



Uterus Cancer in Florida

Bureau of Epidemiology



Executive Summary

Uterus cancer is the fourth most common cancer of the female reproductive system and is often diagnosed at an early stage due to its symptoms. In Florida, 2,269 new uterus cancer cases were reported in 2004. The incidence rate was 19 per 100,000 females. About 50% of the cases were among females aged 65 years and older. In 2004, the incidence rate significantly decreased by 20% among white females compared to the rates in 1981. In 2004, 61% of the cases were diagnosed at an early stage, resulting in good prognoses and better survival rates. In 2004, the percentage of uterus cancer cases diagnosed at an advanced stage increased by 43% compared to 1981. Females 65 years and older and black females showed a greater increase in advanced-stage diagnosis. In 2004, 416 females died of uterus cancer. Black females had a greater mortality rate (8.0 per 100,000 females) than whites (3.0 per 100,000 females). From 1981 to 2004, the mortality rate significantly decreased by 34% among whites.

Background

In the United States, uterus cancer is one of the most common cancers of the female reproductive organs, accounting for approximately 6% of all cancers in females.¹ About 40,000 females are diagnosed with uterus cancer each year.² An estimated 39,080 cases of uterus cancer are expected to be diagnosed in 2007.³ There are two types of uterus cancer, cancer of corpus uteri and uterus sarcoma. Cancer that begins in the cells lining the uterus is referred to as cancer of corpus uteri or endometrial cancer. Uterus sarcoma is a rare cancer that begins in the muscle or other tissues in the uterus.¹ The uterus cancers that are not specified are known as uterus not otherwise specified (NOS).

Uterus cancer is a slow-growing cancer and is often detected at an early stage. The symptoms of uterus cancer include unusual vaginal bleeding, difficult or painful urination, pain during intercourse, and pain in the pelvic area. Females with the following characteristics are considered to be at risk of uterus cancer: (1) females over age 50, (2) females with endometrial hyperplasia (an increase in the number of cells in the uterus

lining), (3) females who are obese (and related conditions), (4) females taking tamoxifen, (5) white females, and (6) females with colorectal cancer.¹

In 2004, 51% of the Florida population were females; 82% were white and 16% were black.⁴ Fifty-six percent of the female population was under age 44, 25% was between 45-64 years, and 19% were 65+ years old.

Methods

Data on cancer incidence, stage, and histology were provided by the Florida Cancer Data System (FCDS). FCDS is Florida's statewide, population-based cancer registry that has collected cancer incidence data since 1981. Only females diagnosed with uterus cancer were included in the analysis (ICD-O-3 C54, C55.9).

Mortality data, based on death certificates, were provided by the Florida Department of Health Office of Vital Statistics. Only deaths whose underlying cause was uterus cancer (ICD-10 C54, C55.9) were included in the mortality analysis.

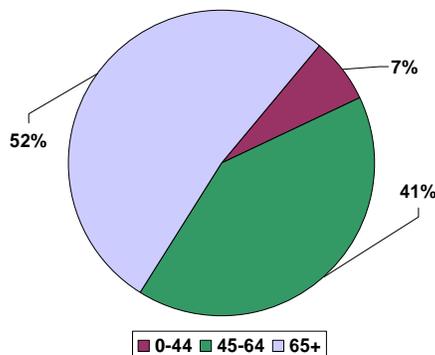
Hospital inpatient discharge data were provided by the Florida Agency for Health Care Administration (AHCA). The hospital inpatient discharge data includes the number of discharges and charges for inpatients whose primary diagnosis was uterus cancer (ICD-9 182).

Only Florida residents were included in the analyses. Both incidence and mortality rates were age-adjusted using the U.S. 2000 standard population. Age adjustment is a process that allows comparison of incidence and death rates over time and between geographic areas with the effect of different age compositions removed. When the number of cases or deaths is very small, the rates calculated are not stable. Therefore, caution should be exercised in interpreting the rates for counties with small population.

