



(4 points)

[DISEASE DETECTIVES DIVISION C] – ANSWER KEY

2018 National Cathedral Invitational

--- NOT FOR STUDENTS ---

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Total Points Possible: **116**

Part A: Vocabulary Matching (each 2 points)

1. I
2. A
3. G
4. B
5. D
6. F
7. K
8. C
9. E
10. H
11. J

Part B: Multiple Choice (each worth 4 points)

- 12.D
- 13.B
- 14.E
- 15.A
- 16.B
- 17.C
- 18.B

Part C: Short Answer

19.Epicurve or epidemic curve **(2 points)**

20.Point source **(2 points)**

21.10/24/15 **(2 points)**

22.10/20/15; calculated by subtracting 4 days from the peak day **(2 pts for correct date, 2 pts for explanation)**

| 23. | Sick | Not Sick | (8 pts- 1 pt for each correct box) |
|---------------------|------|----------|---|
| Ate chicken | 65 | 110 | |
| Did not eat chicken | 8 | 44 | |

24.cohort **(2 points)**

25.relative risk: $(65/(65+110))/(8/(8+44)) = 2.4$ **(5 points)**

*if they put case-control and calculated odds ratio, give

26.Since RR is greater than 1, strong correlation between the chicken and the illness **(5 points)**

27.Wash hands, separate foods in containers, cook foods thoroughly, refrigerate foods properly, wipe and clean all surfaces and equipment properly.... **(2 pts for each correct answer)**

(4 points each)

28.Clinical trial

29.Cohort

30.Cohort

31.Cross-sectional

32.Cohort

*only give half points if they did not show work

33. Tacos $(66/70 = 0.9429)$ **(2 points)**

34. Quesadillas $(13/70 = 0.1857)$ **(2 points)**

35. RR = $(66/69)/(4/31) = 7.41$ **(4 points)**

36. 2 pts for each calculation

Exposed: $46/58 = 0.79$

Unexposed: $24/42 = 0.57$

Tiebreakers

TB1: False

TB2: False

*only move onto TB2 if TB1 doesn't resolve tie