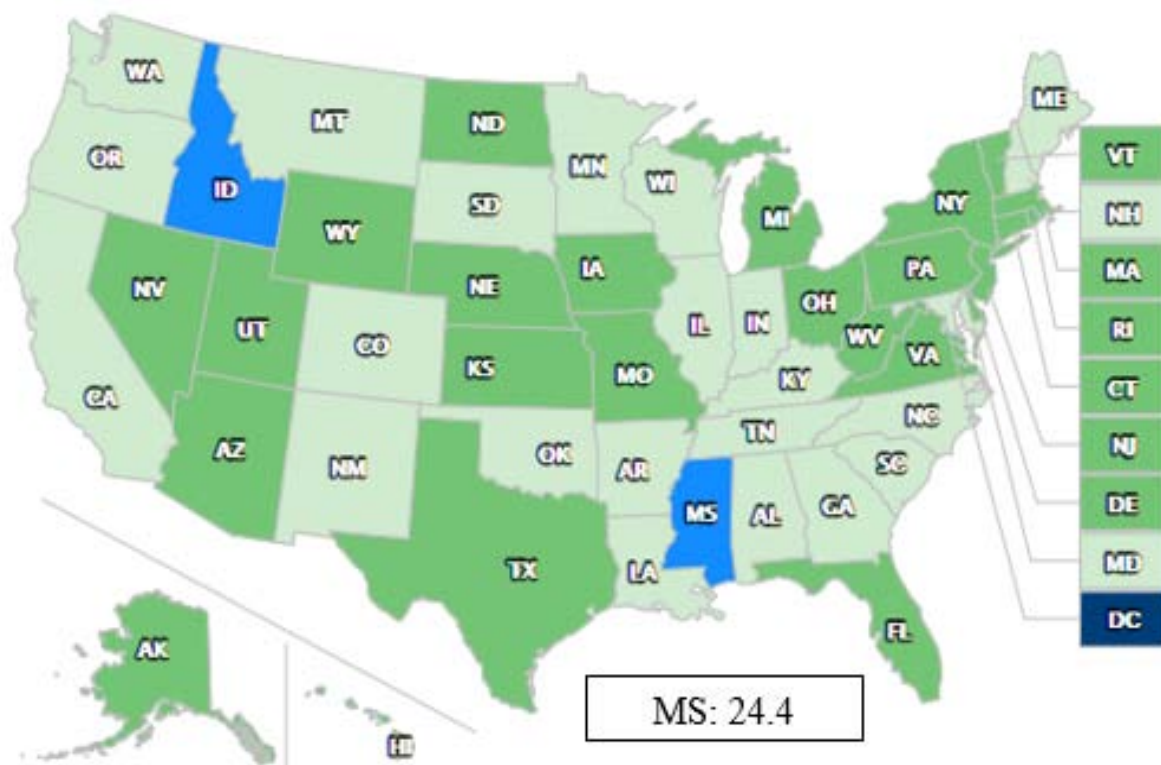
Prostate Cancer in Mississippi

Take home message

- Incidence and Mortality rates in MS are higher than the national average.
- In MS, the higher rates are largely due to higher rates among African American men.
- The MS Delta geographic region concentrates the largest proportion of prostate cancer mortality in MS.
 - The majority of these cases are among African American men.
 - High rates of prostate cancer mortality in the MS Delta are driving MS to exceed national levels.

Healthy People 2020

Healthy People 2020



Mississippi continues to suffer by not potentially meeting the national target with a current mortality rate of 24.4 per 100,000.

12.2-19 National Target Met 19.1-21.8 National Target Met 23.1-25 25.1-45.9

Economic Burden in Mississippi

- The economic burden is not limited to just occurrences of prostate cancer, BUT ALSO:
- High rates of poverty- causing depression
- Poor health- leads to obesity from a poor diet due to limited resources
- All factors correlate to cause cancer and other diseases to increase the economic burden, which are prevalent particularly in the MS Delta.

