

Health: The Basics, 12e (Donatelle)

Chapter 13 Protecting Against Infectious Diseases and Sexually Transmitted Infections

1) Disease-causing agents are called

- A) pathogens.
- B) antibodies.
- C) carcinogens.
- D) infectious microorganisms.

Answer: A

Diff: 1

Skill: Remembering

Section: The Process of Infection

Learning Outcome: 13.1

2) The bubonic plague is an example of a(n)

- A) pandemic.
- B) autoimmune disease.
- C) epidemic.
- D) treatable infection.

Answer: C

Diff: 2

Skill: Understanding

Section: The Process of Infection

Learning Outcome: 13.1

3) All of the following must happen for a disease to occur EXCEPT

- A) the host must be susceptible.
- B) an agent must transmit a disease.
- C) the environment must promote it.
- D) the host must never have had the disease before.

Answer: D

Diff: 2

Skill: Understanding

Section: The Process of Infection

Learning Outcome: 13.1

4) You want to decrease your risk of developing an infectious disease. Which of the following factors is within your individual control?

- A) heredity
- B) nutritional status
- C) environmental conditions
- D) age

Answer: B

Diff: 3

Skill: Applying

Section: The Process of Infection

Learning Outcome: 13.1

5) All of the following behaviors will compromise your immune system's ability to fight infections EXCEPT

- A) not getting enough sleep.
- B) eating junk food.
- C) excessive alcohol consumption.
- D) exercising regularly.

Answer: D

Diff: 3

Skill: Applying

Section: The Process of Infection

Learning Outcome: 13.1

6) Greg frequently gets cold sores (caused by HSV-1). He recently noticed that his left eye had a painful lesion, and he immediately made an appointment with his doctor. Greg's eye most likely became infected with the herpes virus when he touched his mouth and shortly afterward rubbed his eye, which is transmission via

- A) autoinoculation.
- B) direct contact.
- C) indirect contact.
- D) irritation.

Answer: A

Diff: 3

Skill: Applying

Section: The Process of Infection

Learning Outcome: 13.1

7) A substance that triggers an immune response is a(n)

- A) pathogen.
- B) antigen.
- C) antibody.
- D) toxin.

Answer: B

Diff: 1

Skill: Remembering

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

8) Every time you eat something that contains yellow dye, you wheeze and get a rash. The dye must be an
A) antibody.
B) antigen.
C) enzyme.
D) immunoglobulin.

Answer: B

Diff: 3

Skill: Applying

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

9) Key factors in mounting an immune response include all of the following EXCEPT
A) antibodies.
B) macrophages.
C) lymphocytes.
D) red blood cells.

Answer: D

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

10) A rise in body temperature that occurs to destroy invading cells is a(n)
A) fever.
B) autoimmune disease.
C) sign of hypertension.
D) allergic reaction.

Answer: A

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

11) When the body is invaded by antigens, the immune system forms substances called
A) antibodies.
B) macrophages.
C) lymphocytes.
D) helper cells.

Answer: A

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

12) Which of the following is NOT a bacterial infection or caused by a bacterial infection?

- A) tuberculosis
- B) Lyme disease
- C) meningitis
- D) influenza

Answer: D

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

13) Which of the following is typically due to a staphylococcal infection?

- A) scarlet fever
- B) pneumonia
- C) acne
- D) lyme disease

Answer: C

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

14) You woke up this morning with the worst headache of your life, and you feel nauseous. Your neck feels so stiff that you can hardly nod your head. Your roommate says your skin is very hot and you probably have a fever. Which of the following statements is TRUE?

- A) You drank too much and your roommate should make you quit whining and get out of bed.
- B) You studied so much last night that you developed a tension headache. Your roommate should let you rest.
- C) You are experiencing an aura associated with a migraine headache and your roommate should allow you to turn off all the lights.
- D) You have signs of meningitis. Both you and your roommate should go to the health clinic immediately.

Answer: D

Diff: 4

Skill: Analyzing

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

15) While in the hospital, Daniel's grandmother developed an inflammatory condition that involved a build-up of fluid in her lungs. His grandmother was suffering from

- A) tuberculosis.
- B) pneumonia.
- C) emphysema.
- D) influenza.

