MORTALITY SEX RATIO

1. Definition:
MORTALITY SEX RATIO is the sex-specific death rate for male residents (for a specific geography such as country, state or county for a specified time period, usually a calendar year) divided by the sex-specific death rate for female residents (for the same geography and time period).

2. Calculation:

__Sex –Specific Death Rate for Male Residents____
Sex-Specific Death Rate for Female Residents

3. Example:
10.2 = death rate for male residents of the state in 2008
7.9 = death rate for female resident of the state in 2008
(10.2/7.9) = 1.3 which is the ratio of the male to female death rate (i.e., the male death rate was 1.3 times higher than the female death rate)

Additional links to State/National websites with calculation and/or definition -
Sex Ratios for Analyzing Mortality Data - Pennsylvania Department of Health

4. Technical Notes:
- Calculation of mortality sex ratios by major or leading causes of death is commonly done to evaluate the differences in mortality patterns by sex. Further numerical grouping of mortality sex ratios by cause (e.g., ratios of 3.0 or higher, 2.0-2.9, 1.0-1.9, and less than 1.0) provides a very effective method for analyzing/presenting the different mortality patterns in a specific population by sex or for comparing differences in these patterns among demographic groups (age, sex, race, education etc.). (Dever Alan G.E., *Epidemiology in Health Services Management*; Aspen Publishers, 1984; pp. 155-157.)
- Mortality sex ratios are almost always higher among males except for some chronic conditions (diabetes, hypertension) and illnesses that occur more frequently among older persons such as Alzheimer's disease. This is directly due to the fact that life expectancy is higher among women. See *Mortality Trends for Alzheimer's Disease, 1979-1991*; National Center for Health Statistics, Vital and Health Statistics, Series 20, Number 28.
- Although more males than females are born alive, females exceed males in virtually every age group after about age 20 and this difference increases with age. Therefore, age-specific death rates by sex may be more useful than sex ratios in analyzing mortality experiences by sex.

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