WEEK 5 QUESTIONS

**VOCABULARY**

cacophony

claustrophobia

cryptic

sharps container

heart stick

unequivocal

**INSERTION**

1. Gene is referred to as Ajax? Who was Ajax and why this reference?

2. After looking at the list of items carried in, list three other items you

would have brought.

3. Who do you think leaked the news to the *Washington Post*? Why?

4. What is the tone of this story? Reassuring or frightening? Does it lend

an air of confidence or add to the fright factor?

5. Do you think this story is accurate given what you know? What were

some of CJ’s thoughts in preparing to give the interview?

6. What is the white ambulance and what is in it?

7. Why not start the operation at midnight and avoid all the traffic?

8. Why did the teams wear civilian clothes?

9. What might happen if the teams wore military biohazard suites?

10. Why didn’t the army officials just let the virus kill off all the

monkeys?

11. Why would they use a bubble stretcher instead of a regular

stretcher?

12. You’re the day care director next door. You’ve seen the news

report. Do you stay open or close up shop?

13. What about Mark Haines’ background qualifies or doesn’t qualify

him for this mission?

14. What size would pores in a virus filter have to be?

15. What is the main rule of the airlock that allows it to work?

16. Design a map of the main area of the monkey house.

17. What is the purpose of the gray area?

18. What advice did Nancy give her crew before going in?

19. Why did she carry extra tape on her uniform?

20. How much time could they have in the suits?

21. What did Jerry and Mark see inside? How did they react?

22. Why would they be panicked when they found Dan Dalgard with

only a respirator? Is the Army overreacting or are the civilians

underreacting?

23. Who is going to enter the facility first? Who will be the point

man?

24. Compare the expedition to Kitum Cave (made by Gene Johnson)

to the Reston operation. Were the hazards different? How did the

goals of the mission contrast?

25. What are the similarities/differences between Kitum Cave and

the Reston Monkey House as habitats for living organisms?

26. Why did the monkeys react the way they did to the people in the

suits?

27. What did Nancy notice on the monkeys?

28. How are cold and flu viruses transmitted?

29. What are the symptoms of monkeys that contract the virus and

die? Did they compare to the Ebola victims? Describe.

30. How did they euthanize the monkeys?

31. How did Nancy package the carcasses?

32. How does bleach kill microbes?

33. Draw a picture or build a model of the harpoon Jerry used to kill

the monkeys in their cages. Compare this procedure to the one Nancy

used.

34. Dalgard runs to his office. What do you think of this reaction?

35. What is a blood clot and how does it cause organ damage?

36. What does Milton Frantig do that upsets Dan?

37. After the care and thorough description of the Army operation,

why does the author end this chapter with the frenzied symptoms of

Frantig’s illness?

**A MAN DOWN**

38. Compare Frantig’s symptoms with Monet, Musoke, and Peter

Cardinal. Given Dalgard’s fears and what you know by now, what

would you have said to Frantig?

39. Why might Dalgard be scared that his employees are sick?

40. Should Dan have evacuated the facility last week when he first

found out about the outbreak?

41. What would it mean if nobody got sick?

42. What did Dan decide to do after thinking about Frantig?

43. Describe all the human contacts you have had since you got up

this morning. In case of a dangerous exposure, how would you begin

the process of contacting them and maybe quarantining them?

44. Why is the Slammer a safer place to keep an Ebola patient than

a community hospital?

45. Why did McCormick insist on sending Milton Frantig to a

community hospital? What were some other options?

46. Why did Dan turn over all the decisions to CJ? What worried CJ

about the decisions Dan had made so far?

48. How many monkeys and how many people were in the monkey

house at this point?

49. If it’s hot inside and cold outside, what happens if you open a

window? What are the dangerous consequences associated with this

possibility?

**TANGOS**

50. Role play a conversation between CJ and the CEO of the

company. Who’s responsible for the costs and liabilities of this

operation?

51. Why are they arguing over the legal responsibility? Draft a letter

with a fair resolution of authority and responsibility.

