

# 15. Glossary

## #

**95% Confidence Limits:** A range of values for a variable that indicates the likely location of the true value of a measure.

## A

**Association:** Statistical relationship between two or more events, characteristics, or other variables.

**Average:** Average of the values in the numeric expression.

## C

**Case:** In epidemiology, a countable instance in the population or study group of a particular disease, health disorder, or condition under investigation. Sometimes, an individual with the particular disease.

**Case Based:** An advanced display process that allows users to show different symbols based on levels of classification (e.g., Confirmed, Probable, Discarded, Suspected).

**Chi Square:** A test of statistical significance used to determine how likely an observed association between an exposure and a disease could have occurred because of chance alone, if the exposure was not actually related to the disease. Tests for the presence of a trend in dose response or other case control studies where a series of increasing or decreasing exposures is being studied.

**Conditional Probability:** Estimate of the probability of survival of a defined group at a designated time interval.

**Control:** In a case-control study, comparison group of persons without disease.

**Count:** Number of values in the expression or number of selected rows.

## D

**Date Literals:** A specific date used in functions or commands in Check Code or in Classic Analysis.

**DLL:** Dynamic Link Library

## E

**Elementary outcomes:** All possible results of a random experiment.

**Epi Info:** Epi Info for Windows

**Epidemic:** The occurrence of more cases of disease than expected in a given area or among a specific group of people over a particular period of time.

**Epidemiology:** The study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to the control of health problems.

**Evaluation:** A process that attempts to determine as systematically and objectively as possible the relevance, effectiveness, and impact of activities in the light of their objectives.

## F

**Frequency:** The count in any given interval. The relative frequency is the proportion of weights in each interval.

## G

**GIS:** Geographic Information System

## H

**Histogram:** A graphical representation of the frequency of data values within small data ranges which are created by dividing the total range of data into 5 to 20 equal subintervals. The most common histogram form is the Bell Curve, also known as a Normal Distribution.

## I

**Interaction:** The odds ratio (OR) for a variable varies with the value of another variable.

## M

**Maximum:** Highest value in the expression.

**Mean:** Equal to the average of the data. Add all data together and divide by the number of observations.

**Median:** The measure of central location which divides a set of data into two equal parts. A center or mid-point of the data. Order the data from the smallest to the largest and the center point is the median. For odd numbers, it is the center number. For even numbers, it is the average of the center numbers.

**Minimum:** Lowest value in the expression.

## O

**ODBC:** Open Database Connectivity

**Odds Ratio:** A measure of association that quantifies the relationship between an

exposure and health outcome from a comparative study. Also known as the cross-product ratio.

**Outbreak:** Synonymous with epidemic. Sometimes the preferred word because it may escape sensationalism. Alternatively, a localized as opposed to generalized epidemic.

**Outliers:** The number of data values that are much smaller or larger than the rest of the data values.

## P

**P-Value:** The probability that an observed association between an exposure and a disease could have occurred because of chance alone, if the exposure was not actually related to the disease.

**PGM Files:** Commands entered into Classic Analysis generate lines of code in the Program Editor and can be stored in the current PRJ file. Programs can be saved internally within the project or externally as a text file with a .pgm7 file extension. This makes a neat package of data and programs that can be copied to another system or sent by email for use elsewhere.

## R

**Random experiment:** The process of observing the outcome of a chance event.

**Ratio:** The value obtained by dividing one quantity by another.

**Risk:** The probability that an event will occur (e.g., an individual will become ill or die within a stated period of time or age).

**Risk Ratio:** A comparison of the risk of some health-related event (e.g., disease or death in two groups).

## S

**Sample space:** The set or collection of all elementary outcomes.

**Standard Deviation:** A statistical summary of how dispersed the values of a variable are around its mean. The average of all distances of each data point from the mean.

**Standard Error:** (of the mean) The standard deviation of a theoretical distribution of sample means of a variable around the true population mean of that variable.

**Strata:** A population subgroup defined by any number of demographic characteristics (e.g., age, sex, race, etc.).

**Sum:** Total of the values in the numeric expression.

## V

**Variable:** Any characteristic or attribute that can be measured.

**Variance:** A measure of the dispersion shown by a set of observations.