Pennsylvania Department of Health

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PENNSYLVANIA
CANCER INCIDENCE and MORTALITY
1991-1995

Division of Health Statistics
Pennsylvania Cancer Registry
Pennsylvania Cancer Control Program
Harrisburg, Pennsylvania
INTRODUCTION

This is the tenth annual publication since 1985 to present cancer incidence and mortality statistics for the entire Commonwealth of Pennsylvania. Two Cancer Incidence in Pennsylvania reports for only certain regions of the state were also published with 1983 and 1984 incidence data.

Data for 1995 were submitted by approximately 210 acute care hospitals across the Commonwealth. Facilities not complying with a reporting deadline of July 15, 1996 were contacted and follow-up action was taken. Once reporting of 1995 cases was complete, the data were matched by patient identifiers and merged by primary site, laterality, and histology to unduplicate the file for incidence determination. Reports were manually reviewed to verify and resolve linkage discrepancies and to determine if the additional reports represent a new primary or a previously reported primary. The incidence file was then created and edited to insure data accuracy.

Utilizing information collected in the Pennsylvania Cancer Registry, the Department of Health can develop programs to better address Pennsylvania’s cancer program needs. Registry data can be used to plan and evaluate cancer control measures in the areas of risk assessment, prevention, early detection, patient care, public and professional education, and clinical research. Detailed incidence data for Pennsylvania are now available to government agencies, as well as educational, planning and research organizations and concerned private citizens.

The Division of Health Statistics welcomes comments and suggestions on the content and format of this report. Staff are available to answer questions regarding the report, including utilization and limitations of the data. Please address all comments, questions, requests for data, etc. to:

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ORGANIZATION of the REPORT

The report is organized into two parts. The first and much larger part entitled Cancer Incidence and Mortality by Site 1991-1995 is divided into 24 sections— an All Sites section plus 23 sections for each major cancer site. These 23 sites comprise approximately 93 percent of the male cases and approximately 85 percent of the female cases diagnosed among residents during 1991-1995 and reported to the registry. All other sites, such as bones and joints, soft tissue, eye, miscellaneous reticuloendothelial, cervix uteri (in situ) and other ill-defined and unknown sites, accounted for approximately 11 percent of all new cancer cases.

The first page of each section presents Data Highlights. This provides a summary of descriptive incidence and mortality analyses shown in this report and includes some comparisons to observations from national data sets. Also on the first page is Risk Factors which includes information on factors known to be associated with an increase in risk or incidence rates. While there are large numbers of associations cited in the epidemiological literature, only those factors are listed for which there are consistent findings and well-documented associations. Certain associations are not listed if a more direct association can be provided. For example, the association of higher incidence rates of lung cancer in lower socioeconomic males can be explained by the higher prevalence of cigarette smokers in these groups. Another part of the first page, Early Detection, provides a summary of the availability and effectiveness of early detection methods for each type of cancer. Where applicable, the current recommendations of the American Cancer Society are described. Also included on the first page of each section is a paired bar chart which displays average annual age-adjusted incidence rates and mortality rates by sex and race for 1991-1995. Adjusted rates used in this report were calculated by the direct method, using eighteen five-year age groups, corresponding to those age categories in the 1970 U.S. standard million population (see Technical Notes).

Data are presented for males and females and are stratified by race. Race data are shown for white and black categories. According to 1995 state population estimates, blacks represented 9.7 percent of Pennsylvania's population and 87 percent of those residents of races other than white. Cases or deaths of unknown sex or race were included in the appropriate “TOTAL” categories only.

Incidence trends from 1986 through 1995 are shown next. These include annual cases and age-adjusted rates by sex and race. Average annual age-specific rates and incidence counts for 1991-1995 by sex and race are presented next. Tables displaying age-specific incidence rates include a “TOTAL” category for all ages. These rates are crude, that is, not adjusted for age. While crude rates are useful for describing the disease burden in a particular population, they should not be used for comparing rates between different populations. Information on stage of disease at diagnosis by sex and race for 1995 is also presented. A set of standardized guidelines and codes for staging have been used, based on a scheme adopted from the National Cancer Institute (see Technical Notes).

Mortality data are presented next. Annual age-adjusted rates are used to describe the trends in the death rates for the ten-year period from 1986 through 1995. Age-specific mortality rates are also shown for the five-year period 1991-1995. These average annual rates were used, as in the case of incidence data, to improve the reliability of the rates. Again, the “TOTAL” or all ages rate is not adjusted for age.

The county-specific analyses include average annual age-adjusted incidence and mortality rates by sex for each of the 67 counties and the entire state for 1991 through 1995, to improve the reliability of the rates. The numbers of cases and deaths in the county tables are total cases and deaths that occurred among residents throughout the five-year period of 1991-1995.

The second part of the report entitled Cancer Incidence and Mortality Summary for 1995 presents summary tables of the 1995 number of cases and deaths and age-adjusted incidence and mortality rates by sex and race for each of the 23 sites. Number of cases and deaths by sex for 1995 are also shown by county of residence for the five major primary sites.