52. Who was rejected for duty and why? What was the Army’s

position on hazardous duty pay for the soldiers involved?

53. What are some problems you would experience in wearing a

space suit?

54. Jahrling is convinced that the virus us airborne and easily

spread. McCormick thinks that it is not easily spread. Given Gene

Johnson’s expertise, how would you evaluate the risk at this point?

55. What "close calls" did Jerry Jaax have with the disease?

56. What are the steps he uses in visualizing the steps involved in the procedure? What are some other tasks that could involve this kind of visualization?

57. Why not maintain a 24-hour operation if it’s so dangerous?

58. Why is the buddy system useful, why did they use it in the monkey house?

59. What is the new danger Gene sees, and what is the evidence for this?

60. What does he tell the troops before going in?

61. How does the author contrast the experience of the troops with

the reference to Nicole Berk?

62. How many monkeys do they have to kill?

63. What was the condition of the monkey house?

64. What human setting could you compare this to?

65. What had the monkeys done to the walls? How does the author describe this?

66. What were 4 symptoms Jerry saw as he moved around?

67. Why does the coughing and sneezing worry Jerry? What comparison does the author make in this case and why?

68. Why is it not safe to hand an opened syringe to another person?

69. How did Mark condition the soldiers about their mission?

70. What is the veterinarian’s creed?

71. What emotions must Charlotte have been feeling at this time?

Why?

72. Describe the feedback loop and how adrenaline creates that

familiar energy rush.

73. What is ketamine?

74. What was the most dangerous part of the job and why?

75. Describe how the corporation had arranged the room

76. What were some safety tips that Jerry had told his troops?

77. What could happen if people didn’t take breaks?

78. Why is bleach poured down the drain *after* blood?

79. What were the subteams Jerry created? How did this create an

assembly line for the disposal and sampling of the monkeys?

80. Charlotte is 18. How did she react to the opportunity to do an

autopsy? How would you feel about this?

81. At the end of the chapter, how many monkeys were still alive?

82. What if one of the soldiers became infected? What procedure do

you think would be followed?

**INSIDE**

83. Why didn’t people want to leave the facility?

84. How did they maintain radio contact with he outside? Why this

method ?

85. What are some suggestions to help prevent accidents such as

the one that happened to Rhonda Williams?

86. What happened just as Rhonda and Charlotte were sent out?

87. How does a pressure suit work to keep viruses away from your

body? How did this protect Rhonda?

88. What might have happened if the cameraman and the reporter

had seen what was happening? If you were working for CJ on press

relations, what would you do here?

89. How long had Jerry been in his suit and what were the effects on

him? How did he feel by the end of the day?

90. During the cleanup what did they find lying around? What do you

think was the source of these items?

91. Why did Sergeant Klages turn his back on the man in the restaurant?

**A BAD DAY**

93. What is the rapid Elisa test? (do the HHMI Virtual Immunology

lab which is available on the Howard Hughes Medical Institute site,

http://www.hhmi.org )

94. What were Frantig’s results on the Ebola test? What would have

happened if it had come up with the opposite result?

95. Compare the procedures and actions on the second day with

those of the first.

96. What is T-61?

97. What happened in Room C? Describe the room.

98. Compare Williams’ and Jaax’s story. Who do you believe and

why?

99. How did the other monkeys react to the escape?

100. Why did Jerry veto the idea of shooting the monkey? How did he

end up moving through that room? What equipment did he have?

101. “This environment favors the monkey over us.” List evidence to

support or refute this statement.

102. What are Colonel CJ Peters’ "bad habits" and how did they pay

off?

103. Who did he run into outside the building and what was their

conversation like?

104. What changes did Jerry make in procedure as the operation went

on?

105. Compare the technique of a good injection with a bad one. How

could they tell by the effects?

106. What happened to Rhonda went she went to work by the table?

What might have happened if the monkey did bite Rhonda Williams?

107. Why do Peter and Tom keep asking each other how they’re

feeling?

