Module 5
Section B: Association and Causation

Term
Association

Module 5
Section B: Association and Causation

Term
Odds ratio (OR)

Module 5
Section B: Association and Causation

Term
Relative risk (RR)

Module 5
Section C: Descriptive Statistics

Term
Attack rate

Module 5
Section C: Descriptive Statistics

Term
Benchmarking

Module 5
Section C: Descriptive Statistics

Term
Bias

Module 5
Section C: Descriptive Statistics

Term
Confounder

Module 5
Section C: Descriptive Statistics

Term
Correlation

The probability of having a particular risk factor if a condition or disease is present divided by the probability of having the risk factor if the disease or condition is not present.

The relationship between a risk factor and an outcome, such as a disease.

The proportion of persons at risk who become infected over an entire period of exposure or a measure of the risk or probability of becoming a case.

The probability of developing a disease if the risk factor is present divided by the probability of developing the disease if the risk factor is not present.

A systematic error in study design, subject recruitment, data collection, or analysis that results in a mistaken estimate of the true population parameter. (NIH)

The act of measuring the quality of something by comparing it with something else of an accepted standard.

Calculation of the direction and magnitude of a relationship between two variables.

A variable that is an independent cause or predictor of the exposure and the outcome and is not on the path between the exposure and the outcome; also called a confounding variable.

Module 5
Section C: Descriptive Statistics

Term
Incidence proportion

Module 5
Section C: Descriptive Statistics

Term
Incidence rate

Module 5
Section C: Descriptive Statistics

Term
Interval scale

Module 5
Section C: Descriptive Statistics

Term
Mortality rate

Module 5
Section C: Descriptive Statistics

Term
Nominal scale

Module 5
Section C: Descriptive Statistics

Term
Ordinal scale

Module 5
Section C: Descriptive Statistics

Term
Period prevalence

Module 5
Section C: Descriptive Statistics

Term
Point prevalence

Represents the proportion of new cases over a particular period of time.

A measure of the number of new cases or events within the population at risk during the identified time period.

A measure of the frequency of death in a defined population during a specified time (usually a year).

A measurement in descriptive statistics in which the exact distance between any two ordinal scale observations is known and assumed to be equal but attributes measured have no real, rational zero point.

A measurement in descriptive statistics that applies ranking to categorical data on a relative scale so that each category is distinct and stands in some definite relationship to each of the other categories but does not indicate how much greater each level is than another.

The crudest level of measurement in descriptive statistics. Creates categorical data in which no order is implied by the classifications. Values cannot be measured mathematically (e.g., cannot be averaged), but frequency or percentage can be applied.

Prevalence at a specific point in time (e.g., on a given day).

Prevalence during a span of time (e.g., over the course of a given month).

Module 5 *Section C: Descriptive Statistics* **Term** Proportion APIC M-Surveillance Learning System © 2025	**Module 5** *Section C: Descriptive Statistics* **Term** Rate APIC M-Surveillance Learning System © 2025
Module 5 *Section C: Descriptive Statistics* **Term** Ratio APIC M-Surveillance Learning System © 2025	**Module 5** *Section C: Descriptive Statistics* **Term** Ratio scale APIC M-Surveillance Learning System © 2025
Module 5 *Section C: Descriptive Statistics* **Term** Regression APIC M-Surveillance Learning System © 2025	**Module 5** *Section C: Descriptive Statistics* **Term** Standardization APIC M-Surveillance Learning System © 2025
Module 5 *Section C: Descriptive Statistics* **Term** Stratification APIC M-Surveillance Learning System © 2025	**Module 5** *Section D: Inferential Statistics* **Term** 2 by 2 table APIC M-Surveillance Learning System © 2025

A specific kind of ratio that includes a unit of time, and provides information about how fast events are occurring.

A specific kind of ratio that compares a part to the whole.

The highest level of measurement in descriptive statistics; creates interval scale observations that have an absolute, real zero point, which allows for higher levels of statistical analysis.

The comparison of any two quantitative values.

Used when one needs to compare the event rates of different groups, for example, if an IP wants to compare catheter-associated urinary tract infection rates for two facilities.

A way to explain the relationship between a dependent variable (y) and one or more explanatory (or independent) variables (x).

A table with two outcome columns (e.g., disease and no disease) and two exposure rows (e.g., exposed and not exposed).

The process by which the population in a dataset is separated into distinct categories.

Module 5
Section D: Inferential Statistics

Term
Deviation

Module 5
Section D: Inferential Statistics

Term
Dispersion

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Section D: Inferential Statistics

Term
Level of significance

Module 5
Section D: Inferential Statistics

Term
Mean

Module 5
Section D: Inferential Statistics

Term
Measures of central tendency

Module 5
Section D: Inferential Statistics

Term
Median

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Section D: Inferential Statistics

Term
Mode

Module 5
Section D: Inferential Statistics

Term
Negative predictive value (NPV)

The distribution of data around the mean.

The difference between an individual value in a data set and the mean value.

The sum of all values divided by the total number of values.

The probability value arbitrarily chosen by the researcher as the desired level of probability at which one may feel secure in rejecting the null hypothesis; typically set at 0.05 or 0.01.

The midpoint of a set of observations

Describe how observations cluster around a middle value and locate only the center of a distribution measure; include mean, median, and mode.

A measure of the proportion of persons without a disease who test negative.

The observation that occurs most frequently in a data set.

Module 5
Section D: Inferential Statistics

Term
Normal distribution

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Module 5
Section D: Inferential Statistics

Term
Population

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Module 5
Section D: Inferential Statistics

Term
Positive predictive value (PPV)

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Module 5
Section D: Inferential Statistics

Term
Power

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Section D: Inferential Statistics

Term
Range

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Section D: Inferential Statistics

Term
Reliability

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Module 5
Section D: Inferential Statistics

Term
Sample

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Module 5
Section D: Inferential Statistics

Term
Sampling distribution

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The set of all observations of interest to the investigator (the universe).

A bell-shaped curve on a graph in which the distribution (spread) of the values is even on both sides of the mean (both halves are equal) and the mean, median, and mode are all equal.

The ability of a test to detect a specified difference.

A measure of the proportion of persons with a positive test who have a disease.

The ability of the indicator to accurately and consistently identify the events it was designed to identify across multiple healthcare settings. (The Joint Commission)

The difference between the smallest and largest values in a data set.

The distribution of samples taken.

A group of observations selected from a population and chosen to represent the population as a whole.

Module 5
Section D: Inferential Statistics

Term
Sensitivity

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Section D: Inferential Statistics

Term
Specificity

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Section D: Inferential Statistics

Term
Standard deviation

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Section D: Inferential Statistics

Term
Variance

Module 5
Section D: Inferential Statistics

Term
p value

A measure of the probability that a test correctly identifies persons without a disease as negative.

A measure of the probability that a test correctly identifies as positive persons who have a disease.

The deviation around the mean of a distribution.

A measure that reflects the distribution of values around the mean; it is the average of all deviations in a data set and indicates how spread out the data are around the mean.

The probability of observing a sample in which the test statistic is greater than or equal to the test statistic for the sample that was actually observed.