Purpose

• To provide overview of Prostate Cancer
• To discuss the role of health education and outreach
• To highlight the importance of Informed Decision Making

What is Prostate Cancer?

• Prostate cancer starts from the prostate gland which is:
  – Found below the bladder and in front of the rectum
  – The size of a walnut or golf ball
  – Makes the fluid that is part of semen

How many men get prostate cancer and die from it?

• USA (in 2010--estimate)
  – 217,730 new cases of prostate cancer will be diagnosed
  – 32,050 men will die from prostate cancer
• Maryland (in 2010--estimate)
  – 4,010 men will be diagnosed with prostate cancer
  – 650 will die from it

American Cancer Society, 2010
Risk factors for prostate cancer

- Age is the strongest risk factor
  - 63% of prostate cancer occurs in men over the age of 65.

- Race
  - More common in African American men than other men (the reasons are unknown)

ACS and NCI
Risk factors for prostate cancer

- **Age** is the strongest risk factor
  - 63% of prostate cancer occurs in men over the age of 65.
- **Race**
  - More common in African American men than other men (the reasons are unknown)
- **Family history**
- **Genes**
  - Account for about 5-10% of prostate cancer
- **Other areas that need more research include:**
  - Diet, obesity, exercise, and sexually transmitted diseases (STDs)

ACS and NCI

What is the **lifetime** risk of prostate cancer?

- **African American man**
  - 19% chance (1 in 5) of being diagnosed with prostate cancer
  - 5% chance (1 in 20) of dying from prostate cancer
- **General population**
  - 16% chance (1 in 6) of being diagnosed with prostate cancer
  - 3% chance (1 in 33) of dying from prostate cancer

CDC

Men who are most likely to benefit from prostate cancer screening

**Men may benefit from having a “baseline” PSA test at age 40, especially men at higher risk of prostate cancer.**

The frequency of PSA testing is then based on the baseline PSA result.

**Men who will benefit most from prostate cancer screening are 50-69 years of age who have at least a 10 year life expectancy.**

**Men 75 years of age or older should talk to their doctors before screening.**

DHMH – Prostate Cancer Minimal Elements, 2010

Symptoms for prostate cancer

- Prostate cancer may **not** produce symptoms in its early stages. A man can look healthy, feel fine, and not know he may have a problem.
- If signs and symptoms are present, they may include:
  - blood in the urine;
  - the need to urinate frequently, especially at night;
  - weak or interrupted urine flow;
  - pain or a burning feeling while urinating;
  - inability to urinate; and
  - regular pain in the lower back, pelvis, or upper thighs.

CDC, ACS, NCI
How do you find prostate cancer?

- **PSA (prostate-specific antigen)**
  - PSA is a protein produced by cells of the prostate gland.
  - PSA test measures the level of PSA in the blood.

- **DRE (digital rectal exam)**
  - Doctor feels the surface of the prostate gland for bumps, hard spots, and any other abnormalities.

What can increase PSA level?

- Prostate cancer
- BPH (benign prostatic hyperplasia)
  - Enlargement of the prostate gland (not cancer)
- Age
  - PSA level tends to go up with age
- Prostatitis
  - Infection/inflammation on the prostate gland
- Ejaculation
  - Increases PSA levels for a short time
  - Men are asked to abstain from ejaculation for 2 days before testing

Clearly, factors other than prostate cancer can increase PSA level.

Pros and Cons of PSA

- **Pros of PSA Screening**
  - Simple
  - Low cost
  - Blood test is not very invasive
  - Detects cancer most of the time

- **Cons of PSA Screening**
  - “False positive” tests – elevated test results when cancer is not present
  - Can lead to unnecessary biopsy and complications
  - It is unclear if PSA testing save lives
Figure 7. Percentage of Maryland Men Age 50 Years and Older Having Had Prostate Cancer Screening 1999-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Ever had PSA</th>
<th>Had PSA in last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>75%</td>
<td>58%</td>
</tr>
<tr>
<td>2001</td>
<td>79%</td>
<td>61%</td>
</tr>
<tr>
<td>2002</td>
<td>75%</td>
<td>61%</td>
</tr>
<tr>
<td>2004</td>
<td>78%</td>
<td>62%</td>
</tr>
<tr>
<td>2006</td>
<td>76%</td>
<td>58%</td>
</tr>
<tr>
<td>2008</td>
<td>76%</td>
<td>59%</td>
</tr>
</tbody>
</table>

† Maryland BRFSS, 1999, 2001

Can prostate cancer be prevented?

- It is not known yet how to prevent prostate cancer.
- However the key behaviors in cancer prevention, such as:
  - not-smoking,
  - healthy diet,
  - physical activity, and
  - healthy weight
help to lower the risk of many types of cancer, while also reducing the risk of heart disease, diabetes, and stroke.

Informed Decision Making

“I want all the facts before I can decide if I should get prostate cancer screening.”

The role of education and outreach

- Encourage men to speak with their doctors to learn more about:
  - their personal risks for prostate cancer,
  - options for early screening, and
  - the pros and cons of prostate cancer detection and treatment.
The role of education and outreach

- Educate men about prostate cancer including:
  - Risk factors for prostate cancer
  - Symptoms for prostate cancer
  - Screening tests
  - Conditions other than prostate cancer that can elevate the PSA

- Provide men accurate information about prostate cancer screening using publications from credible sources (e.g., ACS, NCI, DHMH)

Informed Decision Making

“I want to know more so I can make an informed decision.”

Questions?