

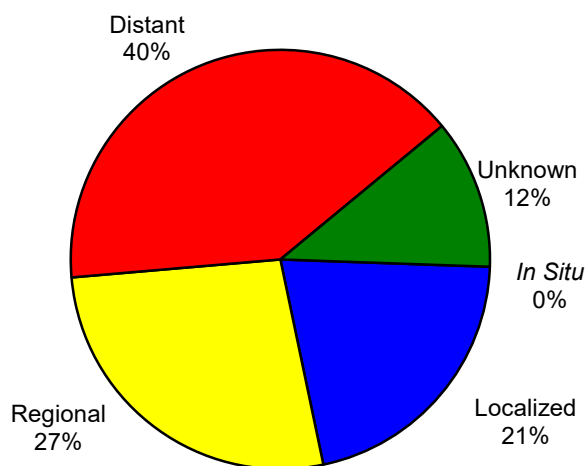
STOMACH

Table 26: Stomach Incidence and Mortality Summary, 2017

| Stomach Cancer | | | Incidence | | | Mortality | | |
|-------------------|-------------------|-------------------|-------------------|------|--------|-----------|------|--------|
| | | | Total | Male | Female | Total | Male | Female |
| South Dakota | Total | # Cases / Deaths | 52 | 37 | 15 | 20 | 11 | 9 |
| | | Age-Adjusted Rate | 4.7 | 7.0 | 2.6 | 2.0 | 2.4 | 1.5 |
| | White | # Cases / Deaths | 46 | 35 | 11 | 16 | 8 | 8 |
| Age-Adjusted Rate | | 4.6 | 7.1 | 2.2 | 1.7 | 1.9 | 1.5 | |
| American Indian | # Cases / Deaths | 4 | 0 | 4 | 3 | 2 | 1 | |
| | Age-Adjusted Rate | 8.4 | 0.0 | 13.6 | 8.1 | 9.2 | 5.5 | |
| United States | Total | Age-Adjusted Rate | 7.1 | 9.4 | 5.3 | 2.9 | 3.9 | 2.1 |
| | | White | Age-Adjusted Rate | 6.4 | 8.5 | 4.6 | 2.5 | 3.4 |
| | American Indian | Age-Adjusted Rate | 7.7 | 9.0 | 6.7 | 4.6 | 6.1 | 3.4 |

Rates per 100,000 age-adjusted to 2000 US standard population and 2013 SD estimated population. US rates www.seer.cancer.gov Source: South Dakota Department of Health

Figure 69: Stomach Cancer Stage of Diagnosis, South Dakota, 2017



Source: South Dakota Department of Health

Descriptive Epidemiology

Stage at Diagnosis: In 2017, data demonstrates that 11 (21%) cases were diagnosed at a localized stage. When a patient is diagnosed at an early stage, prognosis is much better. Fourteen cases (27%) were diagnosed at a regional stage. There were 21 (40%) of the cases in South Dakota diagnosed at a distant stage. The prognosis for the distant stage is very poor. The stage is based on whether the tumor has invaded nearby tissues, where the cancer has spread, and if so, to what extent.

Incidence: Stomach cancer only accounted for approximately 1.1% of all cancers in South Dakota in 2017. Of the 52 cases diagnosed in 2017, 37 were male and 15 were female. It is

predominately a disease of men. Gastric (stomach) cancer is found more commonly in people between the ages of 50 and 70 years of age. The median age at diagnosis was 68 in the United States and in South Dakota.

Mortality: Stomach cancer accounted for 1.1% of cancer deaths in South Dakota in 2017. The median age at death was 73 in South Dakota and 71 in the United States. The age-adjusted mortality rate was 2.4 for men and 1.5 in women in South Dakota. These rates are based on patients who died in 2017 in South Dakota. There were three American Indian stomach cancer deaths.

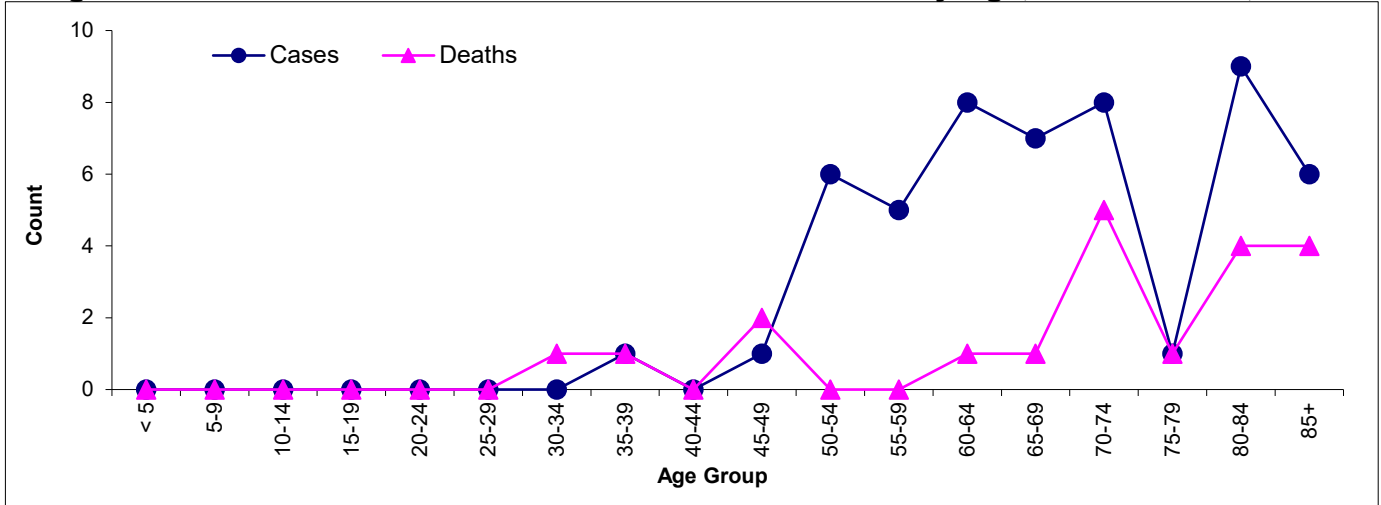
Risk and Associated Factors: Men have twice the risk of women for developing stomach cancer. In recent years, *Helicobacter pylori* bacteria have received considerable attention as a potential factor. Some researchers suspect this bacterium, which causes stomach inflammation and ulcers, may be an important stomach cancer risk factor. Individuals with pernicious anemia (a vitamin B-12-related disorder) and achlorhydria or gastric atrophy, both of which result in lower than normal amounts of gastric juices, may be at higher risk.

