Cancer incidence and Mortality

Cancer is a vital health issue in Texas. Thousands of Texas residents are affected by cancer each year, and it is the second-leading cause of death in the state and the nation, accounting for one of every four deaths. More than 1.4 million Americans are expected to be diagnosed with cancer and more than 500,000 are expected to die from cancer-related causes in 2007. In Texas, more than 95,000 residents are expected to be diagnosed with cancer and more than 37,000 cancer-related deaths are expected in 2007.

Cancer begins when certain cells in the body change and start to grow abnormally and uncontrollably. Cancer cells can also invade other organs and tissues and be spread by the bloodstream and lymphatic system in a process called metastasis. This uncontrolled growth and spread of cancer can result in serious health problems and death. Currently, doctors cannot determine what causes cancer in an individual person, but there are several risk factors that may play a role in cancer development, including aging, tobacco, alcohol consumption, sunlight, ionizing radiation, certain viruses and bacteria, poor nutrition, lack of physical activity, being overweight, and certain hormones and chemicals. Many of these risk factors can be avoided, thus lowering a person’s risk of developing cancer. Other risk factors cannot be avoided, but many cancers can be cured if detected and treated early. Incidence and mortality rates for each cancer are presented as age-adjusted rates or age-specific rates.

Breast Cancer

Breast cancer usually develops in cells that line the ducts that carry milk to the nipples (ductal cancer) or in cells of the glands which make milk (lobular cancer). Ductal cancer is more common than lobular cancer, and, although more rare, cancer also can occur in other tissues of the breast. Breast cancer is the most common cancer diagnosis in Texas and U.S. women. It is estimated that, in 2007, approximately 15,122 Texas women will be diagnosed with invasive breast cancer and 2,843 women will die of the disease. Breast cancer occurs most frequently in women, but men can also develop breast cancer. Hispanic women have a lower risk of developing breast cancer than non-Hispanic women, and white women are at greater risk of breast cancer than African-American women.

Key Point: South Texas women had a lower breast cancer incidence rate than the rest or Texas and the nation. However, the region’s Hispanic women had a higher incidence of breast cancer than Hispanics in the rest of Texas.
Increasing age is the most important risk factor for breast cancer. Other risk factors include a personal or family history of breast cancer, genetic mutations in the BRCA1 or BRCA2 genes, certain breast changes such as atypical hyperplasia, high breast tissue density, high dose radiation to the chest, and certain reproductive factors such as never having children, having a first child after age 30, or having menstrual periods start early or end late in life. Modifiable risk factors for breast cancer include lack of physical activity, alcohol use, being overweight after menopause, and oral contraceptive use.

Screening tests for breast cancer include the breast self-exam, clinical breast exam, and screening mammography.

Breast Cancer in South Texas

Overall, women in South Texas had a lower average annual age-adjusted incidence of breast cancer (104.1 cases of breast cancer per 100,000 women) than women in the rest of Texas (120.3/100,000) or nationwide (129.1/100,000). However, Hispanic women in South Texas had a higher incidence of breast cancer (83.5/100,000) compared to Hispanics in the rest of Texas (74.8/100,000), although they did not have a higher breast cancer incidence compared to Hispanic women nationwide (Figure 5.1). Hispanic women overall, including those in South Texas, had a much lower incidence of breast cancer (83.5/100,000) than non-Hispanic white women (129.2/100,000) (Figure 5.1).

![Breast Cancer Incidence Among Females, 2000-2004](image)

**Figure 5.1.** Age-adjusted incidence of breast cancer in females by location.


Similar age trends for breast cancer incidence were seen for both Hispanic and non-Hispanic white women in South Texas. Similar to what was observed nationwide, the risk
of breast cancer in South Texas increased with age. Among women ages 30 and older, the incidence of breast cancer in non-Hispanic whites was higher than in Hispanics (Figure 5.2).

Figure 5.2. Incidence of breast cancer in South Texas females by age group and race/ethnicity, 2000-2004.
Source: Texas Cancer Registry, Cancer Epidemiology and Surveillance Branch, Texas Department of State Health Services

In 2000-2004, a higher average annual age-adjusted incidence of breast cancer was seen in South Texas metropolitan counties (105.7/100,000) than in non-metropolitan counties (94.7/100,000). Overall, Bexar County had a higher incidence of breast cancer (119.9/100,000) than South Texas as a whole (104.1/100,000). Webb County and the Lower Rio Grande Valley region had lower breast cancer incidence compared to South Texas (Figure 5.3).
Figure 5.3. Age-adjusted incidence of female breast cancer in selected South Texas locations, 2000-2004.
Source: Texas Cancer Registry, Cancer Epidemiology and Surveillance Branch, Texas Department of State Health Services

The overall breast cancer mortality rate among females in South Texas was 22/100,000. Breast cancer mortality rate patterns in South Texas were similar to incidence patterns.

References


Cervical Cancer

Cervical cancer typically begins in the lining of the cervix, which is the lower section of the uterus that connects the upper section of the uterus to the vagina. There are two main types of cervical cancer. By far, the most common type is squamous cell carcinoma, which develops from the cells that line the outer surface of the cervix near the top of the vagina. The other type is adenocarcinoma, which develops from the glandular cells that line the cervix. There are usually no symptoms of precancerous changes to the cervix. Therefore, regular screening tests such as Pap tests, which can detect abnormal cervical cells before cancer develops, are of great importance.

Although regular screening makes cervical cancer one of the most detectable and preventable cancers, it remains a serious threat to the lives of Texas women. It is estimated that, in 2007, approximately 1,115 Texas women will be diagnosed with invasive cervical cancer and 395 women will die of the disease. In the U.S., Hispanic women are at greater risk of developing cervical cancer than non-Hispanic women, and African-American women are at greater risk of cervical cancer than are white women. Women over the age of 40 are at higher risk of cervical cancer than younger women.

Certain human papillomaviruses (HPVs) are the most important risk factor for cervical cancer, and early changes in cervical cells caused by HPV infections can be detected by

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