Answer: B

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

16) What portion of the world's population is infected with tuberculosis (TB)?

- A) one-fifth
- B) one-fourth
- C) one-third
- D) one-half

Answer: C

Diff: 1

Skill: Remembering

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

17) All of the following are key risk factors for TB EXCEPT

- A) poverty.
- B) HIV infection.
- C) lack of access to treatment.
- D) improved sanitation.

Answer: D

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

18) All of the following are true about viruses EXCEPT

- A) they are the smallest pathogens.
- B) there are hundreds of viruses that cause disease.
- C) they can reproduce outside of cells.
- D) drug treatment is limited.

Answer: C

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

19) Two weeks ago your nephew came down with the chickenpox while visiting. Now you have itchy, crusted spots on your arms and you feel terrible. You probably were infected with the chickenpox virus when your nephew was there but did not get sick until now because of the

- A) immune response.
- B) incubation period.
- C) inoculation period.
- D) antibody activity.

Answer: B

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

20) The common cold is always present in the population, meaning that it is

- A) pandemic.
- B) virulent.
- C) endemic.
- D) epidemic.

Answer: C

Diff: 1

Skill: Remembering

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

21) Which of the following BEST describes the relationship between getting a chill and contracting a cold?

- A) A chill may indirectly increase a person's risk for getting a cold by lowering the immune system's resistance.
- B) Getting a chill will cause a person to get a cold.
- C) Getting a chill has no relationship whatsoever to contracting a cold.
- D) Getting a chill may actually decrease the incidence, duration, and severity of a cold.

Answer: A

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

22) Hepatitis B can lead to

- A) liver cancer.
- B) kidney disease.
- C) heart disease.
- D) skin cancer.

Answer: A

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

23) Which of the following statements is correct about hepatitis B infections worldwide?

- A) They are increasing but are not a major health problem.
- B) They are increasing and are a major health problem.
- C) They are declining and not a major health problem.
- D) They are declining but are still a major health problem.

Answer: D

Diff: 1

Skill: Remembering

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

24) Which of the following is a small form of toxin-producing bacteria carried by ticks that causes Rocky Mountain spotted fever?

- A) ehrlichiosis
- B) rickettsia
- C) Lyme disease
- D) tuberculosis

Answer: B

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

25) Symptoms of viral hepatitis include all of the following EXCEPT

- A) excessive appetite.
- B) fever and headache.
- C) nausea and vomiting.
- D) dark yellow urine.

Answer: A

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

26) Ray went on a missionary trip to a developing country. While there, he enjoyed cultural celebrations that gave him the opportunity to sample a wide range of locally grown foods. He had to return home when he contracted hepatitis. Ray most likely has

- A) hepatitis A.
- B) hepatitis B.
- C) hepatitis C.
- D) hepatitis D.

Answer: A

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

27) Last summer, Mallory began a sexual relationship with a man she later discovered was a user of IV drugs. Now Mallory has hepatitis. Which type is she most likely to have?

- A) hepatitis A
- B) hepatitis B
- C) hepatitis C
- D) hepatitis D

Answer: B

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

28) All of the following are recommended for avoiding contracting or spreading a respiratory infection EXCEPT

- A) coughing or sneezing into a tissue or your sleeve.
- B) washing hands often with hot, soapy water.
- C) keeping your hands away from your face.
- D) going to work while sick as long as you take medication.

Answer: D

Diff: 3

Skill: Applying

Section: The Process of Infection

Learning Outcome: 13.1

29) Candi was mortified when her doctor told her that she had a protozoal disease. She probably had

- A) candidiasis.
- B) trichomoniasis.
- C) parasitic worms.
- D) rickettsia.

Answer: B

Diff: 3

Skill: Applying

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

30) After a relaxing week of backpacking and camping in the woods, during which you enjoyed drinking cool water from a creek, you have returned to school. Since you got back, you are experiencing abdominal cramps that won't go away. This condition is probably not the result of schoolwork overload, but rather something you picked up during your camping trip. You likely have

- A) malaria.
- B) trichomoniasis.
- C) giardiasis.
- D) fungi.

