**POINT TO PONDER:**

"One pound of learning requires ten pounds of common sense to apply it."—Persian Proverb

**WHY STUDY INFECTION CONTROL?**

1. Explain in your own words why it is important to study infection control.

2. Cosmetologists should understand the ________ of the cleaning and disinfecting products they use in the salon.

**REGULATION**

3. In regard to regulating the practice of cosmetology, what is the difference between federal agencies and state agencies? ________________

4. What does OSHA stand for? ________________________

5. OSHA was created as part of the U.S. Department of Labor to ________________
6. What is the purpose of the Hazard Communication Standard (HCS)?

7. Explain why you think OSHA's standards are important to you personally as a cosmetologist.

8. Federal and state laws require manufacturers to supply a Material Safety Data Sheet (MSDS) only for those products that are potentially hazardous.
   ____ True
   ____ False

9. What does a Material Safety Data Sheet include?

10. Federal and states laws require salons to obtain an MSDS for each product that is used in the salon.
    ____ True
    ____ False

11. It is the responsibility of each salon employee to ______ the information included on each MSDS and ______ they have done so by ______ a ______ sheet.

12. What does the Environmental Protection Agency (EPA) register?

13. Define the term disinfectant.
14. What two types of disinfectants are used in salons?
   a) ________________________________
   b) ________________________________

15. A(n) _________________________ may be harmful when used on certain tools in the salon.

16. As a rule of thumb, it is always better to use the most powerful disinfectant when cleaning up a spill in the salon.

   _____ True
   _____ False

17. By law, a disinfecting product must be:

   _____ a) Used in the manner prescribed on its manufacturer's label.
   _____ b) Approved for each specific use.
   _____ c) Registered with the EPA.
   _____ d) All of these answers are correct.

18. If you do not follow the instructions for mixing, contact time, and the type of surface the disinfecting product can be used on, you’ve broken federal law.

   _____ True
   _____ False

19. Why do state regulatory agencies exist? ________________________________

20. List four examples of state regulatory agencies.
   a) ________________________________
   b) ________________________________
   c) ________________________________
   d) ________________________________

21. State agencies, rules are enforced through __________ and investigations of consumer complaints.
22. Explain why it is important for a cosmetologist to understand and follow state laws and rules at all times.

23. A cosmetologist who is unsure about which disinfectant to use should:
   _____ a) Choose the one that is most powerful.
   _____ b) Use whatever is handy.
   _____ c) Check state regulations.
   _____ d) Scrub the instrument or surface with soap and water.

24. What is the difference between laws and rules?

PRINCIPLES OF INFECTION

25. The invasion of body tissues by disease-causing pathogens is called __________.

26. List the four types of potentially harmful organisms that are important in the practice of cosmetology.
   a) __________
   b) __________
   c) __________
   d) __________

27. Why are these organisms potentially harmful? __________
28. It is appropriate for a cosmetologist to recommend a treatment to a client who has an abnormal condition, if the cosmetologist has personally had the same condition in the past and, therefore, understands how to treat it.

_____ True
_____ False

29. Use the following terms to complete the sentences below: fungicidal, clean, disinfection, virucidal, bactericidal.

a) _________ refers to something that is able to destroy viruses.

b) To _________ means to remove all visible debris, dirt, and many disease-causing germs by scrubbing using soap and water or detergent and water.

c) The process of ________ destroys many but not all microorganisms on nonporous surfaces.

d) To destroy a fungi, you would need to use something labeled as a _________.

e) A product that is _________ is able to destroy bacteria.

30. Explain why a cosmetologist is obligated to provide safe services in the salon.

________________________________________________________________________________________

________________________________________________________________________________________

31. One-celled microorganisms with both plant and animal characteristics are known as _________. Where can they exist? __________________________________________________________

________________________________________________________________________________________

32. The vast majority of bacteria which are completely harmless and do not produce disease are ___________ organisms.

33. List some of the useful functions of nonpathogenic bacteria.

a) __________________________________________________________________________________________

b) __________________________________________________________________________________________

c) __________________________________________________________________________________________

d) __________________________________________________________________________________________

34. Pathogens are harmful because they may cause ________ or infection when they enter the body.
35. Match each term with its correct definition.

