

KEY! EPI QUIZ, 3/5/03, CHAPTER 8

INSTRUCTIONS: *Please* write your name and the date in the usual location (on the outside of this page, upper right). There will be no partial credit on this quiz, so please calculate carefully! You may use your clean formula sheet. Each question is worth 1 point.

QUESTION: An epidemiologic study is conducted to learn about the relation between exposure E and disease D. Fifteen cases occur in 275 people at risk in the exposed group. Ten cases occur in 776 people at risk in the non-exposed group. Based on these data:

1. Calculate the incidence (risk) of disease in the exposed group.

$$R_1 = 15 / 275 = .0545$$

2. Calculate the incidence (risk) of disease in the non-exposed group.

$$R_0 = 10 / 776 = .0129$$

3. Calculate the risk difference associated with the exposure.

$$RD = .0545 - .0129 = .0417$$

4. Interpret the above risk difference.

Exposure increases risk by .0417 (4.17%).

5. Calculate the risk ratio.

$$RR = .0545 / .0129 = 4.23$$

6. Interpret the above risk ratio.

The exposed group has about 4¼ times the risk of the non-exposed group.

7. Calculate the attributable fraction in exposed cases.

$$AF_e = (.0545 - .0129) / .0545 = 0.76$$

8. Interpret the above attributable fraction

About 76% of the exposed cases would not have occurred if they had been non-exposed.