Answer: C

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

31) A self-replicating protein-based agent that is thought to cause mad cow disease is a type of

- A) virus.
- B) fungi.
- C) protozoan.
- D) prion.

Answer: D

Diff: 1

Skill: Remembering

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

32) You cannot believe that you seem to have come down with the flu while vacationing at a peaceful resort on a lake. The only downside to the beautiful location is having to constantly apply mosquito repellent to fend off the annoying bugs. The illness you most likely have is

- A) Ebola hemorrhagic fever.
- B) hantavirus.
- C) severe acute respiratory syndrome (SARS).
- D) West Nile virus.

Answer: D

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

33) Garrett became very ill with an *E.coli* infection while living on his grandfather's dairy farm last summer. He could have been infected in all of the following ways EXCEPT

- A) eating undercooked ground beef.
- B) drinking unpasteurized milk.
- C) swimming in a sewage-contaminated creek.
- D) a mosquito bite.

Answer: D

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

34) When Maria's boyfriend returned from the health clinic, he told her he had been diagnosed with gonorrhea. Which of the following statements is TRUE?

- A) Maria should take lots of vitamins and eat a healthy diet to prevent infection.
- B) Maria does not need to worry about contracting an STI because she was checked last year.
- C) Maria does not need to worry because she does not have any gonorrhea symptoms.
- D) Maria should go to the clinic to get tested for gonorrhea and treated if she has it.

Answer: D

Diff: 3

Skill: Applying

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

35) Sierra, now 31, has been trying to get pregnant since she got married 4 years ago. Her doctor suspects that their infertility problem was likely caused by her history of PID from the most commonly reported STI. During her early 20s, Sierra had contracted

- A) herpes simplex.
- B) gonorrhea.
- C) chlamydia.
- D) HIV/AIDS.

Answer: C

Diff: 3

Skill: Applying

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

36) Delay in seeking medical care for pelvic inflammatory disease (PID) increases the risk of permanent damage and scarring that can lead to

- A) infertility and other complications.
- B) bleeding between periods.
- C) painful urination.
- D) painful intercourse.

Answer: A

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

37) The stage of syphilis that is characterized by a bacteria-filled chancre is

- A) primary syphilis.
- B) secondary syphilis.
- C) latent syphilis.
- D) tertiary syphilis.

Answer: A

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

38) Vincent has suffered recurrent cold sores since childhood. When finals were over, Vincent and his girlfriend celebrated by going to their favorite romantic spot. Since Vincent takes famciclovir (FAMVIR), there is

- A) an increased chance of him transmitting the herpes virus to his girlfriend.
- B) still some chance that he could transmit the herpes virus to his girlfriend.
- C) no chance of him transmitting the herpes virus as long he has no visible cold sores.
- D) nothing to worry about since the medication blocks the action of the herpes virus.

Answer: B

Diff: 3

Skill: Applying

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

39) The CDC recommends HPV vaccination for

- A) girls beginning at age 13.
- B) boys beginning at age 13.
- C) both boys and girls beginning at age 11.
- D) all teens and adults, within six months of becoming sexually active.

Answer: C

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

40) Bethany is 42 and has cervical cancer. It is probably related to an infection she had during her college years, which was

- A) hepatitis A.
- B) human papillomavirus (HPV).
- C) syphilis.
- D) Chlamydia.

Answer: B

Diff: 3

Skill: Applying

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

41) Which of the following is caused by an increased production of a fungus normally resident in smaller numbers in the vagina?

- A) candidiasis
- B) HPV
- C) trichomoniasis
- D) gonorrhea

Answer: A

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

42) HIV can potentially be transmitted through all of the following EXCEPT

- A) a condom breaking during vaginal intercourse.
- B) sharing a razor with an infected person.
- C) receiving a blood transfusion prior to 1985.
- D) sharing food utensils with an infected person.

Answer: D

Diff: 2

Skill: Understanding

Section: HIV/AIDS

Learning Outcome: 13.6

43) Francisco just found out his HIV test is positive. Which of the following statements is TRUE?

