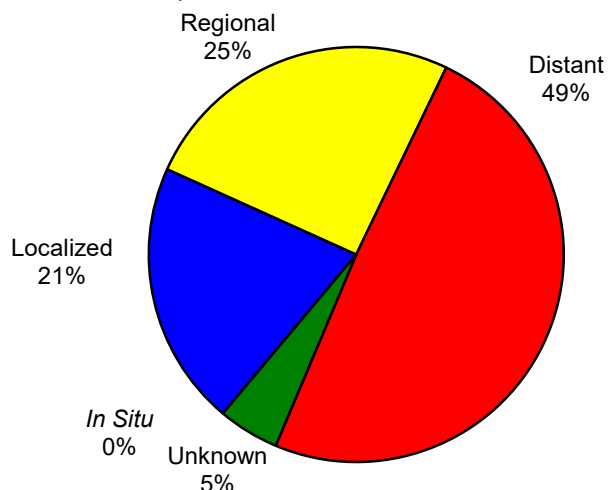


Table 23: Ovarian Incidence and Mortality Summary, 2017

| Ovarian Cancer | | | Incidence | Mortality |
|----------------|-----------------|-------------------|-----------|-----------|
| South Dakota | Total | # Cases / Deaths | 63 | 51 |
| | | Age-Adjusted Rate | 11.1 | 9.5 |
| | White | # Cases / Deaths | 59 | 50 |
| | | Age-Adjusted Rate | 11.3 | 10.1 |
| | American Indian | # Cases / Deaths | 1 | 0 |
| | | Age-Adjusted Rate | 5.9 | 0.0 |
| United States | Total | Age-Adjusted Rate | 10.4 | 6.6 |
| | White | Age-Adjusted Rate | 10.6 | 6.8 |
| | American Indian | Age-Adjusted Rate | 9.5 | 6.5 |

Rates per 100,000 age-adjusted to 2000 US standard population and 2017 SD estimated population. US rates www.seer.cancer.gov Source: South Dakota Department of Health

Figure 57: Ovarian Cancer Stage at Diagnosis, South Dakota, 2017



Source: South Dakota Department of Health

Descriptive Epidemiology

Stage at Diagnosis: Staging of ovarian cancer is done by a surgical procedure to remove as much of the cancer as possible. Surgical staging is of critical importance in the management of this disease. The morbidity associated with ovarian carcinoma is partially attributable to the fact that in the United States two-thirds of the patients present with advanced-stage disease at the time of diagnosis. In 2017, in South Dakota, 31 (49%) of the 63 cases were diagnosed at a distant stage.

Incidence: The incidence of ovarian cancer varies greatly. There were 63 invasive cases of ovarian cancer reported in 2017 in South Dakota. This accounted for 2.8% of the cancer cases diagnosed in 2017 for South Dakota women. The lifetime risk of a woman developing ovarian cancer is 1.2%. There were eight cases

diagnosed at younger than 49 years of age. There were 21 cases diagnosed in the 60-69 age group. The median age at diagnosis in South Dakota was 64 and 63 in the United States.

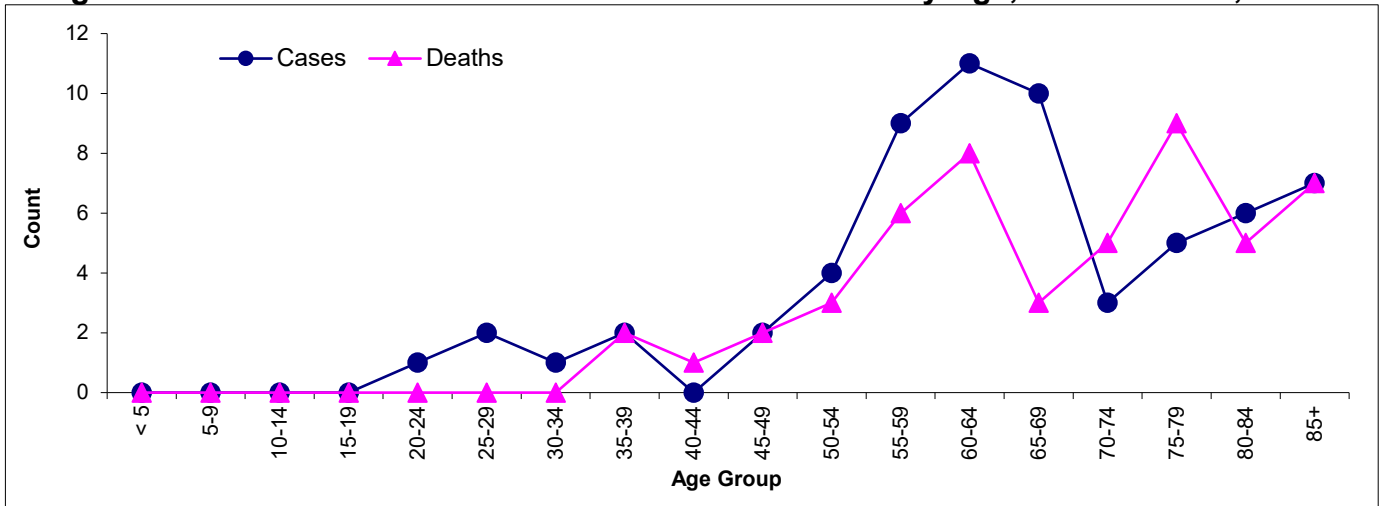
Mortality: Doctors are using dramatic new therapies to fight ovarian cancer, extending the lives of women who five or 10 years ago would have died from the disease. Survival rates for the last several decades are only about 25% for those with advanced disease. Most ovarian cancer presents at advanced disease. Only 30.2% of those diagnosed at late stage survive five years. For those who are diagnosed early, before the disease spreads beyond the ovaries, the disease is 92.6% curable. In South Dakota, 51 patients died in 2017. The mortality rate was 9.5 for women in South Dakota and 6.6 in the United States.

