

## The Burden of Prostate Cancer in Michigan

About 14 percent of Michigan males will be diagnosed with prostate cancer sometime during their lives, and about 3 percent of Michigan males will die of this disease. In 2002, there were 8,676 new cases of prostate cancer in Michigan. The age-adjusted incidence rate in Michigan was 195.0 per 100,000 men (171.8 for white men, and 297.2 for black men). There were 985 deaths from prostate cancer in Michigan in 2003. The age-adjusted mortality rate was 25.5 (23.6 for whites and 44.7 for blacks).

There was a sharp increase in incidence rates from 1988 to 1992 associated with the increased use of screening with the prostate-specific antigen (PSA) test. This resulted in cases being diagnosed earlier and a decrease in the proportion of cases diagnosed at the distant stage. The most likely explanation is that cases that would have been diagnosed later had their diagnosis date moved forward (lead time bias). The impact on survival remains to be established. According to the 1995-2000 results of the federally funded Surveillance, Epidemiology, and End Results (SEER) program, the five-year relative survival rates for prostate cancer were 100 percent for whites and 96 percent for blacks.

Death rates fluctuated between a low of 24.1 per 100,000 population in 1985 and a high of 28.6 per 100,000 in 1992. Between the Years 1994 and 2003, there has been an estimated annual decrease of 4.5% in mortality rates for prostate cancer. Between 1988 and 2003, the annual death rates for black males were 1.8 to 2.1 times higher than the rates for white males. For the period 1998-2003, Michigan residents lost a total of 59,490 years of life due to prostate cancer. The average number of years of life lost for men dying of the disease in 2003 was 9.5. (Years-of-life-lost calculations for people who die are based upon gender and race-specific life expectancy tables.) In 2002, there were 4,491 hospital discharges in Michigan of patients whose primary diagnosis was prostate cancer. The average length of stay was 2.98 days.

In 2002, for its regular Michigan subscribers, Blue Cross and Blue Shield paid \$34,429,664 on claims for all phases of treatment of prostate cancer, an average of \$7,651 per case. During the same period, Medicare Part A paid an average of \$4,376 per case. It is worth noting that these figures do not include out-of-pocket payments for deductibles, co-payments, medications, transportation, and other non-covered items. Likewise, they also do not reflect lost wages and opportunity costs of patients and their family members or other care givers. Thus, these numbers represent the minimum documented costs of cancer care in Michigan. They are useful as an indication of the magnitude of expenditures and in comparing the costs of the specific cancers. If tracked over time, the data would demonstrate one facet of progress in cancer control.

The above cost data does not capture the expenditures for men who are uninsured or underinsured or the lack of appropriate treatment of these men. A fundamental effort for any cancer control plan should be supporting efforts to make diagnostic and treatment modalities available to all men regardless of insurance status.

In addition to incidence, mortality, and cost, morbidity associated with prostate cancer and with the treatment of prostate cancer is a critical measure of the burden of this disease, especially in light of the relatively long survival time of most men with prostate cancer compared to other

cancers. There is a need to develop or adapt tools to track morbidity in prostate cancer populations as measured by changes in the quality of life of survivors including physical, psychosocial, and functional indicators.

*(Data in this introduction is from **The Cancer Burden in Michigan: Selected Statistics**, prepared by the Michigan Public Health Institute in support of the Michigan Cancer Consortium Initiative, December 2005. For more complete information, see Appendices E and F.) Also available at [www.michigancancer.org/Resources/SpecialMCCReports.cfm](http://www.michigancancer.org/Resources/SpecialMCCReports.cfm)*