- A) Francisco's positive HIV test means that he has AIDS.
- B) Looking back, Francisco knows exactly when he got infected with HIV because the initial symptoms are markedly different from those of other STIs.
- C) Francisco should seek treatment as soon as possible to slow progression of the disease.
- D) Francisco's wife does not need to worry about getting infected since she is a heterosexual female.

Answer: C

Diff: 2

Skill: Understanding

Section: HIV/AIDS

Learning Outcome: 13.6

44) Which type of immunity occurs when antibodies develop in response to a vaccine?

- A) naturally acquired passive immunity
- B) naturally acquired active immunity
- C) artificially acquired passive immunity
- D) artificially acquired active immunity

Answer: D

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

45) Which type of immunity occurs when antibodies develop in response to exposure to antigens encountered in the course of daily life?

- A) naturally acquired passive immunity
- B) naturally acquired active immunity
- C) artificially acquired passive immunity
- D) artificially acquired active immunity

Answer: B

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

46) Which type of immunity occurs when antibodies pass from mother to fetus via placenta or from mother to baby via breast milk?

- A) naturally acquired passive immunity
- B) naturally acquired active immunity
- C) artificially acquired passive immunity
- D) artificially acquired active immunity

Answer: A

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

47) Which immune system malfunction occurs when the body develops antibodies that attack its own tissues?

- A) passive immunity
- B) active immunity
- C) autoimmunity
- D) aggressive immunity

Answer: C

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

48) Which bacterial infection affects the membranes surrounding the brain and spinal cord and for which college students living in dormitories are at a higher risk than other populations?

- A) tuberculosis
- B) pneumonia
- C) meningitis
- D) influenza

Answer: C

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

49) Influenza outbreaks that affect 5-20% of the United States population each year are an example of a(n)

- A) trauma.
- B) plague.
- C) pandemic.
- D) epidemic.

Answer: D

Diff: 2

Skill: Understanding

Section: The Process of Infection

Learning Outcome: 13.1

50) A global outbreak of influenza such as occurred in 1918 is an example of a(n)

- A) trauma.
- B) plague.
- C) pandemic.
- D) epidemic.

Answer: C

Diff: 2

Skill: Understanding

Section: The Process of Infection

Learning Outcome: 13.1

51) The common cold is which type of infection?

- A) fungal
- B) viral
- C) protozoan
- D) staphylococcal

Answer: B

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

52) Trichomoniasis is which type of infection?

- A) fungal
- B) viral
- C) protozoan
- D) bacterial

Answer: C

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

53) Candidiasis is which type of infection?

- A) fungal
- B) viral
- C) protozoan
- D) bacterial

Answer: A

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

54) The largest form of pathogen is

- A) fungi.
- B) parasitic worms.
- C) protozoa.
- D) bacteria.

Answer: B

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

55) The virus responsible for causing genital warts is

- A) hepatitis B.
- B) chlamydia.
- C) HPV.
- D) syphilis.

Answer: C

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

56) Which STI occurs in stages over a period of years?

- A) chlamydia
- B) gonorrhea
- C) HPV
- D) syphilis

Answer: D

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

57) Which type of infection can be contracted by sharing needles?

- A) hepatitis B
- B) hepatitis A
- C) HPV
- D) hemophilia

Answer: A

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

58) Which of the following plays a major role in the body's immune response?

- A) red blood cells
- B) lymphocytes
- C) blood pressure
- D) lung capacity

Answer: B

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

59) When bacteria establish themselves in or on a host without causing an infection, this is known as

- A) colonization.
- B) infestation.
- C) foundation.
- D) globalization.

Answer: A

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

60) A key reason for the resurgence of measles and mumps infections is

- A) an increased mosquito population.
- B) a public backlash against vaccinations.
- C) the rise of the HIV/AIDS epidemic.
- D) poor sanitation and hygiene in certain areas.

Answer: B

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

61) The most well-known symptom of mumps is

- A) an itchy red rash.
- B) a high fever.
- C) swollen salivary glands.
- D) aching joints.

Answer: C

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

62) Which of the following is TRUE about avian bird flu?

- A) It is a bacterial disease.
- B) It appears to have originated in Africa.
- C) It has already developed into a major pandemic.
- D) It has not yet mutated into a form highly infectious to humans.

