RATES DEFINITIONS

Crude Rates

The crude rate is the total number of new cancer cases diagnosed, or cancer deaths, in a given period divided by the total population at risk in that period. Crude rates are expressed per 100,000 persons per year. The calculation of the crude rate (**m**) can be written as:

$$m = N/P \times 100,000$$

where **N** is the total number of new cases or deaths in a period, and **P** is the population at risk in the same period.

Age-Specific Rates

The age-specific rate is the number of new cancer cases or deaths occurring in persons in a given age group divided by the population in that age group in a given period expressed per 100,000 persons. For the rate calculations in this report, age groups are defined by each five-year interval of age: 0 to 4, 5 to 9, 10 to 14, etc. The age specific rate (λ_i) is calculated as:

$$\lambda_i = n_i/p_i \times 100,000$$

where **i** is the age group, n_i is the number of new cancer cases (or deaths) in the age group in a given period, and p_i is the population at risk in the age group in the same period.

Age-Adjusted Rates

Age is an important factor in cancer incidence and mortality. Since cancer occurs more often in the elderly, populations with a high proportion of older people will have more cancer cases and deaths than populations with a high proportion of younger people. Because age distributions differ greatly among Florida counties and races, the impact of age is normalized in order to make valid comparisons of incidence and mortality. Age-adjustment is a process to correct for the differences in cancer cases and death counts caused by differing age composition among different populations and counties. The direct method of age-adjustment is used to calculate age-adjusted incidence and mortality rates in this report. The standard population used in this report is the 2000 U.S. standard population, in accordance with the 1998 U.S. Department of Health and Human Services recommendation. The age-adjusted rate (Λ) is defined as:

$$\Lambda = \Sigma(\lambda_i w_i)$$

where **i** is the age group, λ_i is the age-specific rate for an age group, and w_i is the proportion of individuals in the 2000 U.S. standard population in that age group.