Test Bank for Infectious Disease Epidemiology - An Introduction 1st Oren

Chapter 2: Concepts of Disease Transmission

Definitional–Information Retrieval Questions

These definition questions are great as a random select, helping students to distinguish between terms, while having a similar challenge level.

1. When a mother passes a disease to her sister, it is an example of
    *a. horizontal transmission
    b. vertical transmission
    c. direct transmission
    d. indirect transmission
2. When a mother passes a disease to her child, it is an example of
    a. horizontal transmission
    *b. vertical transmission
    c. direct transmission
    d. indirect transmission

These three definition questions are great as a random select, helping students to distinguish between terms, while having a similar challenge level.

3. Which of the following describes the likelihood a disease infects others, commonly examined using the proportion of exposed individuals who become infected?
    *a. infectivity
    b. pathogenicity
    c. virulence
4. Which of the following describes the likelihood of developing clinical disease, commonly examined through the proportion of infected individuals who develop disease?
    a. infectivity
    *b. pathogenicity
    c. virulence
5. Which of the following describes the likelihood of developing severe disease, commonly examined through the proportion of diseased individuals who develop more severe or fatal outcomes?
    a. infectivity
    b. pathogenicity
    *c. virulence

These three definition questions are great as a random select, helping students to distinguish between terms, while having a similar challenge level.

6. A disease with high ____ is one where a large proportion of the exposed individuals will become infected.
    *a. infectivity
    b. pathogenicity
    c. virulence
7. A disease with high ____ is one where a large proportion of the exposed individuals will develop disease.
    a. infectivity
    *b. pathogenicity
    c. virulence
8. A disease with high ____ is one where a large proportion of the exposed individuals will develop severe disease.
    a. infectivity
    b. pathogenicity
    *c. virulence

These three definition questions are great as a random select, helping students to distinguish between terms, while having a similar challenge level.

9. The time between exposure to an infectious agent and the first signs or symptoms of a clinical illness is known as the
    *a. incubation period
    b. latent period
    c. generation time
10. The time from acquiring infection to the onset of infectiousness is known as the
    a. incubation period
    *b. latent period
    c. generation time
11. The time from the moment one person becomes infected until that person infects another person is known as the
    a. incubation period
    b. latent period
    *c. generation time
12. Horizontal transmission is the transmission of an agent from one to another person of the same generation in the same population.
    True
13. Which of the following is NOT true regarding a pathogen's mode of transmission:
    *a. it tells you how many additional cases will arise in a fully susceptible population
    b. it allows for the targeting of responses and interventions to prevent a particular disease or other pathogens transmitted through similar routes
    c. it allows for the conceptualization of the relationships between the host, the pathogen and the environment for a given disease
    d. it can help us project and visualize the trajectory of the disease and its pattern of spread (through epidemic curves and other tools)

Conceptual Higher Order Learning Questions

14. Case fatality rate, which is a measure of the proportion of cases that end in death, is a measure of the _____ of a pathogen.
    a. infectivity
    b. pathogenicity
    *c. virulence
15. A disease is harder to control when the latent period is shorter than the incubation period because individuals are infectious before they start showing symptoms.
    True

Calculations:

16. A study recruited 4,500 individuals, all of whom were disease free. Exposure was noted in 1,500, 80 of whom developed disease. Of the unexposed, 45 developed disease.

Optional to include the 2 × 2 table or have the student populate it themselves:

		Outcome		*Total*
		Y	*N*	
Exp	*Y*	80	1,420	1,500
	N	45	2,955	3,000
Total		125	4,375	4,500

The most appropriate measure of effect is
    *a. (80/1500) / (45/3000) = 3.56
    b. (80/45) / (1420/2955) = 3.70
    c. (80/1420) / (45/2955) = 3.70
    d. (80/125) / (1420/4375) = 1.97