Incidence

In 2004 in Florida, 46,806 cancer cases of all sites were diagnosed among females. Of these cancer cases, 2,269 (5%) were uterus cancer. The age-adjusted incidence rate was 19 per 100,000 females.⁵

Figure 1. Percentage of New Uterus Cancer Cases, By Age Group, Florida, 2004



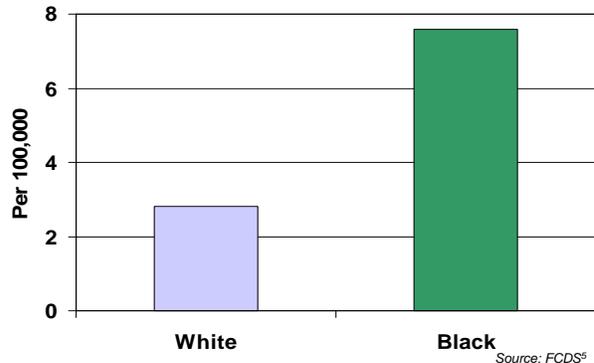
Source: FCDS⁵

Among the 2,269 uterus cancers, 93% were cancer of corpus uteri and 7% were uterus NOS.

Half of the diagnosed cases were among females 65 years and older (52%) (Figure 1). Blacks had a significantly greater incidence

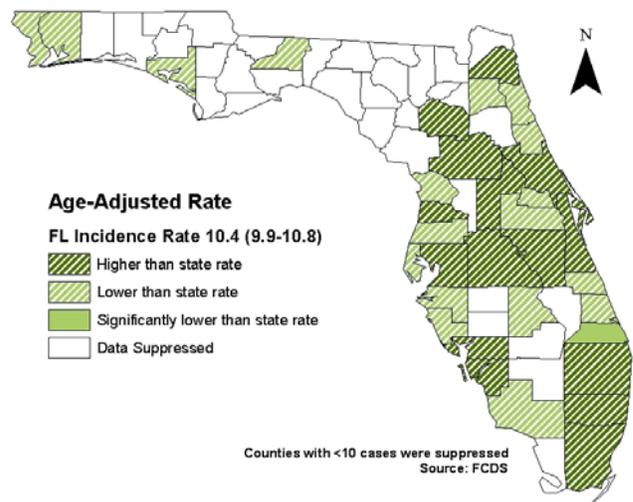
rate (21 per 100,000 females) than whites (19 per 100,000 females) (Figure 2).⁵

Figure 13. Age-adjusted Mortality Rate of Uterus Cancer, by Race, Florida, 2004



Source: FCDS⁵

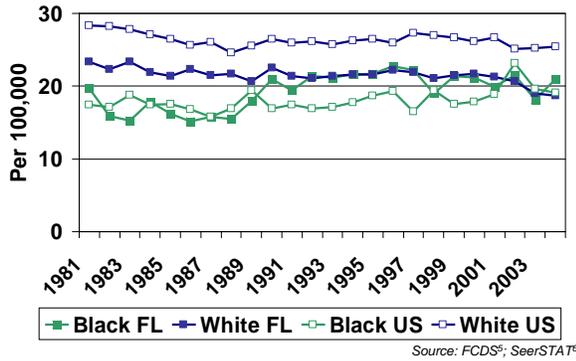
Figure 3. Age-Adjusted Incidence Rate of Uterus Cancer, Florida, 2004



In 2004, the incidence rate of uterus cancer ranged from 4.7 per 100,000 females in Martin County to 13.9 per 100,000 females in Lake County.⁵ The incidence rate in Martin County was significantly lower than the state rate (Figure 3).

From 1981 to 1990, uterus cancer incidence rates were higher among white females than among black females, both at the national and the state level. The incidence rates among whites in Florida have been lower than the national rates since 1981, whereas the rates among blacks have varied around the national rate (Figure 4).

Figure 4. Age-Adjusted Incidence Rates of Uterus Cancer, by Year, Florida, 1981-2004

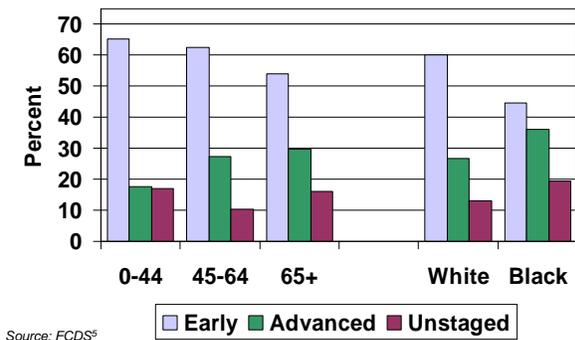


In 2004, the incidence rate among whites in Florida showed a statistically significant decline of 20%, compared to the rates in 1981. Though the incidence rate among blacks showed an increase of 7% in Florida, the increase was not statistically significant.