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<tr>
<td>1. Germs</td>
<td>a) Poisonous substances produced by some microorganisms.</td>
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<td>2. Microorganism</td>
<td>b) The transmission of infection from body fluids or blood through contact with a contaminated intermediate object (such as an implement or towel).</td>
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<td>3. Parasite</td>
<td>c) One-celled microorganisms having both plant and animal characteristics. Some are harmful and some are harmless.</td>
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<td>4. Bacteria</td>
<td>d) Organism of microscopic or submicroscopic size.</td>
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<td>5. Virus</td>
<td>e) A medical condition that is spread from one person to another.</td>
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<td>6. Infectious</td>
<td>f) Transmission of infection due to contact with blood or body fluids through touching, kissing, coughing, sneezing, and talking.</td>
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<td>7. Toxin</td>
<td>g) An organism that lives on another organism.</td>
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<td>8. Direct transmission</td>
<td>h) Synonyms for any disease-producing organism.</td>
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<td>9. Indirect transmission</td>
<td>i) Microorganism capable of infecting almost all plants and animals that replicates only within cells of living hosts.</td>
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36. Match each of the following bacteria with its unique shape.

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<tr>
<td>1. Cocci</td>
<td>a) Curved lines</td>
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<td>2. Staphylococci</td>
<td>b) Spiral or corkscrew-shaped</td>
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<td>3. Streptococci</td>
<td>c) Short, rod-shaped</td>
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<td>4. Diplococci</td>
<td>d) Round-shaped</td>
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<td>5. Bacilli</td>
<td>e) Grape-like clusters</td>
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<tr>
<td>6. Spirilla</td>
<td>f) Spherical</td>
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37. Pus-forming bacteria that cause abscesses, pustules, and boils are known as
38. Pus-forming bacteria that cause infections such as strep throat and blood poisoning are known as _____________.

39. Diplococci are bacteria that cause diseases such as _____________.

40. How do the following bacteria move about?
   a) Cocci ________________________________
   b) Bacilla ________________________________
   c) Spirilla ________________________________

41. A term that means “moving about” is ____________ while the term ________ refers to movement under one’s own power.

42. Unscramble these words and use them to complete the sentences below.
   briateac  sopotparlm  aticve  cniatvie

   __________ generally consist of an outer cell wall containing a liquid called _____________. They manufacture their own food from the surrounding environment, give off waste products, and grow and reproduce. The life cycle of bacteria is made up of two distinct phases: the ________ stage, and the ________ or spore-forming stage.

43. During the active stage, bacteria:
   _____ a) Change color.
   _____ b) Die.
   _____ c) Grow.
   _____ d) Dry out.

44. The division of a bacteria cell is called _____________. The cells that are formed are called _____________.

45. What type of conditions do bacteria require to multiply?
   _____ a) Cool and dark
   _____ b) Warm and clean
   _____ c) Dark and dry
   _____ d) Warm and damp

46. What happens to bacteria in favorable conditions? ______________

   What happens in unfavorable conditions? ______________
47. Why do certain bacteria, such as anthrax and tetanus bacilli, coat themselves with wax-like outer shells?

48. What happens to bacteria when favorable conditions are restored?

49. What occurs when body tissues are invaded by disease-causing or pathogenic bacteria?

50. __________ is the body's reaction to injury, irritation, or infection; it is characterized by ________, ________, ________, and ________.

51. What is pus?

52. A local infection is one that is ________ to a particular part of the body.

53. Give an example of a local infection. ___________________

54. Staphylococci are among the most common human bacteria and are normally carried by what percentage of the population?
   ______ a) 1/8
   ______ b) 1/2
   ______ c) 1/3
   ______ d) 1/4

55. How is a staph infection most frequently transferred in the salon?

56. A MRSA infection can be ________ to cure.
   ______ a) Easy
   ______ b) Difficult
   ______ c) Impossible

57. Staph infections occur most frequently in people who have ________ immune systems or who have had recent ________ procedures. The symptoms usually appear as skin infections such as: ___________________.

