

# Public Health Principles and Epidemiology

Public Health · Answer Key · 8 Questions

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## 1. What is the primary definition of 'incidence' in epidemiological studies?

- A) The total number of existing cases in a population at a specific time
- B) The number of new cases of a disease that develop in a population during a defined period**
- C) The proportion of a population that has ever been diagnosed with a disease
- D) The rate of mortality associated with a specific chronic condition

## 2. Which phase of a clinical trial is primarily designed to assess the long-term safety and rare side effects of a vaccine in a large population?

- A) Phase I
- B) Phase II
- C) Phase III
- D) Phase IV**

## 3. What is the epidemiological term for the 'basic reproduction number' ( $R_0$ ) of an infectious agent?

- A) The number of secondary infections produced by a single infected individual in a fully susceptible population**
- B) The duration of time an infected individual remains contagious
- C) The percentage of a population that must be immune to achieve herd immunity
- D) The number of fatal cases resulting from an index case

## 4. Which international organization is responsible for the implementation of the International Health Regulations (IHR) to prevent the spread of disease?

- A) United Nations Children's Fund (UNICEF)
- B) World Health Organization (WHO)**
- C) World Bank
- D) Doctors Without Borders (MSF)

## 5. In the context of public health, what does 'DALY' stand for as a measure of disease burden?

- A) Daily Average Life Yield
- B) Disability-Adjusted Life Year**
- C) Disease-Associated Loss Yield
- D) Demographic Annual Life Year

**6. Which type of study design is considered the 'gold standard' for determining the efficacy of a new medical intervention?**

- A) Case-control study
- B) Cross-sectional study
- C) Randomized controlled trial**
- D) Ecological study

**7. What is the primary purpose of 'sentinel surveillance' in public health systems?**

- A) To conduct a complete census of all disease cases in a country
- B) To monitor trends in specific health events through a limited network of reporting sites**
- C) To enforce mandatory quarantine protocols during an outbreak
- D) To determine the genetic origin of a viral pathogen

**8. Which term describes a disease that is constantly present in a specific geographic area or population group at a low but stable frequency?**

- A) Pandemic
- B) Epidemic
- C) Endemic**
- D) Sporadic