

BREAST (FEMALE)

Table 13: Female Breast Incidence and Mortality Summary, 2011

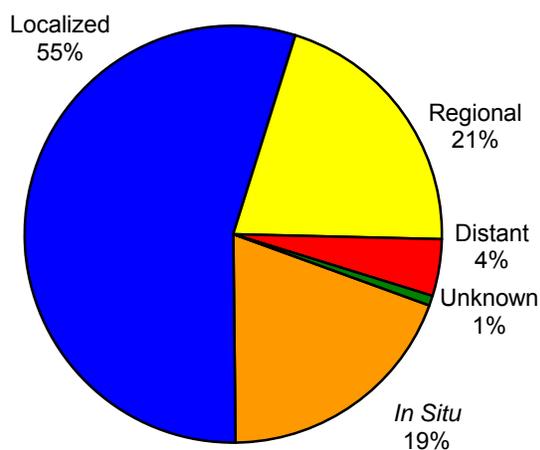
Female Breast Cancer			Incidence	Mortality
South Dakota	Total	# Cases / Deaths	624	122
		Age Adjusted Rate	129.3	23.3
	White	# Cases / Deaths	582	114
		Age Adjusted Rate	130.3	23.2
American Indian		# Cases / Deaths	37	6
		Age Adjusted Rate	142.6	29.8
United States	Total	Age Adjusted Rate	124.3	* 21.9
	White	Age Adjusted Rate	127.2	* 21.3
	American Indian	Age Adjusted Rate	81.3	* 14.1

Rates per 100,000 age-adjusted to 2000 US standard population and 2011 SD estimated population.

* US Mortality rates are from 2010, the 2011 rate is not available at this time.

US rates www.seer.cancer.gov Source: South Dakota Department of Health

Figure 19: Female Breast Cancer Stage at Diagnosis, South Dakota, 2011



Source: South Dakota Health Department

Descriptive Epidemiology

Stage at Diagnosis: Including *in situ* female breast cancer cases there were 773 cases diagnosed in 2011, of which 425 cases were diagnosed at localized stage. This represents 55% of all reported breast cancer cases. There were 159 cases that had progressed beyond the breast. There were 34 that were diagnosed as a distant stage and 6 that were staged as unknown. The 149 *in situ* female breast cancer cases are reported but are not used in calculating incidence rates.

Incidence: Female breast cancer is the most common malignant tumor among women. The incidence rate increased from 1947-1990. The rates fell 3.5% per year from 2001-2005. This decrease may be in part due to the lower number of women using hormone replacement therapy. There were 624 cases of invasive female breast

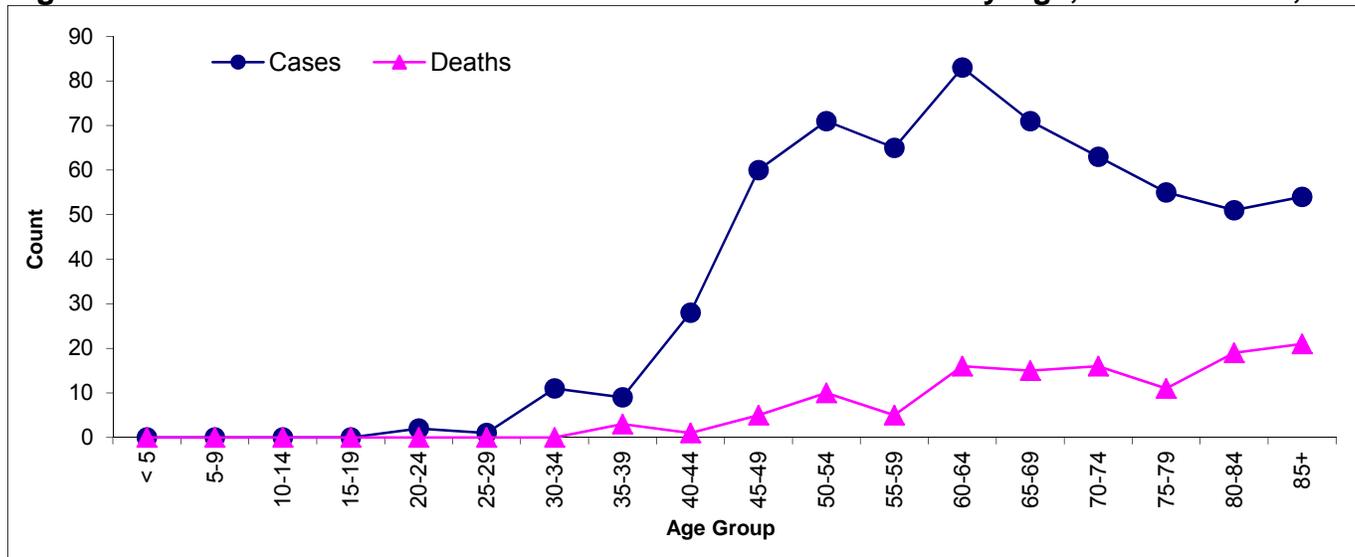
cancer reported in 2011. In South Dakota, 14.4% of all invasive cancer cases reported in 2011 were female breast. Nationally, 14% of all cancer cases are female breast cancer. Breast cancer represented 29% of the cancer cases diagnosed for South Dakota women in 2011.