Stages of Cancer

Many uterus cancer cases are diagnosed at an early stage due to evident symptoms such as vaginal bleeding. Uterus cancer can be treated effectively when diagnosed at an early stage.³ The five-year survival rate is 96% for cancer diagnosed at an early stage.³

Figure 5. Percentage of Uterus Cancer Cases, by Stage, by Age Group, by Race, Florida, 2004

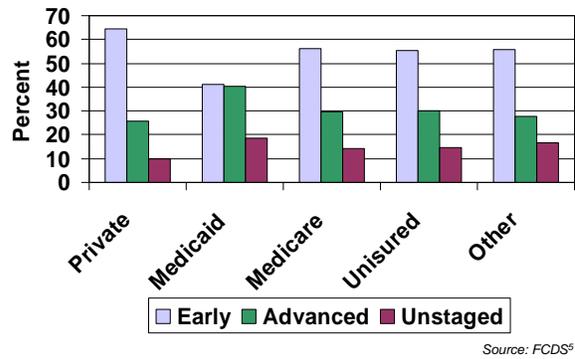


In 2004, 61% of uterus cancer cases were diagnosed at an early stage and 27% at an advanced stage. Eleven percent of uterus cancer cases were diagnosed at an unknown stage. The majority of uterus cancer cases were diagnosed at an early stage in all age

groups and among both blacks and whites. The percentage of uterus cancer cases diagnosed at an advanced stage was higher among blacks than among whites (Figure 5).

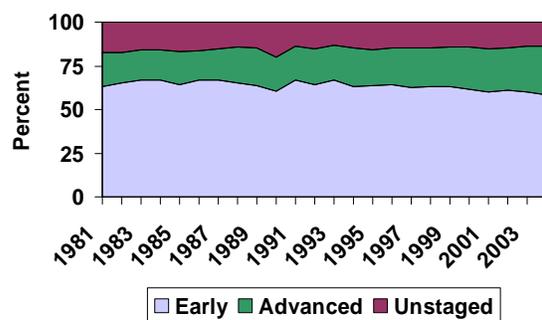
Patients with private insurance had a higher percentage of early-stage diagnoses than patients with any other insurance. Patients with Medicaid had a higher percentage of being diagnosed at an advanced stage than patients with any other insurance (Figure 6).

Figure 6. Percentage of Uterus Cancer Cases, by Type of Insurance, Florida, 2004



The percentage of uterus cancer cases diagnosed at an advanced stage increased by 43%, while diagnosis at an early stage decreased by 8% from 1981 to 2004. An increase of 57% of advanced-stage diagnosis was observed among those 45-64 years of age.

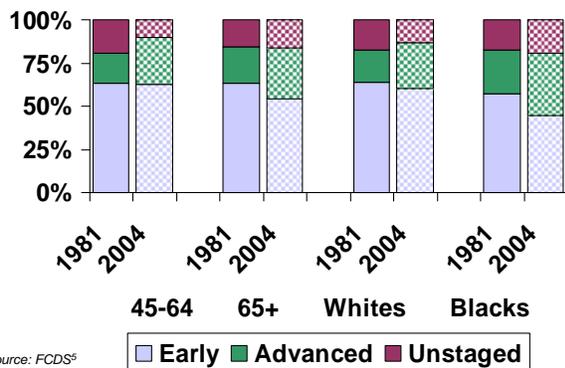
Figure 7. Percentage of Uterus Cancer Cases, by Stage, by Year, Florida, 1981-2004



From 1981 to 2004, diagnosis of uterus cancer cases at an early stage decreased and diagnosis at an advanced stage increased

among whites and blacks. Blacks showed a greater increase in the percentage diagnosed at an advanced stage and a greater decrease in the percentage diagnosed at an early stage, by 65% and 24%, respectively (Figures 7 and 8).

