

Epidemiological Statistical Measures

Epidemiology · Answer Key · 10 Questions

1. What is the primary focus of epidemiology?

- A) Individual patient diagnosis
- B) Populations and groups of subjects**
- C) Clinical drug manufacturing
- D) Hospital administration

2. Which measure quantifies the proportion of subjects with a disease at a specific moment?

- A) Incidence density
- B) Point prevalence**
- C) Standardised mortality ratio
- D) Attributable risk

3. What does the denominator of Incidence Density (ID) represent?

- A) Total population at start
- B) Total population at end
- C) Sum of individual observation times**
- D) Number of new cases

4. Which measure is defined as the ratio of the risk of disease in exposed versus unexposed groups?

- A) Relative Risk (RR)**
- B) Number Needed to Treat (NNT)
- C) Standardised Mortality Ratio (SMR)
- D) Population Attributable Risk (PAR)

5. What does an NNT value closer to 1 signify?

- A) The treatment is ineffective
- B) The treatment is highly effective**
- C) The treatment is harmful
- D) The study is biased

6. When is the Odds Ratio (OR) most similar to the Relative Risk (RR)?

- A) When the disease is very common
- B) When the study is a clinical trial
- C) When the disease occurs infrequently**
- D) When the population is small

7. What is the main advantage of using Incidence Density (ID) over Accumulated Incidence (AI)?

- A) It is easier to calculate
- B) It is only for short-term studies
- C) It can be used for dynamic or open populations**
- D) It does not require time data

8. What does the Number Necessary to Harm (NNH) measure?

- A) The number of people needed to prevent a disease
- B) The frequency of a disease in a population
- C) The population exposed to a risk factor
- D) The number of patients required before an adverse event appears**

9. What is the primary purpose of the Standardised Mortality Ratio (SMR)?

- A) To compare observed mortality with expected mortality**
- B) To calculate the prevalence of a rare disease
- C) To measure the speed of disease evolution
- D) To determine the incubation period

10. In epidemiology, why is comparison considered a basic element?

- A) Because it is required by law
- B) Because it enables the evaluation of healthcare problems in populations**
- C) Because it simplifies data collection
- D) Because it removes the need for statistics