In this series, we examine the distribution of cancers among the U.S. population.

About 2 million people die of all causes in the U.S. each year; of these, about 25% die of cancer. In 1992, an estimated 1,130,000 new cases of cancer were diagnosed, and an estimated 520,000 cancer deaths occurred (in a population of about 250 million people).[1]

Cancers are not distributed evenly among the U.S. population. African-Americans, who make up about 12.6% of the population, have more than their fair share of cancer problems, whether we measure incidence rates (occurrence of new cancer cases per 100,000 population) or mortality rates (deaths per 100,000 population) or 5-year survival rates (the proportion of a population that survives for 5 years after diagnosis). Furthermore, as time passes, the cancer situation for African-Americans is deteriorating, relative to whites.

Unless otherwise noted, all our cancer data are taken from the National Cancer Institute’s (NCI) 1992 summary of cancer statistics for the period 1973 to 1989.[1] The numbers have all been adjusted (by NCI) for the size, racial makeup, and age-distribution of the U.S. population. NCI uses the term blacks to refer to African-Americans and we have retained that terminology.

MORTALITY: In its 1992 review of cancer statistics, the NCI said, "The extent to which blacks experience higher cancer mortality than whites is striking.... Not only do blacks have higher mortality rates than whites, but the mortality rates are increasing faster.... Further, mortality rates which are decreasing for whites are either still increasing for blacks or are not decreasing as quickly. For five cancers --larynx, oral cavity, pancreas, colorectal and leukemia --the mortality rates for whites have been decreasing while for blacks they have been increasing."[2]

INCIDENCE: NCI goes on: "The age-adjusted incidence rate for all cancer sites combined and both sexes has increased in both blacks and whites by 17% between 1973 and 1989. However, the magnitude of the overall cancer incidence rate among blacks is about 6% higher than among whites in 1989."[3]

SURVIVAL RATES: Here the story is the same. There are 9 cancers for which whites enjoy a better than 10% advantage over blacks in 5-year survival rate (colon/rectum; oral cavity; larynx; melanoma; female breast; cervix; uterus; prostate; and urinary bladder); whites also have a better than 10% advantage over blacks in 5-year survival rate for all cancer sites combined. Blacks have a more favorable survival rate than whites for cancers of the brain, and for multiple myeloma.

Here we present an analysis, cancer site by cancer site.

BREAST CANCER: In 1992, an estimated 181,000 breast cancers were diagnosed, and an estimated 46,300 deaths occurred.[4] (Three hundred of the deaths and 1000 of the cancers occurred among males.) The death rate for breast cancer in 1989 among whites was 27.5 per 100,000 whereas the death rate for blacks was 30.4 (10.5% worse than for whites).

The NCI says that the overall increase of 2.7% for female breast cancer, among all races combined, during the period 1973-1989, appears primarily due to a nearly 18% increase among black women. Among women under age 65, breast cancer mortality has been decreasing among whites, but increasing among blacks. Among women 65 and older, mortality has been increasing among both whites and blacks.

Despite the rapidly-increasing incidence rate among younger black women, the incidence rate among white women is still 20% higher than among blacks; however, the five-year relative survival rate for black women diagnosed during 1983-1988 is 17% less than for whites, resulting in a higher breast cancer death rate among black women.[5]

CERVIX: Total new cases (all races) in 1992: 13,500 estimated, with 4400 deaths estimated. The incidence rate among blacks has been consistently about twice that for whites, 14.8 vs. 7.8 per 100,000 during 1985-1989. This disparity is especially evident in a woman aged 65 and over with blacks experiencing nearly three times the incidence of whites during 1985-1989, 48.5 vs. 15.9 per 100,000. Black mortality (7.1 per 100,000) is nearly three times that for whites (2.6 per 100,000), again due largely to women aged 65 and older.

Cancer tends to spread. First it is localized (in one place); then it is "regional" (invading nearby areas); and finally it is "distant" (invading areas of the body far from the original site). Cervical cancer is generally detected earlier in whites than in blacks. Only about one third of cervical cancers among blacks are detected while the disease is localized, as compared to half for whites. Five-year survival rates are 89% for women diagnosed with localized disease and only 13% for women with distant disease. Thus early diagnosis is important for survival. For the past two decades, five-year relative survival rates have been 68% for whites and 60% for blacks. However, in the period 1983-1988, the rate for blacks declined to 55%.[6]

COLON & RECTUM: In 1992, there were an estimated 111,000 diagnoses of colon cancer and 45,000 rectal cancers. During the same year there were an estimated 51,000 deaths from colon cancer and 7300 deaths from rectal cancer.[7]

Between 1973 and 1989, the incidence of colorectal cancers increased 5.6% among white males, 36.1% among black males and 16.1% among black females. Among white females, the incidence rate dropped 3.8% during this period.

During the five-year period, 1985-1989, there were significant declines among white males (6.7%) and white females (9.9%). During the same period, the incidence rate decreased 3.3% among black females, but increased 0.1% among black males.[8]

In the period 1973-1989, the death rate from colorectal cancers declined 8.5% among white males and 20.0% among white females of all ages.[9] During the same period, the death rate increased 2.6% among black females and 22.5% among black males. During the past 5 years, the death rate for colorectal cancers reversed itself among black females of all ages and declined 4.4%, but during the same period the death rate increased 1.6% among black males of all ages.[10]

The five-year survival rate among white males improved from 49.1 per 100,000 to 58.8 per 100,000 between the periods 1974-76 and 1983-87. During the same periods, the survival rate for black men increased from 41.0 per 100,000 to 45.9 per 100,000. Thus, despite improvements, black males in 1983-87 did not achieve the survival rate that whites had achieved 10 years earlier.[11] The rate of improvement among whites is faster than the rate of improvement among blacks, so as time passes the disparity between the two groups is growing.

CANCER OF THE UTERUS: An estimated 32,000 new cases were diagnosed in 1992, with 5600 deaths estimated in 1992.

Incidence rates are higher among whites (22.3 per 100,000 in 1985-89) than among blacks (14.8 per 100,000 in 1985-89). Uterine cancer is detected while localized in 75% of cases among whites vs. only 52% of cases among blacks. This may explain why mortality among blacks was about twice as high (6.0 per 100,000 in 1985-89) as among whites during the same period (3.4 per 100,000). The overall relative survival rate is 30% lower among blacks than among whites.[12]

[To be continued next week.]
Figure 1. U.S. Cancer Incidence and Mortality Rates, 1985-89 (All Ages)

<table>
<thead>
<tr>
<th>Body Site</th>
<th>Incidence Rate</th>
<th>Mortality Rate</th>
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<td>Esophagus</td>
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</tr>
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[8] NCI, cited above in note 1, pgs VI.1 and VI.3.

[9] NCI, cited above in note 1, Table VI-6, pg. VI.8.


