Fold each printed sheet in half lengthwise. The left side of the document will list the term and the right side will list the definition. Tape or staple the open edges of your flashcards. Cut out your flashcards on the solid lines indicated and fold them on the dotted lines.

Module 5
Section B: Association and Causation

Term
Association

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

Module 5
Section B: Association and Causation

Term
Odds ratio (OR)

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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.

Module 5
Section B: Association and Causation

Term
Relative risk (RR)

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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.

Module 5
Section C: Descriptive Statistics

Term
Attack rate

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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.

Module 5
Section C: Descriptive Statistics

Term
Benchmarking

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

Module 5
Section C: Descriptive Statistics

Term
Bias

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

Module 5
Section C: Descriptive Statistics

Term
Confounder

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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
Correlation

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

Module 5
Section C: Descriptive Statistics

Term
Incidence proportion

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

Module 5
Section C: Descriptive Statistics

Term
Incidence rate

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

Module 5
Section C: Descriptive Statistics

Term
Interval scale

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.

Module 5
Section C: Descriptive Statistics

Term
Mortality rate

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

Module 5
Section C: Descriptive Statistics

Term
Nominal scale

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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.

Module 5
Section C: Descriptive Statistics

Term
Ordinal scale

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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.

Module 5
Section C: Descriptive Statistics

Term
Period prevalence

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

Module 5
Section C: Descriptive Statistics

Term
Point prevalence

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

Module 5
Section C: Descriptive Statistics

Term
Proportion

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

Module 5
Section C: Descriptive Statistics

Term
Rate

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

Module 5
Section C: Descriptive Statistics

Term
Ratio

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The comparison of any two quantitative values.

Module 5
Section C: Descriptive Statistics

Term
Ratio scale

APIC M-Surveillance Learning System © 2025

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.

Module 5
Section C: Descriptive Statistics

Term
Regression

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

Module 5
Section C: Descriptive Statistics

Term
Standardization

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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.

Module 5
Section C: Descriptive Statistics

Term
Stratification

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

Module 5
Section D: Inferential Statistics

Term
2 by 2 table

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

Module 5
Section D: Inferential Statistics

Term
Deviation

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

Module 5
Section D: Inferential Statistics

Term
Dispersion

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The distribution of data around the mean.

Module 5
Section D: Inferential Statistics

Term
Level of significance

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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.

Module 5
Section D: Inferential Statistics

Term
Mean

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

Module 5
Section D: Inferential Statistics

Term
Measures of central tendency

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

Module 5
Section D: Inferential Statistics

Term
Median

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The midpoint of a set of observations

Module 5
Section D: Inferential Statistics

Term
Mode

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The observation that occurs most frequently in a data set.

Module 5
Section D: Inferential Statistics

Term
Negative predictive value (NPV)

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

Module 5
Section D: Inferential Statistics

Term
Normal distribution

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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.

Module 5
Section D: Inferential Statistics

Term
Population

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

Module 5
Section D: Inferential Statistics

Term
Positive predictive value (PPV)

APIC M-Surveillance Learning System © 2025

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

Module 5
Section D: Inferential Statistics

Term
Power

APIC M-Surveillance Learning System © 2025

The ability of a test to detect a specified difference.

Module 5
Section D: Inferential Statistics

Term
Range

APIC M-Surveillance Learning System © 2025

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

Module 5
Section D: Inferential Statistics

Term
Reliability

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

Module 5
Section D: Inferential Statistics

Term
Sample

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

Module 5
Section D: Inferential Statistics

Term
Sampling distribution

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The distribution of samples taken.

Module 5
Section D: Inferential Statistics

Term
Sensitivity

APIC M-Surveillance Learning System © 2025

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

Module 5
Section D: Inferential Statistics

Term
Specificity

APIC M-Surveillance Learning System © 2025

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

Module 5
Section D: Inferential Statistics

Term
Standard deviation

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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.

Module 5
Section D: Inferential Statistics

Term
Variance

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The deviation around the mean of a distribution.

Module 5

Section D: Inferential Statistics

Term

p value

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.