The Multiethnic Cohort Study

Prostate Cancer

The most common cancer in American men, other than skin cancer

Risk Factors

- **Age**: The chance of having prostate cancer rises rapidly after age 50.
- **Race/ethnicity**: African American men
- **Geography**: North America, northwestern Europe, Australia, and on Caribbean islands
- **Family history**: Having a father or brother with prostate cancer more than doubles a man's risk of developing this disease.
- **Genetics**: Inherited genetic variants
- **There are no proven modifiable risk factors.**

Incidence and Mortality in Hawaii

- **Lower** incidence and mortality in Hawaii compared to the U.S.

<table>
<thead>
<tr>
<th>Incidence</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HI</strong></td>
<td><strong>U.S.</strong></td>
</tr>
<tr>
<td>96.5</td>
<td>123.1</td>
</tr>
<tr>
<td>13.7</td>
<td>20.7</td>
</tr>
</tbody>
</table>

Average annual rates per 100,000

- **Smoking and diabetes**
  - Among selected lifestyle-related factors including body mass index, height, education, physical activity, alcohol consumption, and dietary components, only smoking and history of diabetes were significantly associated with a lower risk of prostate cancer by 28% (current smoking of ≥20 cigarettes/day vs. never smoking) and 22% (yes vs. no), respectively.
- **Genetic factors**: 8q24
  - Multiple regions within chromosome 8q24 independently affected risk for prostate cancer.

Major Findings in the MEC

- Racial/ethnic variation in prostate cancer risk, 1993-2010

Recommendations for Prostate Cancer Screening

It is not clear if the benefits of testing all men with prostate-specific antigen (PSA) for prostate cancer outweigh the risks. Thus, it is important to talk to a healthcare provider before deciding whether or not to be tested.

- **Men aged 55 to 69 years**: based on professional judgment and patient preferences.
- **Men 70 years and older**: recommend against PSA-based screening for prostate cancer.