DISEASE DETECTIVES **Augusta State University 2005 Regional**

Participants: _____ _____

Directions: The numbers in parenthesis indicates the values of the answers.

1. (11) A group of people developed a variety of intestinal problems a day after attending the picnic. The various foods they ate appear below.

Sickness among people eating various foods

Food Consumed	Number eating this food	Number developing symptoms
Green salad and sliced chicken	100	73
Noodles and black beans	50	21
Noodles and egg salad	80	24
Egg salad and sliced chicken	40	0

a. (2) What food is the most likely source of the problems? _____

_____

b. (1) Which food, noodles and beans or noodles and egg salad had the greatest percentage of people getting sick? _____

_____

c. (1) Which percentage was the highest? _____

d. (6) Describe three ways that the suspected food may have become contaminated.

1. _____

2. _____

3. _____

4. _____

e. (1) What term is used to describe a sudden increase in a disease? _____

2. (6) Match each disease with its mode of transmission. Each disease will have only one answer, but some answers may be used more than once. Other answers may be not be used.

a. ____ Lime disease

b. ____ Malaria

c. ____ HIV

d. ____ *E. coli*

e. ____ Yellow fever

f. ____ Athletes' foot

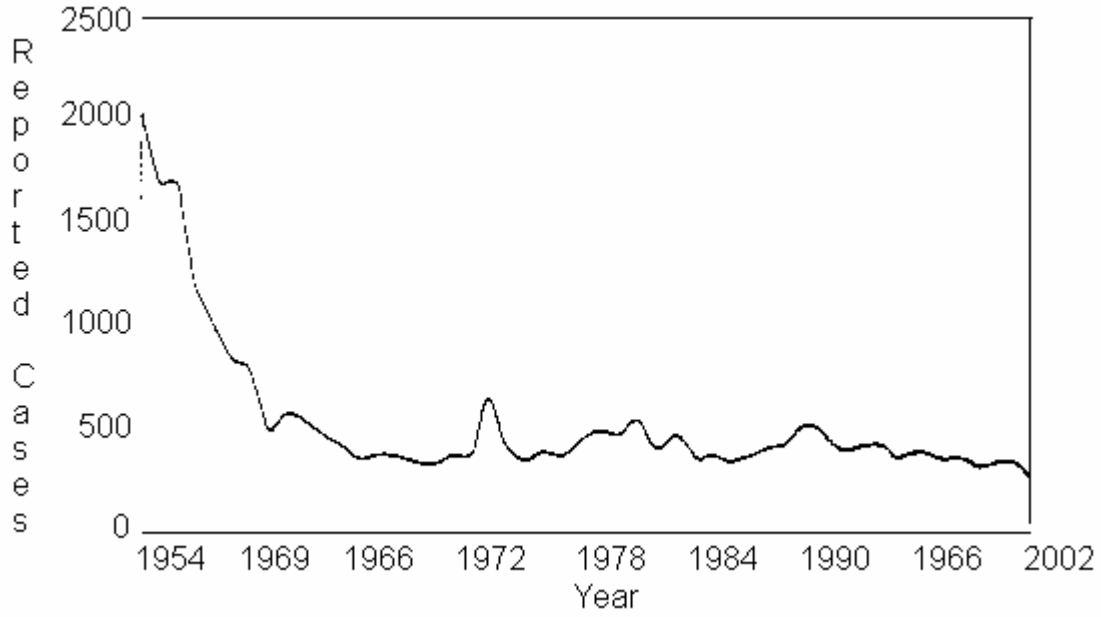
A. mosquito borne
B. Tick borne
C. Food/water borne
D. Blood/sexual transmission
E. Unknown or not given

3. (6) A number of students become ill while at school. List the steps you would follow, in correct order, to determine the probable organism that caused the outbreak. Not all the numbered steps need to be used.

1. _____
_____
2. _____
_____
3. _____
_____
4. _____
_____
5. _____
_____
6. _____
_____

(Note for evaluator: This question is based upon Koch's postulates.)

4. (4) The graph shows the incidence of tuberculosis from 1954 to 2000. On the graph, circle an incidence of an epidemic.



5. (11) Match the kind of organism with the disease that it causes. Some answers may be used more than once; others not at all. Each disease will have only one answer.

Disease	Organism
_____ cold	A. protozoan
	B. fungus
_____ tuberculosis	C. bacteria
	D. virus
_____ Mad cow disease	E. agent unknown or not given
_____ AIDS	
_____ athletes foot	
_____ syphilis	
_____ bacterial pneumonia	
_____ colon cancer	
_____ dental cavities	
_____ red tide/paralytic shellfish poisoning	
_____ influenza	