Answer: D

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

63) All of the following points about *E. coli* 0157:H7 are true EXCEPT that

- A) it is a bacterial disease.
- B) infection can be serious but is not known to cause deaths.
- C) it can be contracted from various foods.
- D) a typical symptom of infection is diarrhea.

Answer: B

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

64) Sexually transmitted infections disproportionately affect

- A) females and adults age 25 and older.
- B) males and adults age 25 and older.
- C) females and young people age 15 to 24.
- D) males and young people age 15 to 24.

Answer: C

Diff: 2

Skill: Understanding

Section: Sexually Transmitted Infections (STIs)

Learning Outcome: 13.4

65) STI pathogens prefer

- A) darkness and moisture.
- B) light and cold.
- C) light and heat.
- D) darkness and dryness.

Answer: A

Diff: 2

Skill: Understanding

Section: Sexually Transmitted Infections (STIs)

Learning Outcome: 13.4

66) More than 24 million people in Africa are infected with HIV.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: HIV/AIDS

Learning Outcome: 13.6

67) Two high-risk behaviors associated with the development of HIV/AIDS are having unprotected sex and injecting drugs.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: HIV/AIDS

Learning Outcome: 13.6

68) Interspecies transmission of infectious disease does not occur.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: The Process of Infection

Learning Outcome: 13.1

69) An antibody is a substance capable of triggering an immune response.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

70) All bacteria can cause disease in humans.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

71) Treatment for influenza is only palliative.

Answer: TRUE

Diff: 3

Skill: Applying

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

72) Amy contracted the flu. Getting a flu shot now will enable her body to attack and eliminate the flu virus in her system.

Answer: FALSE

Diff: 3

Skill: Applying

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

73) The human variant of mad cow disease can develop in a person who has eaten meat from infected cows.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: Types of Pathogens and the Diseases They Cause

Learning Outcome: 13.3

74) Oral sex carries no risk for STIs.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Sexually Transmitted Infections (STIs)

Learning Outcome: 13.4

75) Proper use of a condom during sexual activity does not guarantee protection against STIs.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: Sexually Transmitted Infections (STIs)

Learning Outcome: 13.4

76) Pelvic inflammatory disease (PID) is a sexually transmitted infection (STI).

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

77) Herpes can be cured in its early stages with proper antibiotic treatment.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

78) The new human papillomavirus (HPV) vaccination prevents all types of HPV.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

79) The terms *HIV* and *AIDS* are synonymous and can be used interchangeably.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: HIV/AIDS

Learning Outcome: 13.6

80) HIV can be transmitted through vaginal, anal, or oral sex.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: HIV/AIDS

Learning Outcome: 13.6

81) You cannot contract HIV through casual contact.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: HIV/AIDS

Learning Outcome: 13.6

82) You can only get pubic lice through sexual contact.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Common Types of Sexually Transmitted Infections

Learning Outcome: 13.5

83) If pathogenic microorganisms are all around us, including in the air, on surfaces, and even on our own skin, explain why we don't all develop new infectious diseases every day.

Answer: Three conditions must be present at the same time to develop disease from exposure to a microorganism.

1) The agent must be able to transmit the pathogen. In other words, there must be contact—through broken skin, inhalation, and so forth—between the pathogen and the interior of the human body. Skin, for example, is the body's first defense: pathogens can gain entry to the body via cut or burned skin, but are not able to gain entry in a person with intact skin.

2) The host must be susceptible; that is, vulnerable in some way to the infection. Most obviously, the host's body temperature, chemistry, and cellular make-up must be hospitable to the pathogen involved. This explains why, for example, a certain type of influenza that is pathogenic in dogs may not be pathogenic in humans. Moreover, within any given community, some people have a strong immune system, whereas others—including the very young, the very old, pregnant women, and people who are ill—have a compromised immune system unable to destroy the pathogen before it replicates to cause disease.

3) The environment must allow for the pathogen's survival. Factors such as temperature, light, and moisture must be hospitable to the pathogen. Pathogenic microorganisms in contaminated foods cannot reproduce in your freezer, for example, but can replicate quickly in the same food left out on your kitchen counter.

