

Epidemiology Basics

Epidemiology · Answer Key · 18 Questions

1. What is the primary goal of epidemiology?

- A) To develop new pharmaceutical drugs.
- B) To understand the causes and distribution of diseases in populations.**
- C) To perform complex surgical procedures.
- D) To provide individual patient care.

2. Which of the following is a key component in the definition of an epidemic?

- A) A rare disease occurring in a single individual.
- B) An unexpected increase in the number of disease cases in a specific geographic area.**
- C) A disease that affects only animals.
- D) A chronic condition with a predictable incidence.

3. What does 'incidence' measure in epidemiology?

- A) The total number of existing cases of a disease.
- B) The rate at which new cases of a disease occur in a population.**
- C) The severity of a disease.
- D) The mortality rate from a specific cause.

4. The study of the frequency, pattern, and causes of health-related states and events in specified populations is known as:

- A) Virology
- B) Immunology
- C) Epidemiology**
- D) Genetics

5. What is 'prevalence' in epidemiology?

- A) The rate of new infections.
- B) The proportion of a population that has a specific disease or condition at a given time.**
- C) The speed at which a disease spreads.
- D) The likelihood of recovering from an illness.

6. A disease that occurs at a consistent, expected level in a population is called:

- A) An epidemic
- B) A pandemic
- C) An endemic**
- D) An outbreak

7. Which type of study observes and measures factors in a group of people without manipulating any variables?

- A) Experimental study
- B) Clinical trial
- C) Observational study**
- D) Intervention study

8. What does the 'distribution' of a disease refer to in epidemiology?

- A) The genetic predisposition to a disease.
- B) The way a disease spreads through a population and where it occurs.**
- C) The severity of symptoms experienced by patients.
- D) The treatment options available for a disease.

9. A study that follows a group of individuals over time to see who develops a particular disease is known as a:

- A) Cross-sectional study
- B) Case-control study
- C) Cohort study**
- D) Ecological study

10. Which term describes a disease that spreads across multiple continents or worldwide?

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

11. What is a 'risk factor' in epidemiology?

- A) A medical cure for a disease.
- B) A characteristic or exposure that is associated with an increased chance of developing a disease.**
- C) A method for preventing disease transmission.
- D) A diagnostic test for a specific illness.

12. Which of the following is a common source of data for epidemiological studies?

- A) Personal diaries
- B) Social media posts
- C) Health records and surveys**
- D) Fortune telling

13. The study of how diseases are transmitted from person to person or from the environment to people is called:

- A) Descriptive epidemiology
- B) Analytical epidemiology
- C) Environmental epidemiology
- D) Infectious disease epidemiology**

14. What does a 'case definition' in epidemiology refer to?

- A) A summary of disease symptoms.
- B) Criteria used to determine who counts as a case of a particular disease.**
- C) A list of potential treatments.
- D) The genetic makeup of a pathogen.

15. When a disease occurs in greater numbers than expected in a particular region or during a particular season, it is called:

- A) A pandemic
- B) An endemic
- C) An epidemic**
- D) A sporadic disease

16. Which field investigates patterns and determinants of health and disease in populations and uses this knowledge to control health problems?

- A) Pharmacology
- B) Pathology
- C) Epidemiology**
- D) Biochemistry

17. A study that compares individuals with a particular disease (cases) to individuals without the disease (controls) to identify potential causes is a:

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

18. What is the 'determinant' of a disease in epidemiology?

- A) The cure for the disease.
- B) A factor that influences the occurrence of a disease.**
- C) A measure of disease severity.
- D) The geographic location of the disease.