

Age-adjusted Mortality Usage Notes

- There are nine presentation types for Age-adjusted Mortality Data Query. They are:
 1. Bar Charts present selected population, death numbers, and mortality rates with bar charts grouped by area or by year.
 2. County Rank and Comparison Plots present selected population, death numbers, mortality rates, and county ranking and comparison plot.
 3. Time Trend Curves present mortality rates with trend curves over time (by years).
 4. Scatter Plots present mortality rates and county scatter plot for two indicators.
 5. Pie Charts present death numbers and percentages with pie charts featured by race or by gender.
 6. Statewide Tables present mortality rates for all counties and regions with multiple indicator selections.
 7. Selected Area Tables present mortality rates for selected areas with multiple indicator selections.
 8. Selected Area Profiles present death numbers and mortality rates for all causes of death categorized using human physiopathologic systems by ICD-10.
 9. Leading Causes present mortality rates with bar charts and pie charts for the most common causes of death (top 1 – 10 leading causes of death).
- The population data for all years is based on Tennessee Population Estimates and Projections 2008 revision. The population estimation method is more fully described in [Tennessee Population Projections 2000-2010](#).
- The International Classification of Diseases (ICD) is designed to promote international comparability in the collection, processing, classification, and presentation of mortality statistics. The ICD has been revised periodically to incorporate changes in the medical field. The Tenth Revision (ICD-10) was adopted for coding causes of death on HIT in 1999, and the causes of death codes based on Ninth Revision (ICD-9) before 1999 were re-grouped into ICD-10 categories at that time.
- Three-year annualized rates use the total number of deaths in three years in the numerator and the total population over three years in the denominator.

- Age-adjusted rate statistically is a weighted average of the age-specific rates, where the weights represent the fixed population proportion by age. Age-adjustment removes the confounding influence of variation in population age composition when making mortality rate comparisons - as among counties or between individual counties and the State. Theoretically age-specific mortality data, such as rates for five-year age groups, similarly could be age-adjusted. In practice, however, adjustment is unnecessary because age-specific data minimize the confounding problem. Age-adjustment is especially valuable and important when comparing data for racial groups.
- Age-adjusted rates are computed using Tennessee 2008 Population Estimates and Projections Series from Division of Health Statistics, Year 2000 United States Standard Population from NCHS with standard eleven age intervals, and the Direct Method of Adjustment.
- It is also important to be aware of its limitations when using age-adjusted rates because it is not a direct or actual measure of mortality/morbidity risk. Usually, crude mortality rate is used to measure the actual disease burden.
- When using the *County Rank and Comparison Plot* analysis option and you wish to compare a county with the region that contains the county, make sure that the region is chosen in the Selection form's first "Select an Area" box and the county of interest is chosen via the "Comparison Area" box. Otherwise the county may be obscured on the plot.
- When the output from a *Bar Chart* appears on the screen, the mortality rate (deaths per 100,000 population) will appear in a status bar on the screen when you move the cursor over a "bar" for the chart.
- When the output from a *County Comparison Plot* appears on the screen, you can now move the cursor over a "dot" for the plot and the county's name and mortality rate (deaths per 100,000 population) will appear in a status bar on the screen, and if you click on the "dot", a link will lead you to the county profile pages.
- When the output from a *Scatter Plot* appears on the screen, the counties' names and two cause-specific mortality rates (deaths per 100,000 population) that you selected will appear in a status bar on the screen when you move the cursor over a "dot" for the plot.