Table 27: Thyroid Incidence and Mortality Summary, 2012

<table>
<thead>
<tr>
<th>Thyroid Cancer</th>
<th>Incidence</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
</tr>
<tr>
<td>South Dakota</td>
<td>103</td>
<td>27</td>
</tr>
<tr>
<td>White</td>
<td>94</td>
<td>26</td>
</tr>
<tr>
<td>American Indian</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>United States</td>
<td>13.8</td>
<td>6.9</td>
</tr>
<tr>
<td>White</td>
<td>14.5</td>
<td>7.4</td>
</tr>
<tr>
<td>American Indian</td>
<td>8.0</td>
<td>4.3</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. US rates www.seer.cancer.gov
Source: South Dakota Department of Health

Figure 73: Thyroid Cancer Stage at Diagnosis, South Dakota, 2012

Descriptive Epidemiology

**Stage at Diagnosis:** In 2012 data demonstrates that 63 (61%) of cases were diagnosed at localized stage. When a patient is diagnosed at an early stage, prognosis is much better for a cure. There were 37 (36%) cases diagnosed at regional stage. Only three cases (3%) were diagnosed at a distant stage.

**Incidence:** The American Cancer Society estimated 54,460 thyroid cancer cases would be diagnosed in the United States in 2012. Thyroid cancer continues to account for approximately 2.5% of all cancers in South Dakota. Of the 103 cases diagnosed in 2012, 27 were male and 76 were female. The median age at diagnosis was 51. In the United States the median age was 50. Thyroid cancer is found more commonly in people between the ages of 45 and 70 years of age, with 81% diagnosed before age 65. It is predominately a disease of females as the statistics for South Dakota confirm.

**Mortality:** South Dakota had no deaths attributed to thyroid cancer in 2012. Nationally, the 5-year relative survival rates were 99.9% for localized, 98.1% for regional, and 89.6% for unknown stage.

**Risk and Associated Factors:** Thyroid cancer accounted for only 2.5% of the cancer cases in South Dakota in 2012. Risk factors include being exposed to radiation to the head and neck in childhood. Other risk factors for the development of thyroid cancer include a history of goiter, family history of thyroid disease, and Asian race.

**Early Detection and Prevention:** Early detection of cancer of the thyroid is extremely important. There are currently no tests or screenings for early detection of thyroid cancer. Physical examinations may reveal a lump on the side of neck, hoarseness of the voice, and difficulty swallowing. Most cancerous thyroid tumors are slow growing and curable. Prompt attention to signs and symptoms is the best approach to early diagnosis of most thyroid cancers. Signs or symptoms include:

- A lump in the neck, sometimes growing rapidly
- A pain in the neck, sometimes going up to the ears
- Hoarseness
- Trouble swallowing
- Breathing problems (feeling as if one were breathing through a straw)
- A cough that persists and is not due to a cold
Figure 74: Thyroid Cancer Number of Cases and Deaths by Age, South Dakota, 2012

Source: South Dakota Department of Health

Figure 75: Thyroid Cancer Cases and Deaths by Year, South Dakota, 2001 - 2012

The incidence count for thyroid cancers peaked in 2009.

Figure 76: Thyroid 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