Risk and Associated Factors: Women who have a higher risk for developing ovarian cancer are those with a family history of the disease, those who have used fertility drugs, those who had their first baby after age 30, and those over the age of 65.

Prevention and Early Detection: Factors that may reduce the risk of ovarian cancer are pregnancy lasting full term, use of oral contraceptives, breastfeeding, tubal ligation, hysterectomy, or removal of ovaries in women with inherited risks.

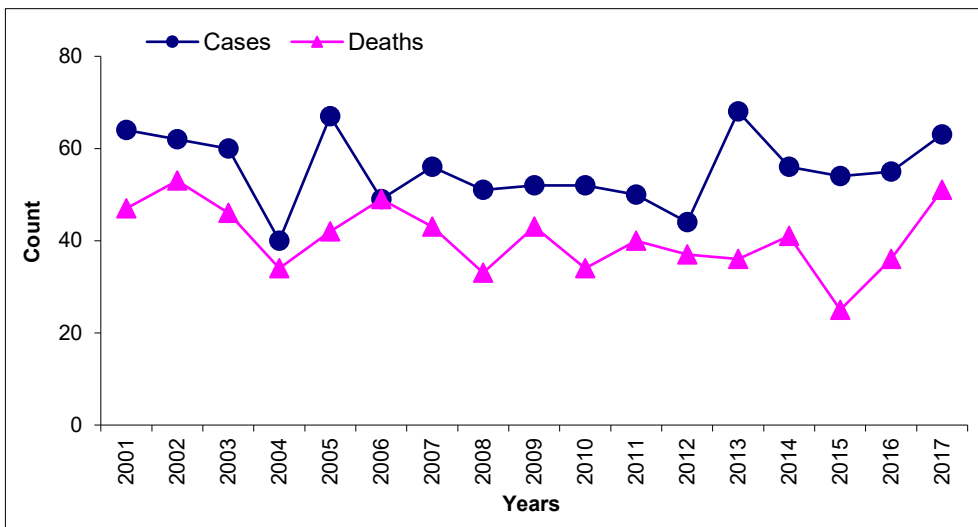
No early stage screening tests have been proven for ovarian cancer and it can be difficult to detect until it has advanced. A combination of imaging and lab tests are the most useful diagnostic tools.

Figure 58: Ovarian Cancer Number of Cases and Deaths by Age, South Dakota, 2017



Source: South Dakota Department of Health

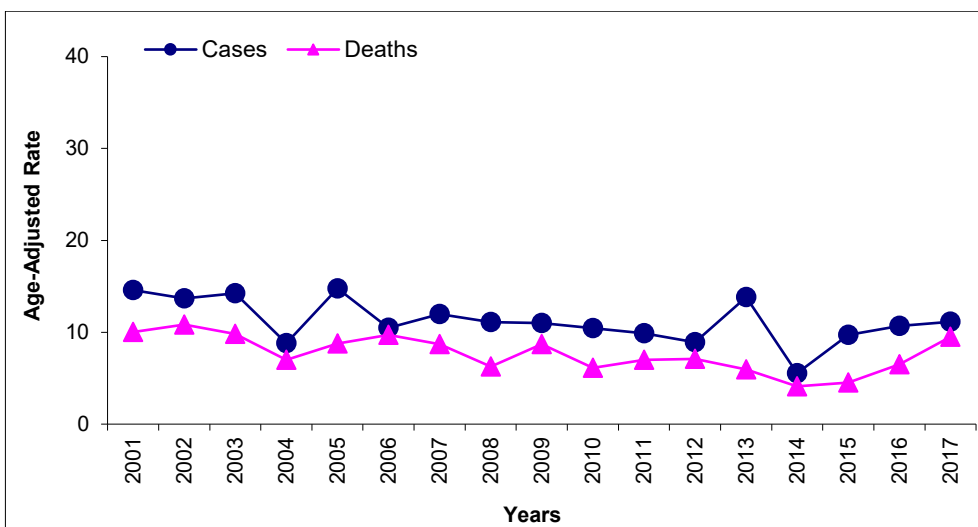
Figure 59: Ovarian Cancer Cases and Deaths by Year, South Dakota, 2001 - 2017



The incidence count for ovarian cancer peaked in 2013. The number of deaths rose to an all-time high in 2017.

Source: South Dakota Department of Health

Figure 60: Ovarian 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