108. Compare Jahrling’s possible method of exposure with Frantig’s.

109. Why does Peter Jharling do tests on his blood?

110. How would Peter Jahrling know if he did have Ebola?

111. Tom resolves to keep working even if he tests positive. How

would you react under these circumstances? What other plans would

you make?

112. Describe Rhonda’s nightmare.

**DECON**

113. What differences would there be if Nancy Jaax did fly home the

day she got the call? What would you do in her position and why?

114. What did CJ tell Nancy? How did she respond?

115. When was the last monkey killed?

116. How did they dispose of the monkeys? Was this safe transport?

117. Why is it better to dispose of the monkeys the way they did

instead of just burying them? What improvements would you

suggest?

118. How did Nancy’s memories of working on the farm compare to

the repetitive work of studying samples?

119. How did Jerry finally catch the escaped monkey?

120. What did Sgt. Klages find in the freezer? What did Johnson tell

him to do?

121. How many samples did they collect? Why this many?

122. What was the condition of the monkey house after the killings

were completed? How did they go about cleaning the place up?

123. Compare and contrast this virus and Ebola Zaire?

124. What disease did Milton Frantig actually have?

125. How did the CDC trace the origin of this collection of monkeys?

What are their remaining unknowns?

126. “Sometimes it is better to be lucky than smart.” How does this

quote apply here?

128. What was the sentinel species used to see if the place was really

clean? Research this species to find out why it is so hard to kill off.

What are some other hard-to-kill microbes?

129. What was the final blow in sterilizing the facility?

130. What is the chemical formula for formaldehyde gas and what

makes it toxic?

131. “You can never know when life is exterminated.” Research the

domain of *extremophiles*, organisms that live in very harsh conditions.

We know now that these are more common than previously thought.

What are the implications of a toxic *extremophile* that is infected with

a lethal virus?

**THE MOST DANGEROUS STRAIN**

132. How and where does a virus hide?

133. Hazelton went back to business as usual. What would you have

done? What if you were one of their neighbors ?

134. How did Ebola travel throughout the building?

135. Think about your classroom or bedroom. How do you microbeproof

it? How do you test to see where sources of infection can come in?

136. Compare the reaction in the face of the second infection

compared to the first. Compare the symptoms of the monkeys.

137. What was the case fatality rate in the second outbreak?

138. Although this new strain turned out not to be lethal to humans,

what was scary about it?

139. What might have kept the men from getting sick even though

they were infected?

140. The CDC did not put John Coleus into isolation. Why not? What

would you have done?

141. How did the symptoms of Ebola Reston compare to Zaire? What

was the likely method of transmission? In 3 of the 4 cases?

142. What scared General Russell the most in retrospect?

143. Find or prepare a graph of deaths from the black plague. What

was the vector, or mode of transmission, in that case?

144. “Imagine a virus with the infectiousness of the flu and the

mortality rate of the black plague.” What could we do to protect

ourselves against this?

145. How are viruses able to evolve so rapidly? Go to Genblast and

match the sequences of Ebola Reston and Ebola Zaire.

146. What did the infected lung look like? What are the implications

for infection of a virus that moves from the lung to the testicles?

147. What causes Jaax to comment about the high level of

sophistication of the virus? What would be the “most dangerous

strain” of Ebola?

148. To whom does the CDC report? To who does an animal importer

like Hazelton report?

149. What steps did the CDC take to prevent another outbreak?

150. Describe and compare Jaax’s, CJ’s and Jahrling’s conclusions about the apparent danger and risk of this event. Where are they now?

151. Given the similarities between Zaire and Reston, what is

Jahrling’s ongoing concern?

152. Given what you know about this case and what happened to the

players, if you were President who would you have promoted and who

would have gotten fired? Why?

153. Why didn’t CJ test the airborne hypothesis? How could he have

done this?

154. How is Ebola Reston classified today? Do we generally prove

danger or safety? When in doubt, which do we assume?

155. What is the next case study that the author raises?

156. What is the likely index case for Reston? What are some other

possibilities for the link between the African and Asian strains? Why can we rule out convergence in this case?