Diff: 4

Skill: Analyzing

Section: The Process of Infection

Learning Outcome: 13.1

84) Compare and discuss factors you can control and factors you cannot control to prevent the onset of disease.

Answer: *Heredity* cannot be controlled; once you are conceived, your genetic composition and family history have been determined. Likewise, you cannot control your *age*.

The majority of our *environmental conditions* are beyond our control, such as global warming and natural disasters (although we can control our response to these factors by being aware and prepared).

The *development of resistant organisms* is beyond our control. We can reduce our personal risk by taking antibiotics only when necessary (not for viral infections) and by completing all antibiotic therapies as directed.

The factors we can control have the greatest impact on our overall health—the *behavioral factors*:

- *Control stress.* We cannot eliminate stressors, but we can control our responses to stressors, thus decreasing the effects of chronic stress such as obesity, heart disease, and decreased immunity.
- *Eat a healthy diet, be physically fit, and be well-rested.*
- *Limit/avoid high-risk behaviors* such as using and abusing legal or illegal drug substances, including tobacco and alcohol, mixing drinking and driving, and having unprotected sex.
- *Practice good personal hygiene*, including good hand-washing practices.

Diff: 3

Skill: Applying

Section: The Process of Infection

Learning Outcome: 13.1

85) Discuss three factors that are contributing to the development of multidrug-resistant organisms and what you can do to slow the growth of resistant organisms.

Answer: (Any three of the following)

- Incorrect use of antibiotics aids the development of resistant organisms. Individuals can do their part by taking antibiotics as directed (i.e., do not skip doses and continue to take the drug until the regimen is complete even if symptoms are gone).
- People often want and expect their health care provider to prescribe antibiotics for virtually any illness. Many health care providers continue to prescribe antibiotics for illnesses not caused by bacteria. An individual can do their part by modifying their own expectations of their health care provider and by asking if the prescribed antibiotic is necessary to treat their particular illness.
- Antibiotics are widely used in food production. Many people believe antibiotics in our food supply are leading to the development of resistant organisms. An individual may try to avoid or limit their ingestion of antibiotic-rich substances. The individual's contribution in this way is made more difficult if proper and complete labeling of food products is not required.
- Many soaps and cleaning products are antibacterial which, combined with inadequate hand-washing, may lead to growth of resistant organisms. Individuals should not use antibacterial soap products for routine hand-washing and should wash their hands at least 20 seconds with regular soap and rinse well with warm water.

Diff: 4

Skill: Analyzing

Section: The Process of Infection

Learning Outcome: 13.1

86) Mark sliced his hand picking up a piece of broken glass, and failed to clean the wound thoroughly. As a result, he has developed an infection. Identify the four signs of inflammation Mark is likely experiencing.

Answer: The infection has likely produced the four cardinal signs of inflammation: As the pathogen damages cells and tissues in the region, and the immune system floods the region with immune cells and chemicals, (1) swelling occurs. This exerts pressure on nerve endings, causing (2) pain. Blood vessels dilate, increasing the flow of blood to the region, causing both (3) redness and (4) heat.

Diff: 4

Skill: Analyzing

Section: Your Body's Defenses against Infection

Learning Outcome: 13.2

87) Discuss three common reasons used to explain the current high rates of sexually transmitted infections (STIs).

Answer: (Any three of the following)

- Shame and embarrassment may prevent infected people from seeking diagnosis and treatment. They may continue to be sexually active, thus infecting their partners.
- People may not be comfortable communicating with partners about using condoms.
- Many people have casual attitudes about sex without consideration of the consequences.
- In spite of massive educational efforts, there is still ignorance about infections, transmission of those infections, and the asymptomatic nature of many STIs.

Diff: 4

Skill: Analyzing

Section: Sexually Transmitted Infections (STIs)

Learning Outcome: 13.4

88) State two reasons that early detection of HIV infection is critical.

Answer: The earlier HIV infection is diagnosed, the earlier it can be treated, and the earlier treatment begins, the better the prognosis. Moreover, early detection is critical to avoid transmitting the infection to others, whether via shared contaminated needles or exchange of bodily fluids.

Diff: 4

Skill: Analyzing

Section: HIV/AIDS

Learning Outcome: 13.6