58. It is possible for a client to have a staph infection without knowing it.
   ______ True
   ______ False
59. A disease that spreads from one person to another by contact is said to be contagious or ________________.

60. List the more common contagious diseases that will prevent a cosmetologist from servicing a client. 

61. List twelve ways contagious diseases are commonly spread.
   a) _____________________________
   b) _____________________________
   c) _____________________________
   d) _____________________________
   e) _____________________________
   f) _____________________________
   g) _____________________________
   h) _____________________________
   i) _____________________________
   j) _____________________________
   k) _____________________________
   l) _____________________________

62. What are two differences between bacteria and viruses?
   a) _____________________________
   b) _____________________________

63. Vaccinations prevent viruses from growing in the body, but are not available for all viruses.
   _____ True
   _____ False

64. Health authorities recommend that service providers in industries that have direct contact with the public, such as cosmetologists, receive a vaccination for ____________.

65. The human papilloma virus (HPV) can infect the bottom of the ______.

66. A client who shows signs of an HPV infection should not receive a(n) __________ service.

67. Disease-causing microorganisms that are carried through the body in the blood or body fluids are called ____________________.
68. List nine ways disease-causing microorganisms can be spread inside the salon.
   a) __________________________
   b) __________________________
   c) __________________________
   d) __________________________
   e) __________________________
   f) __________________________
   g) __________________________
   h) __________________________
   i) __________________________

69. It is against the law for a cosmetologist to ______ ______ ______, even if the client insists.

70. When is it appropriate for a cosmetologist to remove a callus on a client's foot?
    ______ a) Upon the client's request
    ______ b) As a routine part of a pedicure service
    ______ c) Only if the callus causes the client discomfort
    ______ d) None of these answers are correct.

71. List the three types of hepatitis that are of concern in the salon environment:
    __________________________

72. Which of the three types of hepatitis is the most difficult to kill on a surface?
    __________________________

73. What does HIV stand for? __________________________

74. What does AIDS stand for? __________________________ What is AIDS? __________________________

75. Name some ways in which HIV is not transmitted. __________________________
    __________________________

76. ________, which include molds, mildews, and yeasts, can produce ________ diseases such as ringworm.

77. Although it affects plants and inanimate objects, ________ does not cause human infections in the salon.

78. ________________ is the most frequently encountered infection resulting from hair services. What does it affect? __________________________
    __________________________ Whom does it mostly affect? ________
    __________________________
79. List the steps that should be followed to clean and disinfect clipper blades effectively.
   1) __________________________________________________________________________
   2) __________________________________________________________________________

80. Nail infections can be spread through ________________ implements or when the natural nail is not properly _________ before applying an enhancement.

81. A(n) _______ nail infection is more common on the feet than on the hands.

82. _______ nail infections commonly occur on both the hands and the feet.

83. Nail services may cause which of the following infections if proper cleaning and disinfection procedures are not followed?
   _____ a) Tinea barbae
   _____ b) Tinea pedis
   _____ c) Tinea capitis

84. _______ are organisms that grow, feed, and find shelter on or in another _______ and need that ______ to survive.

85. Name three external parasites that affect the human skin.
   a) __________________________________________________________________________
   b) __________________________________________________________________________
   c) __________________________________________________________________________

86. Pathogenic bacteria or viruses or fungi can enter the body through:
   a) __________________________________________________________________________
   b) __________________________________________________________________________
   c) __________________________________________________________________________
   d) __________________________________________________________________________
   e) __________________________________________________________________________

87. The body prevents and controls infections with:
   a) __________________________________________________________________________
   b) __________________________________________________________________________
   c) __________________________________________________________________________
   d) __________________________________________________________________________
88. Match each of the following terms with its definition.

