Table 25: Prostate Incidence and Mortality Summary, 2012

<table>
<thead>
<tr>
<th>Prostate Cancer</th>
<th>Incidence</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Dakota Total</td>
<td># Cases / Deaths Age Adjusted Rate</td>
<td>490 / 75</td>
</tr>
<tr>
<td>White</td>
<td># Cases / Deaths Age Adjusted Rate</td>
<td>460 / 74</td>
</tr>
<tr>
<td>American Indian Total</td>
<td># Cases / Deaths Age Adjusted Rate</td>
<td>24 / 1</td>
</tr>
<tr>
<td>United States Total</td>
<td>Age Adjusted Rate</td>
<td>* 135.7 / * 20.8</td>
</tr>
<tr>
<td>White</td>
<td>Age Adjusted Rate</td>
<td>* 125.9 / * 19.2</td>
</tr>
<tr>
<td>American Indian</td>
<td>Age Adjusted Rate</td>
<td>* 53.2 / * 22.1</td>
</tr>
</tbody>
</table>

Rates per 100,000 age-adjusted to 2000 US standard population and 2012 SD estimated population.

* US Mortality rates are from 2011, the 2012 rate is not available at this time.

Source: South Dakota Department of Health

Figure 65: Prostate Cancer Stage at Diagnosis, South Dakota, 2012

Descriptive Epidemiology

**Stage at Diagnosis:** The greatest number of cases was diagnosed at an early stage. In 2012, 81% of the cases were diagnosed as localized (not extending outside the prostate). Frequently older cases may simply be monitored (watchful waiting) by their physician to assess the rate of growth; others may be given hormonal therapy. New treatments for prostate cancer include the de Vinci Robotic assisted prostatectomy, proton therapy, and brachytherapy radiation.

**Incidence:** Carcinoma of the prostate is predominately a tumor of older men. The median age at diagnosis in South Dakota is 66. Also, in South Dakota the incidence of prostate cancer begins to increase in the 60’s age group. Nationwide, eight out of 10 men diagnosed with prostate cancer are over the age of 65. Prostate cancer is the second most diagnosed site of all cancers reported in the state.

**Mortality:** Prostate cancer was the third leading cancer death in men in South Dakota in 2012. Prostate cancer can be a slow progressing disease and can be cured or at least controlled in the early stages. The median age of death in South Dakota in 2012 was 80 years old and only one was American Indian. Many patients have co-morbid conditions and will die of other causes rather than prostate cancer.

**Risk and Associated Factors:** A number of risk factors for prostate cancer have been identified. Studies suggest that prostate cancer risk is increased two to five-fold in relatives of men with prostate cancer. Environmental factors, including exposure to heavy metals may increase risk. Smoking has also been indicated as a risk. Diets high in saturated fat intake may also contribute.

**Early Detection and Prevention:** The availability of the Prostate Specific Antigen (PSA) test as a diagnostic test coupled with increased awareness by the public of the disease has produced an increase in the number of new cases diagnosed each year in the United States. Disease detected by elevated PSA in the presence of a palpable normal gland is the most common presentation of prostate cancer. The American Cancer Society recommends the PSA and digital rectal exam should be offered annually beginning at the age of 50.
Figure 66: Prostate Cancer Number of Cases and Deaths by Age, South Dakota, 2012

Source: South Dakota Department of Health

Rates per 100,000 age-adjusted to 2000 US standard population and SD estimated populations.

Figure 67: Prostate Cancer Cases and Deaths by Year, South Dakota, 2001 - 2012

Source: South Dakota Department of Health

Figure 68: Prostate Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota 2001 - 2012

Rates per 100,000 age-adjusted to 2000 US standard population and SD estimated populations.
Source: South Dakota Department of Health