Figure 8. Change in Percentage of Uterus Cancer Cases, by Stage, Florida, 1981 & 2004

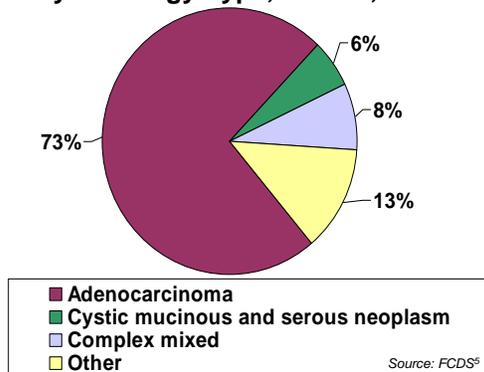


Source: FCDS⁵

Cancer Histology

Histology refers to the type of cells on which the cancer forms. For this report, histology of uterus cancer (including uterus sarcoma) was based on the following groupings: (1) adenoma and adenocarcinoma (Histology code 814-838), (2) complex mixed and stromal neoplasms (Histology code 893-899), (3) cystic, mucinous, and serous neoplasm (Histology code 844-849).

Figure 9. Percentage of Uterus Cancer Cases, by Histology Type, Florida, 2004

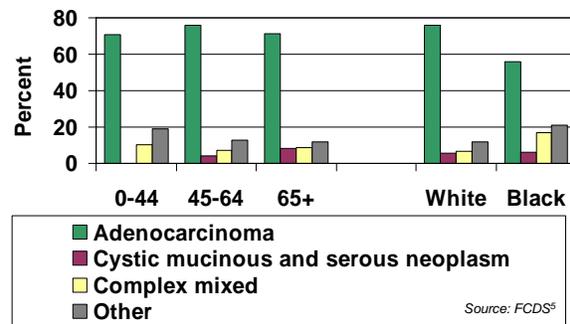


Source: FCDS⁵

In 2004, these three groups accounted for 87% of all uterus cancer (Figure 9). Adenoma and adenocarcinoma was the most common

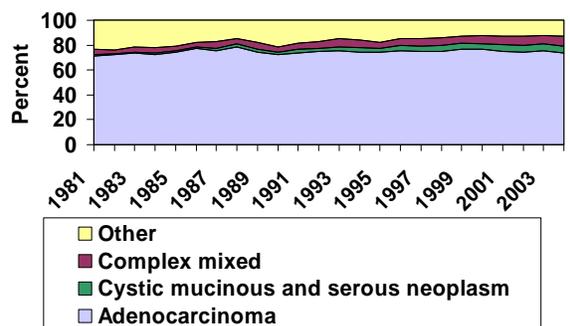
histology type of uterus cancer among all age groups and both races. The percentage of complex mixed and stromal neoplasms, the second most common histology group, was higher among blacks than among whites (Figure 10).

Figure 10. Percentage of Uterus Cancer Cases, by Histology Type, by Age Group, by Race, Florida, 2004



Source: FCDS⁵

Figure 11. Percentage of Uterus Cancer Cases, by Histology Type, by Year, Florida, 1981-2004



Source: FCDS⁵

The percentage of uterus cancer cases diagnosed with histology type of cystic, mucinous, and serous neoplasm increased from 0.8% in 1981 to 5.9% in 2004. Complex mixed and stromal neoplasm also increased from 4.0% in 1981 to 7.5% in 2004 (Figure 11).

Hospital Discharges

In 2004, 2,017 hospitalizations were for treatment of uterus cancer in Florida and the total hospital charges were \$5,666,336.

Mortality Rates

Each year approximately 7,000 females die from uterus cancer in the United States and an estimated 7,400 deaths are expected in 2007.⁷ Death rates declined on an average of 1.6% per year from 1975 to 1991 and have stabilized since then.⁷ Although the incidence rate of uterus cancer is lower among blacks compared to whites, the mortality rate is nearly twice as high.¹

In 2004, 18,199 females died from all cancers in Florida. Of these, 416 died from uterus cancer. The age-adjusted mortality rate was 3.0 per 100,000 females. Among deaths from uterus cancer, the majority (77%) occurred in females 65+ years old and 21% were among females 45 to 64 years (Figure 12).