____ 1. Immunity   a) Both inherited and developed through healthy living.

____ 2. Natural immunity   b) Ability to overcome disease through inoculation or exposure to allergens like pollen.

____ 3. Acquired immunity   c) The body's ability to destroy and resist infection.

**PRINCIPLES OF PREVENTION**

89. Define the term decontamination. __________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

90. Most salons use this method of decontamination: ______________________________

________________________________________________________________________________________

91. In some states, salons that also perform nail services must now use this method of decontamination: ______________________________

________________________________________________________________________________________

92. The vast majority of pathogens and contaminants can be removed from the surfaces of tools and implements through proper cleaning.

______ True

______ False

93. If you are in a hurry to get to your next client, it is OK to use a disinfectant on an instrument and skip the step of cleaning it first.

______ True

______ False

94. List the three pathogens that disinfectants are able to destroy on nonporous surfaces: ______________________________.

95. Explain why disinfectants should not be used on human skin, hair, or nails.

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
96. Explain how sterilization is different from disinfection.

_________________________________________________________

_________________________________________________________

_________________________________________________________

97. A high-pressure steam autoclave is the most effective method of
__________.

98. How often does the CDC require an autoclave to be tested to make sure it is
functioning properly?
____ Daily
____ Weekly
____ Twice a month
____ Every two months

99. Currently, no states require salons to sterilize their tools and implements.
____ True
____ False

100. Disinfectants must be registered by the ________.
____ CDC
____ FDA
____ EPA

101. What does it mean if a disinfectant has the word concentrate on its label?
____ It needs to be mixed with water before using.
____ It is ready to use right out of the container.
____ It is less potent than other types of disinfectants.

102. Define the term contact time. _____________________________

_________________________________________________________

103. A disinfectant that is environmentally friendly can be ________ down the
salon drain.

104. When compared to a hospital, a salon has a ________ infection risk.
____ Higher
____ Lower
105. Explain why you need to remove all dirt and other matter you can see on tools and implements before immersing them in disinfectant solution.

106. The label on a disinfectant product states “complete immersion.” Explain what this means.

107. ____________, known as quats for short, are effective disinfectants for salon use, when used according to the product labeling instructions.

108. List six disadvantages of phenolic disinfectants.
   a) 
   b) 
   c) 
   d) 
   e) 
   f) 

109. Why should a cosmetologist know about accelerated hydrogen peroxide (AHP)?

110. Any household bleach may be used as an effective disinfectant.
   _____ True
   _____ False

111. Name five disadvantages of using bleach as a disinfectant.
   a) 
   b)
c) 

d) 

e) 

112. Name two disinfectants that are unsafe for salon use.
   a) 
   b) 

113. Identify each of the following items used in a salon as either multiuse or single-use:
   Nippers 
   Cotton balls 
   Permanent wave rods 
   Combs 
   Capes 
   Pumice stones 
   Wooden sticks 

114. According to state rules, how often should tools and equipment be cleaned and then disinfected? 

115. In the salon, how should soiled linens and towels be stored until they can be properly laundered? 

116. Why is it good practice to clean doorknobs and handles daily? 

117. Ultraviolet (UV) light units are effective for sterilizing implements.
   _____ True  
   _____ False 

118. A sanitizer is a cleaner and does not work as a disinfectant.
   _____ True  
   _____ False 

119. Why are liquid hand soaps preferred over bar soaps in the salon?
UNIVERSAL PRECAUTIONS

120. What are Universal Precautions?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

121. Explain why strict infection control practices should be followed for every client.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

122. An (n) _______________ is contact with nonintact skin, blood, body fluid, and/or other potentially infectious materials during the performance of an employee's duties.

________________________________________________________________________

________________________________________________________________________

THE PROFESSIONAL SALON IMAGE

123. _______________ is an important part of the salon routine and helps project a professional image to clients.

124. How often should you sweep hair off the floor of the salon?

_____ a) After every client

_____ b) Once a day

_____ c) As part of the closing routine

125. Explain why you think food should never be stored in the same refrigerator as salon products.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

126. To maintain a professional image, try to avoid touching your _____, _____, or _____ during client services.
127. Name four important ways you can protect the health and safety of your salon clients.

a) ____________________________________________________________

b) ____________________________________________________________

c) ____________________________________________________________

d) ____________________________________________________________