Prevention and Early Detection: Excessive salt intake has been identified as a possible risk factor for stomach cancer. Having a high intake of fresh fruits and vegetables may be associated with a decreased risk of stomach cancer. Studies have suggested that eating foods that contain **beta-carotene**¹ and **vitamin C**² may decrease the risk of stomach cancer.

¹<http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=45328&version=Patient&language=English>

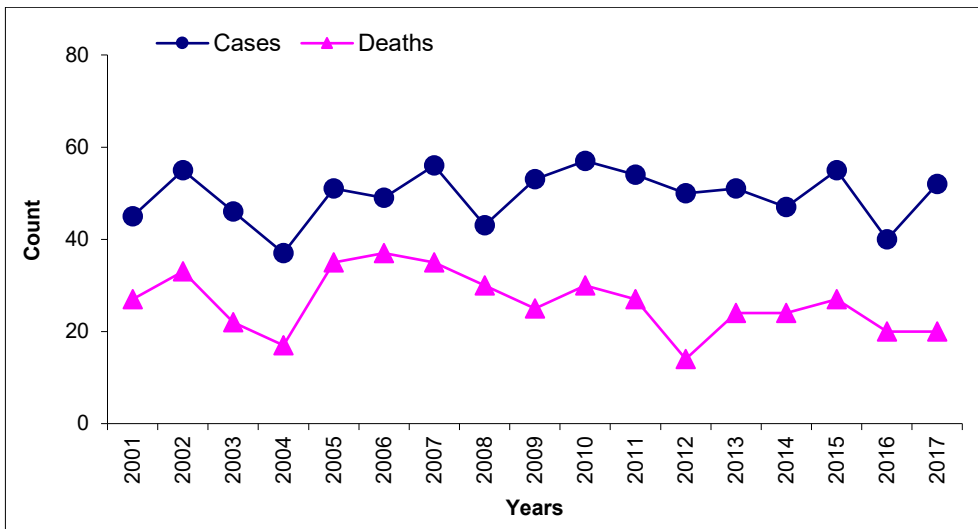
²<http://www.cancer.gov/Common/PopUps/popDefinition.aspx?id=439435&version=Patient&language=English>

Figure 70: Stomach Cancer Number of Cases and Deaths by Age, South Dakota, 2017



Source: South Dakota Department of Health

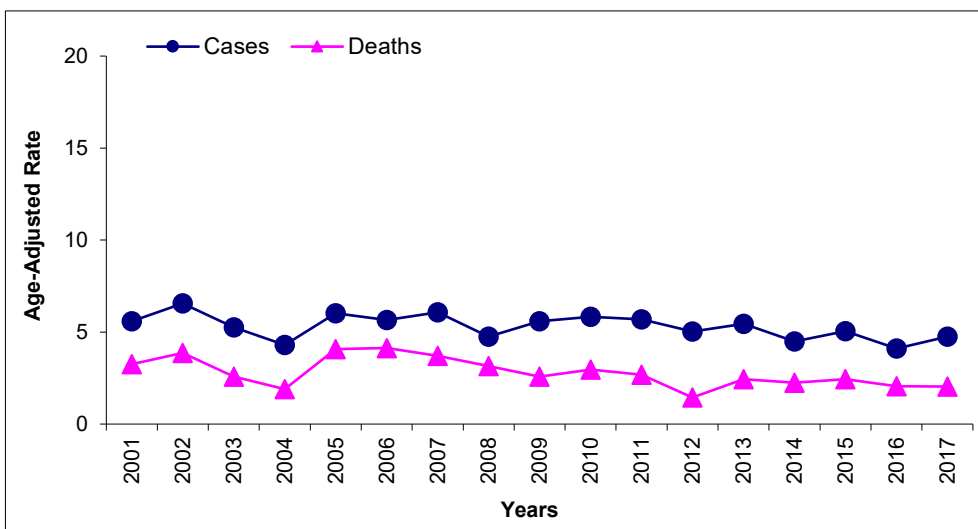
Figure 71: Stomach Cancer Cases and Deaths by Year, South Dakota, 2001 - 2017



Source: South Dakota Department of Health

The incidence peak for stomach cancer was in 2010.

Figure 72: Stomach Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2017



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