Figure 12. Percentage of Uterus Cancer Deaths, by Age Group, Florida, 2004

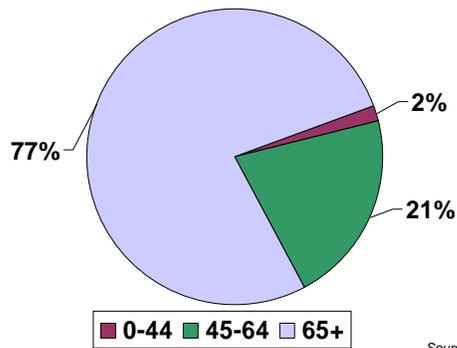
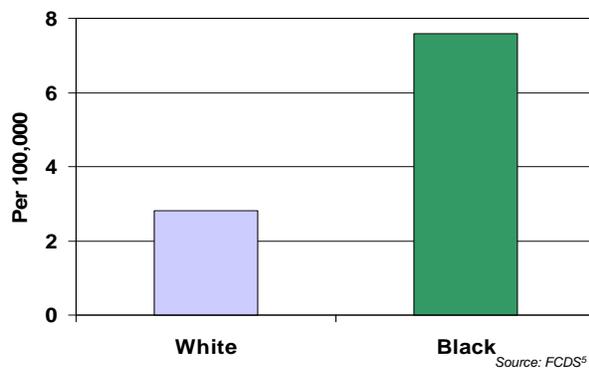


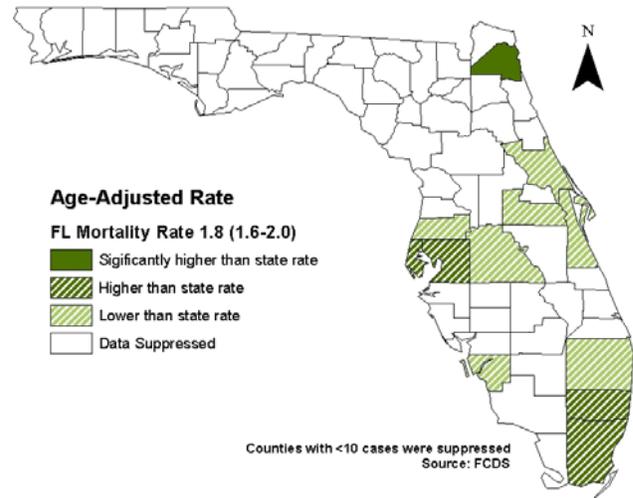
Figure 13. Age-adjusted Mortality Rate of Uterus Cancer, by Race, Florida, 2004



Blacks had a greater mortality rate compared to whites, 8.0 per 100,000 females and 3.0

per 100,000 females, respectively.⁵ Other studies have found that histology type, and stage of cancer diagnosis are associated with greater mortality rates.⁸ Whether these factors explain the greater mortality rate of uterus cancer among blacks in Florida is unknown (Figure 13).

Figure 14. Age-Adjusted Mortality Rate of Uterus Cancer, Florida, 2004



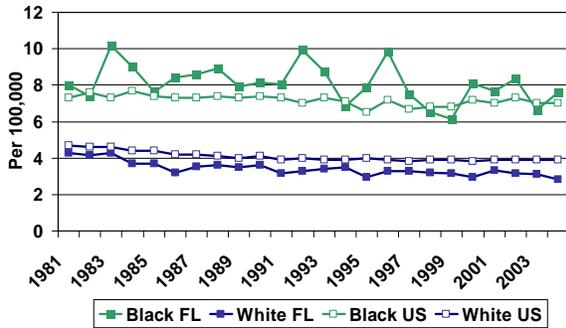
In 2004, the age-adjusted mortality rate ranged from 1.4 per 100,000 females in Polk County to 3.7 per 100,000 females in Duval County. The mortality rate in Duval County was significantly higher than the state rate (Figure 14).⁵

In 2004, the national mortality rate for uterus cancer declined by 11% (17% among whites and 4% among blacks) compared to the rates in 1981. Blacks had a higher mortality rate compared to whites, both at the national level and in Florida from 1981 to 2004 (Figure 15).

During the same time period in Florida, the mortality rates among whites were lower than the national mortality rates. The overall mortality rate in 2004 showed a statistically significant decline of 29% compared to the rate in 1981. In 2004, whites showed a statistically significant decline in mortality rate of 34% compared to 1981 rates. The percentage decrease in mortality rates was

greater in Florida than the decrease in the United States among both races.

Figure 15. Age-Adjusted Mortality Rate of Uterus Cancer, Florida and U.S., 1981-2004



Source: FCDS[®], SeerSTAT[®]

References

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