Mortality: Breast cancer is the third leading cause of death attributed to cancer in South Dakota. Nationwide, breast cancer mortality has been relatively stable overall since 1950. In cancers only of women, it is the second leading cause of cancer deaths. Although mortality has increased among women older than 55 years, it has decreased among women younger than 55 years of age. In 2011, there were 122 deaths. Of those deaths, 114 were white and six were American Indian.

Risk and Associated Factors: Among the known risk factors for breast cancer are early onset of menarche, late onset of menopause, never having been pregnant, first full term pregnancy after age 30 and fewer number of children. These factors increase the risk because of cumulative exposure of breast tissue to estrogen. Other risk factors include high fat diets, obesity, alcohol consumption, history of fibrocystic disease, having a mother or sister with breast cancer, a personal history of ovarian or endometrial cancer and specific tumor suppressor genes such as BRCA1 and BRCA2.

Prevention and Early Detection: Prevention and early detection is the key to survival of breast cancer. Monthly self-examination and annual examination by a health professional are the mainstays of early detection. Women should talk to their doctor for individualized screening recommendations.

Figure 20: Female Breast Cancer Number of Cases and Deaths by Age, South Dakota, 2011



Source: South Dakota Department of Health

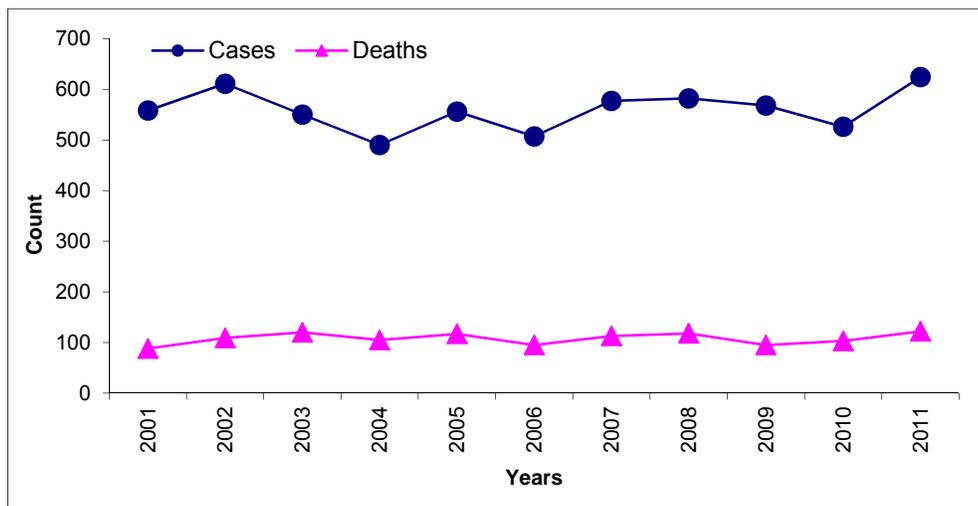


Figure 21: Female Breast Cancer Cases and Deaths by Year, South Dakota, 2001 - 2011

The incidence for female breast cancer was at an all-time high in 2011.

Source: South Dakota Department of Health

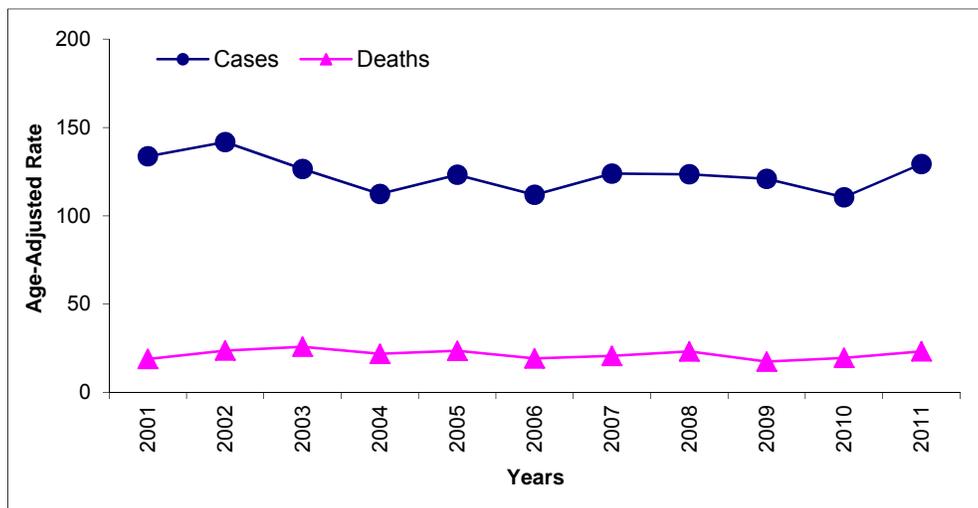


Figure 22: Female Breast Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2011

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