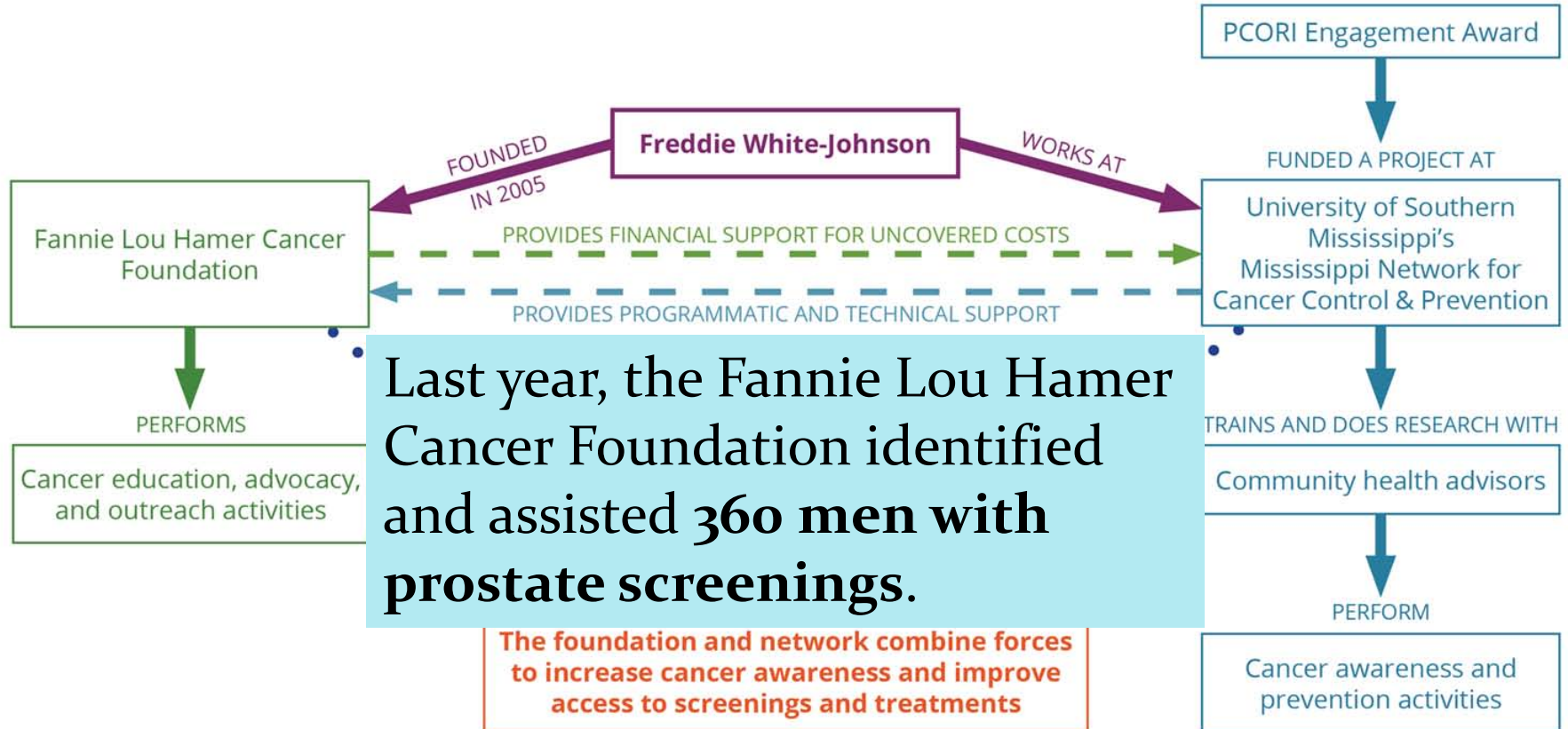
Recommendations

- Increase the availability of employment programs to help increase the ability to gain health insurance, which will help decrease disparities in poverty and poor health.
- Increased Early Screening in areas of high prostate mortality (i.e. The Mississippi Delta)
- Patient-Centered Approaches through health care research in order to benefit the patients and communities equally.
- These factors should help reduce the economic burden and improve the overall quality of life.



Fannie Lou Hamer Cancer Foundation

ONE WOMAN, TWO ORGANIZATIONS, MAJOR IMPACT IN THE DELTA



Acknowledgements

- Heavenly Father
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